

AURAVANA PROJECT

PROJECT FOR A COMMUNITY-TYPE SOCIETY

The Social System

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SOCIETAL SPECIFICATION STANDARD



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GREETINGS

In an effort to provide the greatest possible clarity and value the Auravana Project has formatted the system for the proposed society (of the community-type) into a series of standard publications. Each standard is both a component of the total, unified system, as well as intended to be a basis for deep reflective consideration of one's own community, or lack thereof. These formal standards are "living" in that they are continually edited and updated as new information becomes available; the society is not ever established, its design and situational operation exists in an emergent state, for it evolves, as we evolve, necessarily for our survival and flourishing.

Together, the standards represent a replicable, scalable, and comprehensively "useful" model for the design of a society where all individual human requirements are mutually and optimally fulfilled.

The information contained within these standards represent a potential solution to the issues universally plaguing humankind, and could possibly bring about one of the greatest revolutions in living and learning in our modern time. Change on the scale that is needed can only be realized when people see and experience a better way. The purpose of the Auravana Project is to design, to create, and to sustain a more fulfilling life experience for everyone, by facilitating the realization of a better way of living.

Cooperation and learning are an integral part of what it means to be a conscious individual human. A community-type societal environment has been designed to nurture and support the understanding and experience of this valuable orientation.

The design for a community-type society provides an entirely different way of looking at the nature of life, learning, work, and human interaction. These societal standards seek to maintain an essential alignment with humankind's evolving understandings of itself, combining the world of which humans are a regenerative part, with, the optimal that can be realized for all of humanity, given what is known.

The general vision for this form of society is an urgent one considering the myriad of perceptible global societal crises. Together, we can create the next generation of regenerative and fulfilling living environments. Together, we can create a global societal-level community.

THE UNIFIED SOCIETAL SYSTEM: SOCIAL SPECIFICATION STANDARD

This publication is one of six representing the proposed standard operation of a type of society given the category name, 'community' (a community-type society). This document is a specification standard for a social system.

Every society is composed of a set of core systems. Different types of societies have different internal compositions of these systems. The composition of these systems determines the type of society. The type of society described by the Auravana Project societal standard is a, community-type society. The standard is a composition of sub-system standards. The Auravana societal standard may be used to construct and duplicate community at the global level.

For any given society, there are four primary societal sub-systems. Each of these sub-systems can be specified and standardized (described and explained); each sub-system is a standard within a whole societal specification standard. The first four primary standards of the six total standards are: a Social System; a Decision System; a Material System; and a Lifestyle System. Each standard is given the name of its information system. The fifth publication is a Project Plan, and the sixth is an Overview of the whole societal system. Together, these standards are used to classify information about society, identify current and potential configurations, and operate an actual configuration.

- This societal specification standard is the Social System for a community-type societal system.
- There are more figures (and tables) associated with this standard than are identified in this document; those figures that could not fit are freely available through auravana.org, in full size, and if applicable, color.
- *Figures and tables on the website are named according to their placement in the standard.*

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Document revision history

A.k.a., Version history, change log.

This document is updated as new information becomes available.

The following information is used to control and track modifications (transformations, changes) to this document.

VERSION	REVISION DATE	SECTIONS	SUMMARY (DESCRIPTION)
001	June 2020	n/a	<p>This is the first version of the unified release of the societal standard for a community-type society. This is the first version of the social system.</p> <p>Note: The reader should understand that this document contains a high-level of conceptual linguistic detail, the reader should understand that this document is one of six total documents that together provide a complete explanation of the proposed societal system. In order to visualize the complete realization of the whole societal system, its concepts and objects, and their interrelationships, must be modeled and reasoned.</p> <p>Note: All figures associated with this standard, many of which are not published herein, are all available via the project's website. It is not possible to publish via this page medium all figures related to this standard.</p>
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The Social System Overview for a Community-Type Society

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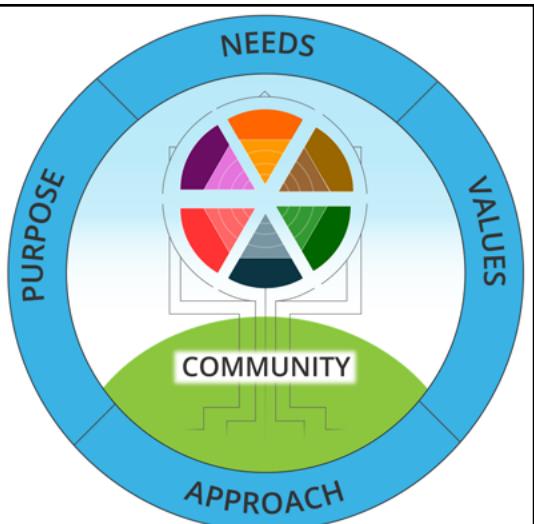
Abstract

This publication is the Social System for a community-type society; it is a social system for the organized structuring of a social population. A social system describes the organized structuring of a social environment. Asocial system is a grouping of units of individuation (here, units of consciousness) forming a cooperative network in which information is shared and integrated through a data structure. The term social system is used, in general, to refer to lifeforms in definite relation to each other, which have enduring patterns of behavior in that relationship. This social system standard identifies humanity's aligned interests, and that which everyone has socially in common. It is an organizing system for social navigation that specifies a direction, orientation, and approach to socio-technical life. The standard details the purpose for the society's existence (a direction, 1), its value system (an orientation, 2), and its approach (a methodology and methods, 3). Herein, these concepts, their relationships and understandings, are

defined and modeled. Discursive reasoning is provided for this specific configuration of a social system, as opposed to the selection and encoding of other value-oriented configurations; consequences are evidenced. The social system provides a description of who humanity is, and where humanity is going, by identifying its social organization.

Graphical Abstract

Figure 1. *The social organizational model visualizes the relationships between the primary organizing conceptual understandings that lead to the formation of the proposed community. The model presents a top-level view of the social organization of the Community. It shows a community arising out of the similar organization and elucidation of four primary concepts: needs; purpose (& goals); values; and approach. Each of these concepts is a principally influential aspect affecting human behavior and social arrangements. The model is a conceptual framework that reflects, supports, and guides the emergent design and participative development of the Community. The Community itself is symbolized by the green emerging elliptical circle within the larger encompassing blue circle. Within the Community a greater subtlety of dynamic organization and refinement of information exists, and this is symbolized by the six triangular slices representing the Community's habitat systems. These concepts and their relationships are described and modelled in this Social System 'design specification', which is a 'blueprint' for the social organization of the Community.*



1 Introduction

The Social System Specification Standard details the organized structuring of the social environment; the social structuring of community. A social system is a grouping of units of individuation (units of consciousness) forming a cooperative network in which information is shared and integrated through a structure. Essentially, the social system identifies humanity's aligned interests, and that which everyone has socially in common. It is an organizing system for social navigation that specifies a direction, orientation, and approach to social organization (to humanity's socially coordinated experience). This specification standard details the purpose for the community's existence (a direction), its value system (an orientation), and its approach (a methodology and set of methods).

The social formation of a community-type society arises out of the visualization and elucidation of a set of primary organizing concepts. These concepts and their shared understanding lead to the formation of the proposed community (hereafter known as 'Community' or 'the Community'). These concepts and their relationships are defined, described, and modelled in this document, which is a "blueprint" for the social organization of community at the societal level.

A top-level view of the social organization of said society shows a community arising out of the similar organization and elucidation of three primary categories that contain four primary concepts. The category of 'direction' includes: needs, purpose and goals. The category of 'orientation' includes, values. And, the category of 'approach' includes: a methodological set. Each of these concepts is a principally influential aspect affecting human behavior and social arrangements. As a whole, the model is a conceptual framework that reflects, supports, and guides the emergent design and participative development of the Community.

Within the Community a greater subtlety of dynamic organization and refinement of information exists, detailed in the other societal specification standards (i.e., decision, material, and lifestyle).

Fundamentally, a community-type society forms out of the similar organization (definition and application) of conceptual relationships; from this recognition of commonality arises community.

NOTE: *A social system only continues if the people within it support it with their own behavior.*

2 The triality structuring of community

Although this specification standard may be represented [as a whole] by the Social Organizational Model, it may also be described at a high level as a triality structuring of social information sets. Together, these "awarenesses" forms a structure by which a cooperating social population can navigate a society in an existent world toward everyone's highest potential state of experience.

This specification standard is divided into three principal sections [by these three awarenesses]:

1. The Social Direction
2. The Social Orientation
3. The Social Approach

2.1 *The three forces model*

APHORISM: *Three by three creates complexity.*

The three force(s) model is a theoretical representation of the three "forces" required to be present for new directional creation, including thinking. The model's claim is that at least triality must be present for directed creation to flow and for rhythm to coalesce into structure, to transform and exchange creativity in the expression of new states of organized existence.

The three forces are known as:

1. **The activating force** - any force that initiates. The concept of direction fits under this category.
2. **The restraining force** - any force that limits or moderates the initiation. The concepts of qualification, conditions, and values fit under this category.
3. **The reconciling force** - any force that balances and connects the other two forces. The concepts of integration and synthesis fit under this category.

The triangle is the first formable, stable geometric structure. Also, the triangulation of coordinates is the simplest way of calculating orientation in a three-dimensional [action potential] space.

Below is an abbreviated list of the 'three forces models' involved in the design of the social organization of a community-type society. Note that some of these triality models do not fit precisely with the definitions of the three forces in the "three forces model"; they are instead stated here to show the significance of the conception of triality. The list of three forces models includes:

1. To change the dynamic (Read: active[ly changing]) structuring of a society the following concepts may be applied:

- A. Direction (activates)
 - B. Orientation (restrains)
 - C. Approach to integration (reconciles)
2. To change the mental state of empowerment in an individual the following concepts may be applied:
- A. Focus
 - B. Language & meaning
 - C. Physiology
3. To change the approach and/or state of integration in an individual the following concepts may be applied:
- A. Systems approach (systems science, systems methodology, systematic inquiry)
 - B. Analytic approach (scientific method, analytic inquiry)
 - C. Critical approach (critical thinking, trivium method, critical inquiry)
4. To change the oriented state of fulfillment among a society the following concepts/values may be applied (the definition and degree of):
- A. Freedom
 - B. Justice
 - C. Efficiency
5. To change the state of intrinsically creative motivation in an individual the following concepts may be applied:
- A. Autonomy
 - B. Mastery
 - C. Purpose
6. To change the state of a system the following concepts may be applied:
- A. Structure
 - B. Environmental feedback
 - C. Connections (or interrelationships)

2.1.1 The three forces model applied to societal organization

In concern to societal organization, the three forces model shows many applications, including but not limited to:

Note that some of these triality models do not fit precisely with the definitions of the three forces in the "three forces model"; they are instead stated here to show the significance of the conception of triality.

1. In a system there is:
 - A. Input
 - B. Process
 - C. Output
2. In a cybernetic system, the three "forces" are:
 - A. Input as the activating force
 - B. Process as the reconciling force
 - C. Control of feedback as the restraining force

3. Alternatively, a cybernetic system could be viewed as having:
 - A. Input
 - B. The feedback design process
 - C. Output
4. In all of potential (i.e., in "source") there exist layers of fluctuating potential:
 - A. The electric field
 - B. The potential difference
 - C. The fluctuation of the electric field
5. In electromagnetism there is:
 - A. Frequency
 - B. Wavelength
 - C. Photon
6. In the material there is:
 - A. Chemical
 - B. Magnetic
 - C. Electric
7. The three essential parts of a circuit are:
 - A. Power (activating force)
 - B. Load resistor (resisting force)
 - C. Connection (reconciling force)
8. The essential functions of a circuit may then be broken down into:
 - A. Inductors
 - B. Resistors
 - C. Capacitors
9. In motivation, there is:
 - A. Source (energy)
 - B. Flow (current)
 - C. Effort (voltage)
10. In the homeostatic loop of a biological organism there is the:
 - A. Receptor (e.g., free nerve ending)
 - B. The integrator (e.g., the brain)
 - C. The effector (e.g., a muscle or a gland)
11. In a general homeodynamic system there is:
 - A. The environment
 - B. There is a stimulus
 - C. There is a response (note that feedback provides dimensionality to the experience)
12. In common "spirituality" there is:
 - A. Mind (mental)
 - B. Body (physical)
 - C. Spirit (consciousness)
13. In a computing system there is:
 - A. Start
 - B. Task computation (instruction)
 - C. End
14. There are three distinct systems:
 - A. Isolated system - exchanges no energy or matter with its environment
 - B. Closed system - exchanges only energy, but not matter with its environment

- C. Open system - exchanges both energy and matter with its environment
- 15. Aggression is highly context sensitive behavior; context insensitive aggression is pathological.
Aggression appears in three contexts:
 - A. Desperation for food
 - B. Desperation for sex and reproduction
 - C. Desperation for retribution
 - D. Competition for scarcity (e.g., individuals weigh themselves against opponents in competition; where, if the perception is that of being weaker, you aggression is avoided)

The Social Direction of a Community-Type Society

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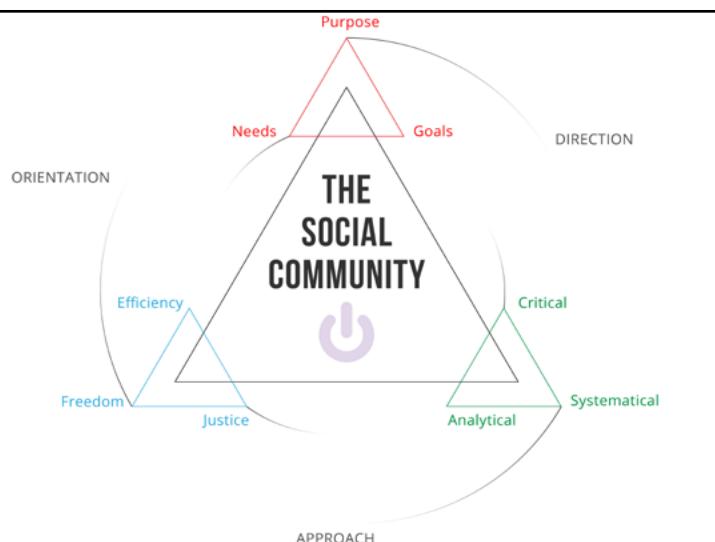
Abstract

A coordinated and mutual approach provides the ability to explore the dynamics of society, of cities, and of the ecology as a whole (as a complex system) through the application of various methods and modeling techniques, which provide for the potential of understanding and designing more fulfilling, more resilient, and more sustainable societies. Models and tools (e.g., instruments) that provide greater confidence in answers, verification, and understanding are identified and applied. There is a complex nature to life existence that can be understood through patterns. The design of any societal environment is built around patterns of how a population conceives of and how they use informational concepts and material space. In order to apply a common structural approach, there is the need to use common semantics and common kinds of models. Commonality among society allows for the optimization of communication and of work. A unified means of thinking and communicating is likely to generate

a work environment that is commonly understandable and integratable (i.e., that everyone can commonly understand work with). Herein, all work on the societal system can be traced back to a purpose, a purpose that includes individuals and society as a whole. A single, unified way of approaching life at the societal level is essential to making everyone across the [societal] team/group more successful (i.e., more free, effective, and efficient in their work). Society may come to a recognition of the interconnection and unification of a set of universal patters (the systems approach), it may discover new patters (the scientific approach), it may clarify and understand patters (the critical approach), and it may generate and guide new patters (the systems engineering approach).

Graphical Abstract

Figure 2. The triality structuring of a the social system of community. The model depicts the social structuring of the Community in the form of a "trinity of awarenesses": a direction [information] set (i.e., vectors); an orientation set (i.e., values); and an integration set (i.e., approach). At a high-level this community may be differentiated into these three "awarenesses" (or experience patterns), which are each sub-divided into three additional "awarenesses". Together, these information sets structure the whole social patterning of the Community. In a sense, the power icon within the center of the model represents the "power" of the structure of the awareness of all sensorily conscious beings among a social community of beings.



1 Purpose domain

"The purpose of a system is what it does."
- Stafford Beer

The Purpose Domain's primary function is to identify and define the purpose for the society's existence in the world, as well as detailing the goals (i.e., "task objectives") that support the fulfillment of that purpose. The purpose for this society's existence is documented in the Social System specification standard. The purpose domain is part of the social organization of a community-type society. Fundamentally, a society's purpose reflects its highest level of intentional understanding.

In part, the Real World Community Model is held together by the central idea that a society may exist to fulfill a commonly agreed upon and intentional purpose (i.e., a "community of purpose"). This is the reason for the purpose domain's all-encompassing position in the Real World Community Model. Central to this idea is the experience that self-direction [as will or volition] is a characteristic of all forms of conscious expression in the real world. In a "community of purpose", the community exists to support the fulfillment of a commonly agreed upon and formalized direction of intention (i.e., a "purpose"). In a community-type society, that purpose is [in part] to, "continuously and consciously evolve toward a higher potential state of expressed existence while remaining adaptively resilient" -- a common intention of all consciously embodied beings.

Everyone in a community-type society, at the deepest level of their being, is interconnected by a common desire to develop and evolve toward a higher potential state of existence; herein, they recognize mutual (or "common") self-interest -- they see the relationship of the whole to its parts as well as the relationship of the parts to a whole. Therefore, community exists to maintain organizational structures and systems whose identities and relationships (including material objects and services) fulfill common human needs and facilitate directional progress toward the betterment of oneself and of all humankind.

Through the definition of a purpose humanity can come to more greatly understand its highest motivating factors. Living purposefully is a fundamental orientation that applies to every aspect of human existence. It means that humans live and act by intention. It is a distinguishing characteristic of those who enjoy a high level of control over their life. The idea of "living purposefully" involves the self-initiative to discover the functional purpose of the [socio-economic] structure one is either living under or continuously creating. Together, humanity may live purposefully in taking care of its needs and re-designing its structures to more effectively and efficiently fulfill those needs.

An intentionally oriented society needs to be clear of what is wanted, as well as what is not wanted. Therein, purpose is the highest-level perspective someone can have in their life and it is manifest in everything one

does. If "you" don't clearly identify what "you" want, what "your" focus is, and what "your" highest level intentional attractor is, then "you" are more than likely going to get what others want to give "you". Now that humanity has a shared optimal direction, humanity no longer needs the direction of the "ruling class".

'Direction' is a simple concept, it refers to the idea of movement toward or away from that which is desired or true. A community-type society arrives at and maintains support structures that facilitate a movement toward higher individual and social potentials as a direction for everyone's fulfillment. Herein, 'goals' are applied to clarify the society's purpose and aid in arriving at purposeful decisions and desirable actions.

Once the purpose of a structure is known, then its first functional boundary and the direction it is likely to take become visible. A structure is a function, and a function is a structure (a.k.a., a structure determines function and function determines structures). Without proper structure there isn't proper function. Herein, intention is translated into function through structure. It is wise to be cautious of people who begin telling "you" what some system is without telling "you" its purpose and fundamental structure.

From a basic engineering perspective, a 'purpose' represents a description of the operational performance of a task. It represents a goal-driven approach toward the emergent awareness of a relationship between the "whys" and the "what's" in a given engineering project.

In the social domain, purpose feeds into a set of values, which become an adaptively corrective approach toward decisioning and learning; the result of which is an integrated city-system embedded within a habitat (and a host of accompanying imperatives). Wherein, production and distribution emerge based upon systematic need, sound scientific discoveries, and integrally engineered design.

In a pursuit (or a project) a purpose acts as a frame-of-reference that facilitates the better focus of "energies" and "intention" on things that serve the need or desire behind the purpose. With a focus of intention, input that would otherwise create a terrible mess in a person's psyche, can be better filtered and organized. Essentially, a purpose provides a direction for organization and for decisioning. Herein, it motivates, clarifies, focuses, and may even expand options by freeing time and energy that would otherwise be wasted on things that do not serve the desire or conflict with the underlying need.

The Real World Community Model is adaptive and emergent in its design; therefore, there is no "end goal" or "final vision" -- there is no "final purpose". Hence, the community itself exists in a state of emergence, constantly evolving and adapting to new information in the fulfillment of a purposeful direction shared by all individuals. Fundamentally, static directions (and final visions) in dynamic environments are likely to limit the fullest expression of a community's potential; they become tyrannical.

2 The purpose and goals of a community-type society

ADAGE: *Purpose is always found in the service of a larger whole.*

The type of society detailed herein may be otherwise known as a 'community of purpose' - a society founded upon and directed toward a commonly held purpose. Because the purpose is directed at the evolution of the whole, it is similarly embraced by all individuals sharing in the Community. The term "embrace" in the prior sentence could be replaced by: accepted; acknowledge; intended; reasoned; evidenced; explored, experienced; chosen; participated with; or even, actualized -- it represents a recognition that there exists a common direction of intention for social organization, a common purpose in everyone's life that may be used to organize society.

At a basic level, the Community exists as a set of similar social decisions, social structures, and social interrelationships (i.e., connections) that support individuals in developing toward their highest potential through the fulfillment of their needs and the facilitated expression of their natural desire to learn about themselves and the world (i.e., to advance themselves). The Community represents an intentional evolutionary direction through stable human fulfillment and engaged exploration. Herein, 'community' is a social organizational vehicle for developing human potential and facilitating human fulfillment.

2.1 The purpose

The following statements (*below*) represent humanity's shared purpose; it is the purpose for a community-type society. This purpose directs and motivates individual lives toward empowering and universal human progress. It is a unifying growth-orientation and a direction that has deep meaning throughout an individual's life and the life of the community.

The purpose statement: *To continuously and consciously evolve toward a higher potential expression for oneself and all others through resilient adaptation to a higher potential dynamic of experiential life existence.*

The term "highest potential" is defined as the greatest possible expression of a being's fulfillment, its capabilities, creativity, well-being (or "flourishing"), happiness, and intellect, while in a state of open and active intrinsic-engagement, and imbued with the deepest appreciation and compassion for the evolving and developing whole. Development toward a higher potential is observed [in part] as compassion, connection, contribution, self-growth & self-expression, and the desire and energy to pursue one's deepest passions - a resiliently adaptive cycle of 'flow'. It is an intentional

evolutionary direction - a direction of emergence into greater coherency, consistency, and continuity. There is no known absolute point wherein someone has reached their highest potential; the state is "revealed" through its emergence. Resilience refers to the experience of stress, and thereafter, rapid recovery (rapid recover from setbacks). To respond and recover from stress (versus reactive suffering) is "resilient action".

The aim of a community-type society is to unfold the fullest possible life potential of every individual consciousness through intentional organization in a continuum of balance with nature. It is a state-of-being present and in alignment with one's full potential self, bringing one into coherence with all reality.

The purpose of mutual societal fulfillment must be to deliver a framework whereby every human has ready access to all basic necessities – clean air, water, food, housing, sanitation, sustainable housing, aesthetic surroundings, medical care, and energy – whilst simultaneously remaining below the carrying capacity of the natural environment both locally and globally.

INSIGHT: *A system that can adapt, can likely survive; a system that can evolve, can likely thrive.*

2.2 The goals

The following goals (or intrinsic aspirations) maintain a social orientation toward common individual fulfillment.

1. To support each other in progressing toward a higher potential while developing self-knowledge and a deeper understanding and appreciation of nature and the nature of the world.
2. To continuously improve the effectiveness and efficiency of the community's systems in fulfilling the unifying and life-long needs of everyone.
3. To continuously improve the means, methods, and approach by which humanity discovers, understands, learns, communicates, and acts.
4. To exist in a state of regenerative abundance with the lifeground while maximizing the intelligent use of resources and caretaking the environment (i.e., to sustain material resiliency).
5. To arrive at decisions based upon a commonly "living" purpose, set of needs & values, and approach, and hence, a similar set of understood relationships for arriving at decisions and actions. Note that these similarities are necessary for the effective functioning of [human] social relationships wherein a community is a set of similar relationships.
6. To exist in a state of appreciation and compassion for the self and the evolving whole.
7. To continuously improve access abundance

through a stable 'bio-psycho-social community', a community of need fulfillment, serving as the liberating foundation from which individuals pursue their highest development and apply/contribute (participate in) everyone's evolving potential.

3 Human fulfillment

What keeps an individual fulfilled throughout their life, in the long-term? Maybe becoming something to be proud of. Maybe something that has been or is being created. Maybe the experience of growth and contribution. Maybe inquiry and the exploration of novelty. Maybe individuals are fulfilled through the feeling of continuous and coherent self-development - a sense of growing relatedness, of autonomy, and of competence in life. Maybe appreciation and consideration for the evolving whole represent a higher potential for fulfillment (also sometimes spelled as fulfilment). Maybe the act of questioning, or of openly inquiring, regenerates a sense of fulfillment. Maybe an environment where technology is applied to free all of humankind from the anxiety of chronic impulsivity and uncertainty, from a state of simple and programmed reactive survival. When individuals see themselves in another and they choose to cooperate and to share, then maybe they can organize a common social approach toward the arrival of decisions and actions that strategically fulfill everyone. Maybe, humanity could apply its resources and understandings toward the highest fulfillment of all - to free all humans for what is meaningful - to have all human needs sufficiently fulfilled (i.e., sated or "met") as all individuals progress toward a higher potential of life experience and self-expression. Fundamentally, fulfillment is the process of meeting needs (i.e., completing the need cycle on some required basis). Thus, a fulfilled society is a society of recognized needs, and not of unrecognized fears. In the real world, there exist commonalities that remove the illusion of separation between all of humanity. A deficiency of fulfillment is not a state (or, condition) any individual wants.

The most obvious and powerful realities of humanity seem to also be the most unrecognized. And, it is only when individuals take pause, often at the risk of social alienation, to question the foundational principles and ideas to which their lives are oriented does the truth about a supposed normality become more clear. Fulfillment is experienced in the moment as engagement in something for the joy of doing it (i.e., intrinsic joy, play). It is the experience of presence in something viscerally meaningful without worry or fear. Herein, achievement is secondary to the experience of fulfillment. Achievement brings only a temporary state of fulfillment. The moment something has been achieved it is already in the past. Many people numb themselves in the constant pursuit of achievement, and in doing so, miss out on the joy that comes from actualizing their truest and deepest desires. Achievement "achieves" only a temporary state of pleasure - the pleasure is there, and then it's not. Instead, fulfillment recognizes continuity - the continuous nature of being, of desire and of human needs. Fulfillment involves a continuous interplay of relationships and decisions that regenerate a continuity of well-being, of consistently meaningful progress, and of the coherent selection of ever higher potentials.

Essentially, fulfillment is a more accurate description, or metaphor, for that which is truly being sought by all individuals; though it is often disguised as achievement, and other forms of "pseudo-satisfaction".

The second obvious reality is that the human brain is designed to prioritize needs as a mechanism for maintaining the survival of the human organism. The brain anticipates and considers and reduces contradiction [during integration] for its very survival - the survival of the self as a physically material organism. When the basic needs of human beings are not met, then the human organism begins reacting in an instinctually predictive manner to "get" its life-support needs met [through impulse & compulsion as basic instinctual reactions]. Impulsive and compulsive behavioral reactions to situations are an indication of the absence of fulfillment and the presence of [at least] fear. When basic needs are sufficiently met and a human is not controlled by its instinctual reactions, then consciousness may begin considering its relationships and its ultimate potential.

Most people in early 21st century society, because their needs are not sufficiently met, find a comfortable and convenient place from which to shelter themselves from opportunities that might challenge them and lead to their growth beyond a state of fearful reaction, beyond the three f's of flee, fight, and feed (i.e., food & mate).

The third obvious reality is that human needs are fulfilled through the organization of certain states of the internal (or mental) and external (or material) world. Humans are naturally inclined to act on these inner and outer environments, and they do so [in part] through a system of orientational values that may or may not generate a state of structured organization that fulfills their discoverable, natural, and common human needs. Clearly, some states of the internal and external world objectively meet human needs more greatly than other states of the world. The term 'objective' refers to that which is independent of the opinions or attitudes of a person or persons. Some ways of approaching the world meet needs more greatly than other ways of approach. And, some states of the mind meet needs, and meet them more greatly and joyfully, than other states.

The starting point in the development of a community of flourishing individuals is the human being itself. Human beings have the ability to learn and pass on information via communication concerning the regular[ly verifiable] properties and principles of reality (e.g., scientific knowledge). This capacity for information acquisition, communication and transference allows for the common identification and fulfillment of human needs and desires, and the creation of systems that facilitate the strategic fulfillment of those needs.

If individuals among society seek to experience a continuous state of fulfillment, then they must continuously ask themselves, "What direction are I moving toward and what states of the world do I desire?" If humanity desires a community where individuals are supported in their experience of and exploration toward

their highest potential, then humanity requires a system of social organization that in some useful manner fulfills all common human needs.

INSIGHT: *When life isn't about fulfillment, then it can all too easily become about something else.*

4 Human needs

"Human needs are a powerful source of explanation of human behavior and social interaction. All individuals have needs that they strive to satisfy, either by using the system[,] 'acting on the fringes[,] or acting as a reformist or revolutionary. Given this condition, social systems must be responsive to individual needs, or be subject to instability ..."

- Coate et al. (1998)

A need is something that is necessary for a living system (or 'organism') to maintain a healthy and full[y satisfied] life. Needs are the 'nutriments' (or necessary conditions) that are essential for the ongoing growth, development, integrity, and well-being of all individual human beings regardless of culture. They are a component of the nature of a living organism and lie on a spectral continuum (i.e., a 'spectrum'). Herein, a human need is a state of felt deprivation of some basic, axiomatic form of human satisfaction, which requires energy and integration for the persistence and development of [embodied] consciousness. When deprived of the fulfillment of any need an individual is reduced in their life capacity. Hence, an unsatisfied need is a force of motivation, and by definition it requires some form of thoughtful and decisive action (Read: thought + decision + action). Human action is principally based on needs as a primary motivating fact[or] of behavior, and secondarily based on values. Values exist to orient individuals toward the fulfillment of their needs; they organize and orient toward [dynamic] states of fulfillment. Human need is the foundation from which humans have always operated; however, individual humans and society at large can forget that they have needs, and also, be conditioned to desire circumstances that inhibit need fulfillment.

Human needs are innate and universally common to all humans. In other words, all humans have at the very least a similar set of principal and common needs, which are objective and scientifically discoverable; they are verifiably experienced. Needs exist apart from knowledge of them - they are *a priori*. Human needs can be physical (or material), such as nutrition, energy, rest, and shelter, or they can be mental (psycho-social), such as the needs for growth, connection, and contribution. In general, needs do not change over time, but the way in which they are satisfied may change with advances in knowledge and technology, or changes in the environment.

All of humanity shares a common human experience and a set of common human needs. Humans have objective and discoverable needs. Human needs are distinguishable from the specific culturally conditioned and temporary environmental desires of a particular human being. All of humankind shares a set of common needs, including but not limited to nutritious food, clean water, a healthy and aesthetic living environment, and accurate information to effectively plan a fulfilled life together on a shared planet. Fulfillment is a common

pathway. If there is a common lowest denominator, then it is the fulfillment of human needs. And, the Community exists as a primal structure in the facilitation of human fulfillment.

Humans need a number of essentials to physically survive, psychologically thrive, and to maintain well-being in general. These needs are common to all human beings and include both material and social elements (or 'motivating factors') required for human growth, development, and healthy functioning, as well as all those things humans are innately inspired to become and driven to attain. The fulfillment of these needs leads to progressively higher states of potential well-being and flourishing. Herein, to flourish means to live within an optimal range of emergent human functioning, one that connotes well-being, generativity, growth, and resilience. Herein, growth and all forms of development are stunted when fewer [needed] nutrients are available.

Bio-physiological organisms require nutriments from their environment if they are to survive and to flourish. In particular, when the environment does not meet a developing human brain's need for optimal conditions (e.g., nutrition and sensory affection), then the brain does not develop optimally or even properly (qualified by later-in-life neuro-plasticity). When the environment is lacking, development and healthy functioning are by consequence also likely to be distorted or lacking. Human needs explain why only some efficacious behaviors [and values] actually enhance well-being, whereas others do not. Effectively, a hierarchy of prepotent needs structures values, in terms of their relationship to [objective] human fulfillment.

If there is a need, then there is a frequency [of need]. There is a "need frequency". For instance, humans need water every so frequently, they need air of a certain composition among a frequency of breaths, and they need shelter every so frequently. A community is a structural organization that facilitates the frequent fulfillment of needs.

Needs represent the reality of what is occurring to individuals in any given situation. The idea of "needs" is accurate in its description of what is really occurring with individual human beings and their required inputs from, and relationships with, the environment. Wherein, needs allow for the realization of complexity [in relationship and structure] in the real world. Needs are inclusive and their true fulfillment does not innately generate structural states of polarization between people, for they are commonly verifiable. Hence, evaluations of life and behavior based upon needs are "more true" in their accuracy at orienting toward greater states of human fulfillment.

Necessities involve relationships with objects that are indispensable for the full spectrum of human fulfillment. They include but are not limited to: shelter, food; water; habitation; energy; healthy relationships; learning systems and access to society's accumulated knowledge (as opposed to nonsense or error); the "pursuit of happiness" and self-esteem, self-development; the

pursuit of a higher and meaningful purpose; leisure time; love and connection; the means to communicate, locomote, and cooperate; and so on.

Human beings have [eco-, socio-, psycho-logical] needs, which drive motivation throughout the life of their human existence. From needs arises the conscious experience of emotion[al drive]. When consciousness is aroused to move toward completion of some need, it will engage in exploratory behaviors directed toward re-configuring the environment to complete the need, and experience the pleasure of that opportunity. When the desire (arousal) is satisfied, the system is restored to something akin to an equilibrium.

Herein, the conception of emotion has three related definitions:

1. **Emotion** = "causing movement", from the Latin *emot-*, past participle stem of *emovere* ("move through" or "move out") + -ive, *emotive*, meaning "capable of emotion". Emotion as stimulus; energy plus motion (e + motion).
2. **Feeling** = the conscious experience of a signal of the complex of arousal in an interaction (i.e., in an experience).

Observations and critical integrations create the potential for momentum. This momentum allows an individual to "break free" from the gravity of thoughts and actions that do not serve needs and do not explain the observations. Individuals must first move (behave) if they are to attain their goals and to overcome the inertia of the universe or procrastination within a dogmatic [belief] system. Momentum represents movement toward change, and emotion is the instantiation of that momentum. All levels of action are goal-directed [by consciousness]. But, not all goals are created equal because some goals are more directly satisfying (or sustainably fulfilling) of needs, and some are less satisfying or even thwarting of need fulfillment, and thus, have different effects on total well-being. (Ryan, 1996)

Behind feelings are needs and desires. Feelings and emotions are internal signals (or indicators) telling someone that one's needs are, or are not, being met. Figuratively speaking, there is a feeling of hunger or longing when needs are insufficiently fulfilled that propels someone to act. For instance, a living organism has a need (e.g., for bio-physical nutrition), which gives rise to a feeling (e.g., hunger), and its sensation by consciousness propels decisive action (e.g., food seeking behavior). This is how human beings function [in part] at a known and scientifically verifiable level. Based on a feeling, such as that of hunger, which arose out of a need for food, "you" move into a state of [food] seeking and acquiring behavior. It should be noted that these internal signals can become confused and perverted under aberrant and otherwise nocuous developmental conditions.

As well as physical needs humans have interpersonal, social needs -- humans are implicitly a social species. Human beings are social organisms, and they have not, and do not, function in complete isolation. Any given human individual exist within a continuum, a chain of social actions that are influenced from other social actions. There is no escaping the social element of the self. For a start, it takes two humans to make another human, and so, there is a requirement for at least two or three to begin with. Also, humanity's primate ancestors relied upon one another for their health and survival (e.g., grooming behavior of primates). (Dunbar, 1998) It is commonly known that humans developed as a species to hold approximately 150–250 unique human relationships (this is known as "Dunbar's number"), thought to be the size of most early human communities. (Hill et al., 2002) For millennia, the qualities and coordination of these interrelationships meant the survival of the individual as well as the entire tribe. Since the dawn of human history humans have lived in groups, and part of living in a group involves the evolved adoption (or adaptation) of interpersonal needs, such as trust, equality, respect, contribution, clarity and communication, and touch. And, these needs also give rise to feelings. This is, in part, the nature of human beings - humans have needs, they give rise to feelings, and then, individuals [have the potential to] act in a way that genuinely resonates with and fulfills their needs.

Human interpersonal needs are likely not as fundamental as persistence needs (a.k.a. primal, basic, and life support needs), such as shelter, water, and food. If someone does not get food and water s/he will die within a verifiably set amount of time. Without the fulfillment of interpersonal needs, an individual isn't going to die, but s/he is likely to feel less alive. When social needs go unmet individuals are likely going to feel lonely and depressed, possibly hurt and threatened; they are likely going to feel separate from themselves, for that is how they are living their lives - they are living separated from their social selves.

In a community-type society, it is understood that individuals can only get their needs met fully if the other people around and are also getting their needs met fully as well. If some individuals are getting their needs met and others around are not, then soon enough the others are going to become unhappy and start causing conflict. And, the whole time the individuals with met needs are going to feel conflicted, and the more that conflict is suppress, the more dis-at-ease everyone becomes. Herein, conflict presents an opportunity to take pause and to recognize [the insufficient fulfillment of] needs. When in a state of conflict one might begin to ask, "What are my needs and what are their needs in the generation and resolution of this conflict?"

When human needs are sufficiently fulfilled, humans experience greater comfort and well-being, and tend toward behaviors and interrelationships that maintain a state of "cooperative flow" and a space of active higher potential.

All human beings are continuously seeking to meet all of their needs. Although humans seek to satisfy all needs [sometimes simultaneously], some needs are clearly more immediately important than other needs—needs have a temporal and spatial nature to them. For example, humans need to eat at somewhat regular time intervals and the food has spatial-physical form. Needs, such as those of nutrition and connection must be sated (Read: satisfied fully) before other desires can be entirely fulfilled. The interaction, the ranking, and the progressive fulfillment of human needs largely determines how an individual lives and makes decisions towards its well-being and the well-being of others in a common environment. Needs are a factorial “determiner” of human behavior (i.e., they are a factor in the appearance of a specifically complex behavior). (Latham, 2005) Fundamentally, needs are a driving force in humans and there is no greater force in life to direct someone’s “destiny” than the needs that are valued most and the environmental structure that facilitates or hinders their fulfillment.

Human needs vary with respect to their *urgency*, *intensity*, and *priority*. This is known as the ‘prepotency’ of a need(s). Hence, the motives for learning behaviour are built into the biological constitution of the human organism as a ‘hierarchy of needs’, which can be described in terms of varying degrees of prepotency. One need is more prepotent than another if it is more urgent and inhibits other needs. The order of their succession is dictated by the fact that some motives are simply more physio-biologically urgent than others. For example, when physically threatened, or when survival is at stake, many people are likely to become more aggressive as a natural reflex to protect the needs of their physical form and to maintain the acquisition of nutriments. Hence, human motives are structured, and their arrangement within the structure is defined by their respective levels of urgency, intensity, and priority.

The fulfillment of needs is healthy, while preventing the fulfillment of needs or threatening their unfulfillment leads to dis-ease, illness, and behaviors that cause harm and suffering in oneself and others. Hence, the sufficient fulfillment of human needs represents the most rational[ly reasoned] self-interest of every human being. Sufficient fulfillment involves the recognition of the strategic requirements of one’s life, one’s happiness and well-being, and one’s whole environment, and hence, acting in integral accordance with values, principles and understandings formed on the basis of such cognition. Herein, rational self-interest is not selfishness [as a fetish, hedonism]; it is a factual life-serving necessity that may become perverted under sufficiently adverse conditions for growth and development.

When conditions exist or events take place that limit someone’s ability to meet their needs and to affect their bodily or psychological structure, then the experience of ‘trauma’ may be said to exist. As a result, in order to cope, individuals may engage defense mechanisms to block out awareness of their needs, or alternatively, they

might desperately attempt to sate those unmet needs in a misguided (or hurtful) fashion. This cycle involving unmet needs, trauma and the engagement defense mechanisms is a central one that lies behind many of the most destructive aspects of all cultures.

The failure to fulfill some needs in the temporal short-term may result in death (e.g., “terminal dehydration”). Yet, chronic unfulfillment (e.g., long-term shaming & shunning) is likely to generate a persistent and correspondingly pathological state of insufficient fulfillment, of trauma. Therein, a state of neurotic psychosis (as defense) is [at least] a dis-ease of “arrested fulfillment”, and possibly, of persistent deficiency (or insufficiency) in developmental fulfillment. And, it is a state that is widespread among people in early 21st century society, for early 21st century society [to a great extent] does not recognize or account for human needs, and the systems that it creates are not designed to effectively fulfill human needs.

The definition of needs herein may be considered in *organismal* and *functional* terms. The term, ‘human needs’, assumes the potential for a fundamental human trajectory toward vitality, integration, and health (i.e., that humans are not broken by design), and further assumes that this organismal tendency will be actualized so long as the necessary and appropriate nutriments are attainable, but will give way to the emergence of non-optimal physiological and psychological outcomes, and social arrangements, under conditions of threat or deprivation. In other words, human needs specify the necessary conditions for growth, health, and well-being, and their fulfillment is hypothesized to be associated with the most effective functioning (and potential capacity) of the human organism and the flourishing of a human community. A further claim is that each need plays a necessary part in the optimal functional development of an individual such that no one need can be thwarted or neglected without significant “negative consequences”, which reduce the manifested functioning of the organism.

Human needs include not only the obvious physiological needs for survival of the organism and the species, but also the basic psychological needs of a social organism, as well as those higher psychological needs that function to fulfill the full development of consciousness’ experience as the organism. In the case of humans, this is sometimes known as “full humanisation”.

Human needs are rooted in the instinct for self-preservation and are functional in human motivation evolved for learning and adaptive behavior. This general idea may be stated in two other ways: First, human needs are the intrinsic motivators for adaptive behavior and learning behavior; and second, as intrinsic motives toward adaptive behaviors human needs are the source of motivation for learning (i.e. ‘intrinsic motivation’).

Intrinsic motivation, unlike extrinsic motivation [as outside reward or punishment] engages personality growth and development; it does not inherently destabilize the personality of an organism [as occurs

with extrinsic motivation]. There exist different stages of human growth and personality development wherein an individual's behaviour is dominated by the need that is motivational at the particular socio-cognitive stage that they have reached. These motivations (or "deep meanings") provide the individual with a sense of direction as well as the motive energy and psychological will needed to expend energy and carry out particular life tasks toward the fulfillment of their need(s).

Practically, if there are rules to the human condition, then needs are those regularities in the nature of humanity that when discovered and fulfilled manifest meaningful and empowering states of flow (or "abundant living").

Finally, the conceptualization of human needs may be approached from a larger perspective, that of 'systems thinking'. Systems have needs that require input to maintain their operation and fulfill the larger purpose of the system. So, if the human organism was perceived as a system, then humans would have certain needs (or 'system objectives') that when fulfilled may reveal a larger and more meaningful view of humankind within a larger reality.

NOTE: *Without identification of one's own feelings and needs it is hard to identify the feelings and needs of others [in common]. In community, the self and other go together.*

Many aspects of behaviour, such as foraging, communication and mate choice, involve information processing, and many of the subdisciplines of behavioural science have considered mechanisms of information processing. For example, one can think of most of the basic processes of psychology (e.g. learning, perception, memory) as mechanisms of information processing. (McLynn, 2006:1119) Information processing is used in order resolve a requirement (Read: need), and it wanes when the requirement has been fulfilled.

INSIGHT: *When our basic needs are fulfilled, then we have a reservoir from which to further fulfill ourselves, to give back, and to fulfill others [in the community].*

4.1 Needs and rewards

INSIGHT: *Relationships have consequences and consequences create a space for growth.*

Reward is a property that an individual assigns to an input (or, incoming) environmental signal intended to satisfy or otherwise fulfill a need.

There is a very simple and seductive model (Read: the 21st century addiction model, the "reward hypothesis") when processing the concept of reward, which is wrong; and, if society falls into it, it will have made a logical error from which recovery is very challenging, because it creates its own logically circular paradigm. That error is:

If need does in fact have a physical property called [neuro-biochemical] reward, because consciousness is experiencing life through a physical embodiment, which causes individuals to express behaviors that meet needs (e.g., food seeking behavior in the case of hunger and the need to eat). Then, the logical circular paradigm of thought is that if the result of a behavior has too much reward (i.e., it's "hyper-rewarding"), then an individual will overindulge in it and become addicted.

However, attention should not solely be focused on "reward" (or "palatability" in the case of food). For instance, why do different people like different foods? Billions of people around the world find various foods delicious that others might find unpleasant. Reward is internal to the individual, and hence, has a subjective component to it. And, in its subjectivity, it is also cultural.

The second issue with the reward hypothesis is, "Why do we ever stop seeking the fulfillment of a need?" In the case of eating, the question is, "Why do we ever stop eating?" At some point an individual human does not want any more (in a single sitting) of a particular food, for example. The environmental signal (termed a 'reward') didn't change, the individual did. Essentially, reward is a subjective property individuals assign to a signal based on their past experience, and their current neuro-body physiological state. And, it underlies all individuals' motivations.

APHORISM: *The sated appetite spurns honey, but to a ravenous appetite even the bitter is sweet.*

4.2 The internal reward signal

INSIGHT: *Everyone needs something beyond life support, something more like meaning, purpose, exploration, restoration, and an environment conducive to supporting their development toward a higher potential.*

What is the internal signal individuals' experience that causes them to seek the fulfillment of their needs? For example, what is hunger? The signaling of a presence of a need is not a single motivation (or "force"). Instead, it is the interaction of several different processes. In the case of hunger, it is the interaction of four different clinically measurable, provably distinct biochemical processes:

- **Satiety:** The mind-body's *capacitive state*. In the case of hunger it is the body's *nutritional and metabolic state*. It includes both the biochemical response to the absorption of nutrients, and access to stored nutrients.
- **Satiation:** An estimate of future fulfillment. In the case of hunger it is an estimate of future satiety, based on the sensory and cognitive experience of eating.

- **Hedonic impact ("likes"):** The pleasure someone experiences from an action. "Palatability" is the hedonic impact of food.
- **Incentive salience ("wants"):** The actual motivation to obtain something that is "liked". It is largely, but not exclusively, a product of the other three motivations.

Note that it is important to recognize that likes and wants are not limited to food. Any experience someone "likes" - that has hedonic impact - is capable of producing a "want" for more - incentive salience.

It is also very important to point out that what is colloquially called "reward" is a mashing together of hedonic impact and incentive salience. Both vary independently, and both are properties relative to the subject; hence, the term "signal reward" (or "food reward" in the case of food), which implies a singular property of the signal itself, is intrinsically misleading because it creates the cognitive trap of the self-limiting [reward] model. Interestingly, the claim that "wants are infinite" represents a similar cognitive trap.

Satiation and satiety are synonyms in common usage: so, why are they distinguished? The answer lies in material space-time (i.e., needs have a temporal and spatial nature). In the case of food it lies in [at least] the gastrointestinal transit time: it takes hours for the nutrients in food to be digested and absorbed (or "assimilated"), which means that the satiety response is not a useful signal to stop eating.

The idea of pseudo-satisfaction now becomes relevant - it is possible to distinguish two types of satiation: positive and negative. For example, when people eat real food, they are rewarded twice: once by the pleasure of eating, and again by the pleasures of positive satiation and satiety. In contrast, negative satiation is that sick feeling people get when they have eaten too many empty calories. It is the body's way of telling them, "We can't dispose of any more of that." So they receive that quick hit of pleasure, or hedonic impact, from eating tasty but nutritionally empty non-food - but it's over the moment that candy slides down someone's throat, and the individual never receives the hedonic impact of positive satiation and satiety that tells them, "You're done, you can stop eating now." And with each bite of empty calories, people not only receive less and less pleasure - they make it more and more difficult to achieve the pleasures of positive satiation and satiety.

Furthermore, because satiation is the sensory experience of signal processing (e.g., eating), it can be fooled. It's well known that in the case of food:

- People eat more in specific group configurations than when eating alone. (Lumeng, 2007)
- People eat more when they're able to eat more quickly.
- Hidden calorie preloads are never completely compensated for.

It is possible to fool satiation, but not so much food satiety, which modulates reward. And, satiety is the salient factor to understanding the signal-need, because:

- Satiation is an estimate of future satiety based on the sensory and cognitive experience of eating, in the case of food.
- Both a subject's likes and wants are very strongly modulated by satiation and satiety.

Three more factors interact with the signal to modulate fulfillment:

1. **Availability:** How difficult it is to get something that is wanted.
2. **Certainty:** How certain it is to get something that is wanted.
3. **Willpower:** The conscious overriding action of the forebrain, known as "executive function".

The problem with popularizing for mass consumption is that it's easy to simplify a concept until it's no longer true. In the process of oversimplification, concepts also become *politicized* - and the naive model, in which reward is a property of need that causes dis-ease (or, want is a property of the individual self that causes infinite wanting), is being used to resurrect a multiple false hypothesis [for a variety of agendas].

QUESTION: *For who does this fail?*

4.3 *The pseudo-satisfaction and the reality of needs for a stably directed society*

INSIGHT: *Community facilitates stability in fulfillment.*

Human systems exist at several levels, not only at the individual level (also social, economic, and ecological). In each system there exist a set of human needs that may or may not be fulfilled by the structural design of the system. Therein, human societies are complex systems embedded within a supra-system, the global ecological environment. Since humans are dependent upon that environment for the necessities of life, and since human activities strongly influence both individual and environmental health, a society needs to be well-informed about the state of each interrelated system if it is to remain stable. This implies the need to identify and monitor key indicators of the state of human fulfillment, socio-economic sufficiency (i.e., "public health"), and the health of the natural ecological environment. Further, stable societies facilitate open and integrated relationships between individuals such that needs are acknowledged and sought fulfillment synergistically and at a global-community level.

A stable community is one in which human needs are

recognized and are sufficiently fulfilled (i.e., a threshold of need sufficiency exists) such that the highest potential direction for each individual is clear to themselves in the moment. When an individual's needs are not sufficiently met, then they are likely to act in an impulsive manner toward "getting their needs met", which often comes at the expense and cost of others. When society recognizes needs, then probabilities turn in favor of socially corrosive values and behaviors being washed out for examination by society. Alternatively, socio-economic systems that do not account for human need are highly likely to generate a systemic form of social instability (e.g., structural violence) and move society in a direction that costs humanity its "humanity", and ultimately, its highest potential. Some societal structures are mental illness producing mechanisms.

Of course, people are manipulative and seek power in an environment that incentivizes and/or requires those attributes in order to get needs met (e.g., in an environment of socio-economic competition). The behaviors that humanity expresses must be viewed in the context of the environment; when humans are in an environmental state of artificial scarcity and socio-economic competition, then there is some degree of certainty over the types of behaviors that likely to appear. And, when there is socio-technical cooperation, then there is some degree of certainty over the type of behaviors that are likely to appear as a consequence. Human behavior can be changed [in part] by changing environmental variables, through actions by other humans (subjects) and the natural environment (nature).

In early 21st century society, it is often the case that social instability starts with a lack of recognition that children also have human needs. Children, as common human beings, have needs that require fulfilling, just like adults. At a fundamental level, a more free society is a society that nurtures the fulfillment of even the young ... especially the young.

Recognition of human needs is necessary for social stability for at least two sapient reasons. First, human needs direct human action. This direction, in combination with environmental conditions and opportunities, allows for the fulfillment of needs and sets the course of human development. Secondly, human needs are a key factor in the adoption of new ideas, technologies, and systems; ideas will not be adopted by a society unless a presumed need for them exists. Some ideas, such as that of retribution and of infinite economic growth, are verifiably harmful to the well-being and needed fulfillment of individuals. When human needs go unaccounted for, then it is highly likely that ideas which promote suffering will continuously re-manifest.

A social system for fulfilling human needs cannot be designed to provoke behaviors that lead to social corrosion and instability if it is to remain a viable long-term system. The basis of any society or "civilization" ought to be a socio-economic organization that is systematically designed to reduce and/or eliminate violence between individuals, to improve the alignment

of conceptual understandings with nature, and to improve individuals' access to common resources - these are the characteristics of a truly civil civilization. Societies that systematically regenerate states of harm are not civilized.

Further, without an emergently formalized social system based upon human needs, how is any economy supposed to function sustainably and without violence. Instead, economies will continue to function via competitive gaming, authoritarian, and other structural forms of violence until they account for and are informed by the common lifeground of which all of humankind is a part.

A socio-economic system that maintains or exacerbates an imbalance in the fulfillment of needs is one of the most caustic organizations a society can have. This is in part explained by humanity's deep psychological need for connection, sharing, and a social communication. The human organism is a social organism with a social neurophysiological makeup that allows for empathetic connection within its own species and with others. Humans are hard-wired for social connection, empathy, and support. In a community, an individual's well-being is often dependent upon the group's well-being. Fundamentally, the human brain is geared for socialization. At a functional level, the fulfillment of 'basic needs' and 'social needs' triggers the same reward centers in the human brain. An individual's psyche does not live in a solitary vacuum away from everyone and everything. Invariably people interact and influence each other's fulfillment, their emotional states, their needs, and their overall well-being. There exists an ongoing and identifiable relationship between human needs and the ambient cultural/socio-economic context that either supports the fulfillment or frustration of those needs. And, the way in which people orient themselves toward

THE BENEFITS OF A PREDICTABLY NEED-DIRECTED SOCIETY

Neuroscientists Shmuel Lissek and colleagues have found that when an unpleasant or painful experience, such as an electric shock, is predictable, then organisms relax.^[1] The anxiety produced by uncertainty is gone. Hence, it is thoughtful to consider that when humanity's basic needs are met, and human beings are effectively fulfilled, then quite possibly they step into a natural capability of perceiving more of themselves and more of reality because they are no longer focused solely on reflexive fight or flight, or on compulsive pseudo-pleasuring.

1. Shankman, S.A. et al. (2011). *Effects of Predictability of Shock Timing and Intensity on Aversive Responses*. International Journal Psychophysiol, 80(2), pp112-118. DOI:10.1016/j.ijpsycho.2011.02.008 [ncbi.nlm.nih.gov]

their social environment affects the environment's potential for providing them further fulfillment. Needs are commonplace in the real world. Needs are commonplace among humanity. And, a recognition of one's own fundamental needs provides the opportunity to recognize the same needs in others.

Humans are capable of experiencing both personal distress as well as distress for others (i.e., 'empathic distress'). When humans are distressed they behave compulsively and impulsively with causal regularity. Hence, a community-type society involves individuals who are aware of their human needs. It involves individuals who have awoken to their nature and to the realization of why they behave in the patterned manners in which they behave, with recognition that some patterns are detrimental and others beneficial to the health and happiness of all individuals in society. For a society to remain stable, patterned behaviors that lead away from human fulfillment must be made visible. To ignore these behaviors or expect different results is a recipe for delusion and disorientation. It is commonly said that repeating the same behaviors and expecting different results is the definition of insanity. Those who are unsane are essentially stuck in their developmental understanding of what it means to experience the condition of human fulfillment; they are stuck in the true evolutionary progression of human consciousness toward greater levels of awareness, complexity, and morality.

Individuals have choices and have needs, and they can choose to fulfill their needs in ways that are meaningful and common to everyone, or in ways that are meaningful to their pleasure center in the moment and create suffering for oneself and others in the long-term. In a community-type society, individuals seek pleasures that are strategically life enriching, not vices that keep them in a static stagnant grip.

Under certain cultural and economic conditions manufactured, artificial needs (i.e., pseudo-satisfiers) become confused with objective, real needs. Needs are objective and exist apart from culture and economic [market] conditioning. In early 21st century, children are often used as pseudo-satisfaction for the[ir] adults' unfulfilled desires. Some people [for discoverable reasons] seek to meet their needs in the short-term, destroying everything else around them in the long-term. They do not identify their needs nor do they recognize ways of meeting needs that lead to strategic fulfillment as opposed to short-term pleasure and pseudo-satisfaction. They often sink down into regions of the brain that support instinctual survival and the rapid and obsessive short-term satisfaction of needs (i.e., compulsion). Early 21st century society maintains a dis-ease continuum that starts with a lack of fulfillment and the pseudo-satisfaction of real human needs and ends in warfare and ecological devastation.

Pseudo-satisfaction represents the opposite of a higher potential adaptation and optimization. Pseudo-satisfied behaviors are often compulsive and irrational.

When needs are truly fulfilled (or "sated") and not pseudo-satisfied, then impulsivity and compulsivity have the potential of being replaced with reasoned rationality and social intelligence. A single intense energy expenditure (that of reactive impulsivity) is replaced by a self-regenerating state of inquiry and fulfilling action that takes the form of rationality (as spectral ratio), reason (as coordinated relationship), and intelligence (as integrated connection). Wherein, repetitive behaviors that are deeply unsatisfying transform into behavioral actions that align with that which has a naturally higher potential for being more fulfilling and more meaningful.

There exist things in this world that people perceive as needs, but are in actuality impermanent substitutes for real and deeply meaningful needs - there exist 'pseudo-satisfiers' (or 'pseudo-fulfillers'). Some of these modern substitutes among many other personal and socially stagnant and corrosive behaviors [and material objects] include, but are in no way limited to: lounging in front of the television; artificial flavoring and flavor enhancers, the rewards of "winning", commanding and controlling the lives of others, living through one's children, pigging out on ice cream, and gossip (or social drama). In order for a healthy individual to overcome the expression of pseudo-needs the real need must be identified and met.

Pseudo satisfiers are detrimental because they provide the sensation of need satisfaction when a real need is not actually being fulfilled. When real needs continue to go unrecognized, then individuals begin to consume more and more of what they don't need in futile compensation for what they do need - homes become cluttered, minds become confused, and people become fat and lonely [with over 7 billion people on the planet]. Nowhere is this maybe more apparent than in the context of modern [modified and nutritionally deficient] foods. Therein, individuals consume ever more quantities of food as their taste sensation is slowly changed with artificially loud and intense flavors. Also, industrial food stuff is nutritionally vacant and may be biologically incompatible; hence, it causes the body to feel ever more lost in hunger for real nutrition. The factual desire is for true hydration and biophysical nourishment, not industrially designed products marketed as food.

Deficiencies in [effective] fulfillment create cravings that are extremely difficult to deny. Commercial entities, in general, desire to engage a state of craving in their customers such that they have a deep desire to return to and re-purchase their products. They want (if not financially need) to engage a consumer's cravings and emotions, for that will cause them to continue the consumption of their products. For the purpose of "marketshare" commercial entities manufacture cravings and addictive behaviors that are very difficult to control once they have been engaged. Food manufacturing businesses, for example, are fighting for what they refer to as "stomach share" - the portion of your stomach that they can control and fill with their products (e.g., the bliss point and formulaic food "optimization"). (Moss, 2013) In other words, they are competing for control

of the market share of "your" stomach. That is [in part] why they market their products using emotional appeal, and they manufacture their products with ingredients that maintain a high likelihood of creating a customer's desire to return to the food product over and over again. They want "your" cravings and your emotions engaged; they want "you" pseudo-satisfied.

Many real needs go tragically unmet within profoundly sick societies, some of whom begin declaring wars on natural desires, spawning forth states of individual and social instability. When societies begin declaring wars on various desires, such as "the war on drugs" or "the war on sex" the real needs become lost in the fight and frequently the war turns toward fighting the very expression of the real need. The war on drugs, for example, battles a sovereign individual's desire to experience different states of consciousness (i.e., consciousness exploration) and of plant/fungi "medicine" healing. The initiation of war against what is perceived as a social problem is not ever a rational decision; it is a decision from the State of greed and protectionism. Treating a problem as if one were at war with it will not solve the problem and will branch out new problems in the process. Has "your" society been declaring war on health symptoms? What if wars were distractions that serve business and the few, rather than the interests of human beings. There is a relevant maxim here: The first casualty of war is the truth.

What is not being said here is that there is never a time to fight or to struggle, or to apply willpower toward others immediate cessation of harm. These "warrior" defense instincts are part of each individual also, and they are important aspects of human nature and a humane desire to survive and live free, fulfilled lives. And, perhaps there are times when someone needs to trust his/her desire to fight or to struggle. But, what has happened in early 21st century society is that this particular response to problems, the response of fighting, struggling, and overcoming has become habitual to situations where it is not applicable; where its engagement doesn't cease harm, but re-generates a state of suffering.

When more people make more rational and meaningful choices, then healthy social interaction toward resolving systemic problems becomes probable. When reason and knowledge [and self-esteem] exist, then the idea of a deep purpose, and its unwavering pursuit, may enter awareness. When the state of need sufficiency exists, then progress toward a higher potential is more likely to regenerate itself in someone's perceptual field of awareness. When all psychological barriers to self-growth are dropped, then an individual has the possibility of entering into a state of constructive and creative flow, instead of re-generating states of self-limiting illusion. And, at a social level, *constructive flow* becomes *cooperative flow* wherein a more stable social state enters into the realm of probability.

Regardless of how human needs are fulfilled, if they are not fulfilled, then an individual's highest potential will always remain elusive and social cooperation toward a

stable higher-potential for all will appear utopian (i.e., fantastically impractical; a fantasy).

There is no known greater force in life to direct destiny than the needs and the states of being that someone values most, for humans are highly likely to violate their values (and principles) to meet their needs [in environments that do not facilitate the real meeting of needs]. Thus, if needs are not sufficiently fulfilled, then values are unlikely to coordinate optimal decisions as there is a high possibility that they will be overridden by the organism's instinctual impulse or compulsion to meet an unsatisfied need, which has likely generated a persistent state of suffering.

If human needs are not capable of being fulfilled given a finitely regenerative system and transparent ecological conditions, then it would seem that humans may well be a non-viable organism. While the human population exploded, human societies developed in ways that have caused enormous damage to their own bodies and the ecologies in which they inhabit, which maintain their very survival and well-being. If, however, humans are capable of recognizing their needs on an individual level and fulfilling them on a sustainable socio-environmental level, then a stable platform might be persistently created for universal progress and cosmic exploration.

Living systems in all forms "evolve" and "respond to change" in ways that depend upon their internal structure and the characteristics of the environment within which they exist. It is desirable for purposes of the well-being of those who use the systems [in the community] to have the ability to evolve the systems themselves in order to keep their re-creations in alignment with their emergent and dynamic intentions and ongoing issues of fulfillment. A preferential social organization would also be capable of responding to the ecological environment within which it exists and upon which it is dependent such that when the environment changes the individuals are capable of changing in-turn with grace and stability.

Fundamentally, when human needs are fulfilled dissimilarly or denied fulfillment due to limitations of societal structures, then how will that affect individuals' social behavior? If a population understands what its needs are and how they may be optimally fulfilled given what is known at the present time, then people can begin to resolve conflict and unify their solutions toward the mutual fulfillment of all of their needs. Needs exist along a continuum; they are not compartmentalized. All of humanity is part of a continuum of the same existence, for life is a continuum of existence (because it is life).

When someone's needs are met, then that individual is much more likely to develop into a fully functioning human being capable of expressing their highest potential, than if their needs were to go unfulfilled. No one goes through life happy while simultaneously going through life unfulfilled. A stress inducing void is generated when there exists insufficiency in the fulfillment of critical needs. Therein, stress can be a motivational and hormetic adaptor, or it can become an overwhelming disintegrator of motivation, personality,

and social cohesion.

"It's simply a matter of historical fact that the dominant intellectual culture of any particular society reflects the interests of the dominant group in that society. In a slave owning society the beliefs about human beings and human rights and so on will reflect the [pseudo-satisfied] needs of the slave owners. In the society which is based on the power of certain people to control and profit from the lives and work of millions of others, the dominant intellectual culture will reflect the [pseudo-satisfied] needs of the dominant group. So, if you look across the board, the ideas that pervade psychology, sociology, history, political economy and political science fundamentally reflect certain elite interests. And, the academics who question that too much tend to get shunted to the side or to be seen as sort of radicals."

- Dr. Gabor Mate

5 Human nature

INSIGHT: *There is a common humanity. Among community, when we see nature, we see the interconnection of consequential information.*

If human nature is a thing of any kind, then it is [at least] the needs of the human organism that have a terminal consequence on its behavior in the context of an environment. Human nature, in this sense, is the manifestation of behavioral traits, psychological characteristics, and emotions under particular environmental and learned conditions that support or thwart the fulfillment of common and persistent human needs. Herein, human nature is characterized within the context of human needs. To claim that human nature is any one behavioral trait, such as stating that "humans are violent and greedy by nature," without identifying the environmental characteristics and existent relationships in which the behavior manifests is scientifically incorrect. To de-contextualize "human nature" from human needs, physiology, and from the totality of the environment is unlikely to facilitate fulfillment, and is likely to spawn forth self-generated illusion and human conflict. Essentially, human needs are a frame of reference for inquiry into human nature. Human behavior is a direct result of the reality in which the behavior exist. Human behavior can be highly predicted based on the environmental context in which the behavior manifests. Fundamentally, environment shapes behavior, and the behavior of organisms can be changed by changing the environment.

Human behavior exists within a vast ecosystem of experience that is always adapting to stressors and incentives. When specific societal structures (Read: social, decision, material and lifestyle) become endemic in an area, it is very likely that we are going to see adaptations of the humans in that environment. Exposure to elements within the environment highly shape behavior, physiology, and overall life experience. When societal structures are out of alignment with human need fulfillment some of those humans living in that environment are likely going to manifest dis-ease, psychological and/or physiological in form.

Humans are at least conscious, bio-psycho-social organisms that react to their environment (physical and mental). Humankind is by its very nature a social organism (i.e., there is a psycho-socio-physical dimension to human life), and by consequence, social-technical organizations (or systems) have evolved. An awareness of one's "human nature" (as self-knowledge common to all) is also an awareness of the self as a social organism beyond (and within) the persona or 'ego'. Social norms as well as individual behavior cannot be taken as a given, uninfluenced by an environment of connection and interrelationship. If human nature is claimed to involve a behavioral trait, then the statement must include qualifications that accurately describe the environment within which the behavior manifests and

an evidential rationale of the human need (or common terminal consequence) that the behavior seeks to meet. All behaviors, wants, desires, and preferences are eventually traceable to a terminal human need in a larger systematic environment.

As humanity defines who it is, how its bodies and minds work, how evolutionary pressures shape what humanity has become, then humanity may find that the scope of variables expand through interconnectedness. Humanity may find that it is impossible to define who humanity is without also defining what is in and around it (i.e., in the surroundings): the air that is breathed, the sunlight that bathes the planet; the food taken in; the social connections with others; the shared mental models; the trillions of bacteria that are on everyone, and within, everyone; the shared DNA with all living things. The deeper humanity looks, the more it is likely to see the interconnectedness of all things.

The environment is an essential component part of the variability element of what is commonly referred to as "human nature". The behavior (and personality) of humans is greatly influenced by their environmental conditions and conditioning. In other words, behavior does not occur in a vacuum, it is considerably shaped by environmental variables. Human nature, if granted such a thing exists, is an amalgam of human needs in an environmentally embodied context. In short, what is going on in the environment shapes individual brains and behaviors. And, there exists a discoverable relationship between needs and the surrounding sources of their fulfillment.

Genes are not independent initiators of commands; they rely on environmental triggers to come into effect (i.e., to be 'expressed'). Recent scientific papers show that it is the surrounding environment which is often more important than a "perfect" stem cell. There can exist a near "perfect" cell (i.e., stem cell), but it will still not develop and function optimally if the surrounding environment is diseased (or "off"). If the environment doesn't offer all of the signals necessary for the cells full functioning, then that cell will not have a structure from which to develop toward its fullest potential.

Humans display behavioral propensities under certain environmental conditions (i.e., under particular environmental contexts). It is generally the environment that triggers these propensities. As such, there is not necessarily a fixed human nature, there is human behavior dependent upon an environmental context that to some degree either meets or does not meet needs; there is consciousness dependent upon sensory information, which thwarts or facilitates the fulfillment of human need. Therein, the flourishing of the positive traits of human behavior arises when humans experience the sufficiently free fulfillment of their needs. And, a failure to fulfill that which is desired by fundamental human nature will produce results that are personally and socially destructive (e.g., fearful primitive reactions and the desire to control or manipulate others' lives).

The world is not someone's egoic projection; it is the

world as it is, the world in its natural form - nature is the model. Nature is not "out there", every individual is a part of it. Nature does not have to be split from humans or from the social. People project their own values onto others, and that is where they are wrong about others and about human nature.

Any definition of human nature that is not grounded in evidence common to all humans for its claim is likely to establish an ideology of artificial limitation and mar an individual's or culture's perception of their fellow human beings. Some things that are assumed to be human nature are very much cultural, whether this be food choices, leisure activities, work behaviors, discrimination biases, and violent tendencies. The real question is, what is human and what is cultural? And, how is the universal human condition shaped by culture?

Some people believe that human nature is "flawed", and then, they go on to claim that society needs a government made up of humans to do the "right things" and make the "right choices". Some people believe that authority is the fix for the mistake that is humanity.

Some cultures have become rather impoverished in their understanding of human nature and also rather impoverished in the range of what they consider to be human potential. Many individuals become victims of the culture into which they have been conditioned -- their sense of themselves, of others, and of what is possible is caged by the culture-bound choices of those who have come before them. And at a neurolinguistic level, it is very easy to reinforce one's own prejudices by repeating declarations about what one believes human nature and one's own capabilities are limited to. A slight change in repetitious thought pattern can bring about major effects [over iterative time]. There are real attachment disorders to real[ly unpleasant] experiences of existence.

In each moment, individuals choose from among those possibilities in their awareness, and their lives are expressions of these choices. Perceptions are not always accurate and choices are not always made rationally, and this is largely due to a distorted view of who one is (and the self-limitations that one repeats to oneself).

Nature is not "out there", humanity is an evolving part of nature. Rather than viewing oneself as an isolated individual at odds with the outside world (and sometimes, oneself), and in conflict with others who are essentially similar to oneself, it is wise to view one's self as part of a single unified field of existence. How might that perceptual change influence the way a population interacts? How would individuals treat others if they understood that everything they do to them and how they treat them, that they are ultimately doing to a part of themselves? How might an individual treat oneself if one were to realize that much of what one says and does to oneself, one is also doing to others?

Most inaccurate perceptions of human nature eventually translate into the fallacious assumption that the interests of the individual and those of society are mutually exclusive (i.e., not inclusive). This dichotomous

view of social reality perpetuates prejudice, bigotry, oppression, exclusion, and multiple other forms of corrosive ideology. It creates social problems that are in fact unresolvable 'pseudo-problems', which must be approached from a more accurate perception of human nature (and natural systems thinking in general) to adequately resolve.

In early 21st century society, perpetual neglect of human need by other humans in early 21st century society is a societal experiment being carried out right before everyone's very eyes and tested on a daily basis in nearly every form of media you can image. If one's needs are not met then one's behavior and values are more likely to manifest into "negative" human characteristics (i.e., harmful thoughts and behaviors), which are then used for judgment and punishment by "authorities" and other "negatively" confused individuals.

In a very real sense, the only limitation on human potential is nature, the laws of which all of humanity are all a part. In any culture humans have all manner of potentialities for what they may become. What they do become, however, depends largely on which possibilities are cultivated and which are hindered and repressed. The exploration of a higher potential depends greatly on the kind of society an individual lives in, since all humans can only exist as social beings.

It is not scientifically accurate to say that "human nature dictates" ... anything. For is now know that the human system (and all living systems in general) reconfigure themselves through [at least] environmental signaling. Hence, anytime someone says, "Human nature dictates ... ", wait for the ideological statement that follows, to more greatly understand where they (Read: their active belief systems) are originating from. Fundamentally, both heredity and environment interact with each other to influence the development of the individual. Life is, in part, an adaptive response.

ADAGE: *The structure manifests the individual.*

6 The motive for action model

INSIGHT: *Consciousness experiencing the [natural] human condition has extant, commonly identifiable needs. An objective value is the identification of a common relationship in a common system of existence through intentional inquiry and integrated understanding. Objective values describe the natural relationships that verifiably fulfill the common needs of conscious organisms. Therein, there is a coherent way for consciousness to know fulfilling actions from unfulfilling action.*

The Motive For Action Model (see [Figure 3 on page 21](#)) represents humankind's innate and universal motives for action, their common needs and states of being. It is a model of the forces that motivate, liberate, and direct a human life [as they are presently known] toward a higher potential of self-expression and human fulfillment. This model assumes that all humans, regardless of culture and socio-economic conditions are driven by the same fundamental needs, the same motive forces. The model exists as a guide for the informed creation of a fulfilled society. By understanding what human [life] needs are and the different ways they may be fulfilled (or prevented from being fulfilled) humanity can create an intentional environment where it can cooperate toward the fulfillment of all everyone's needs.

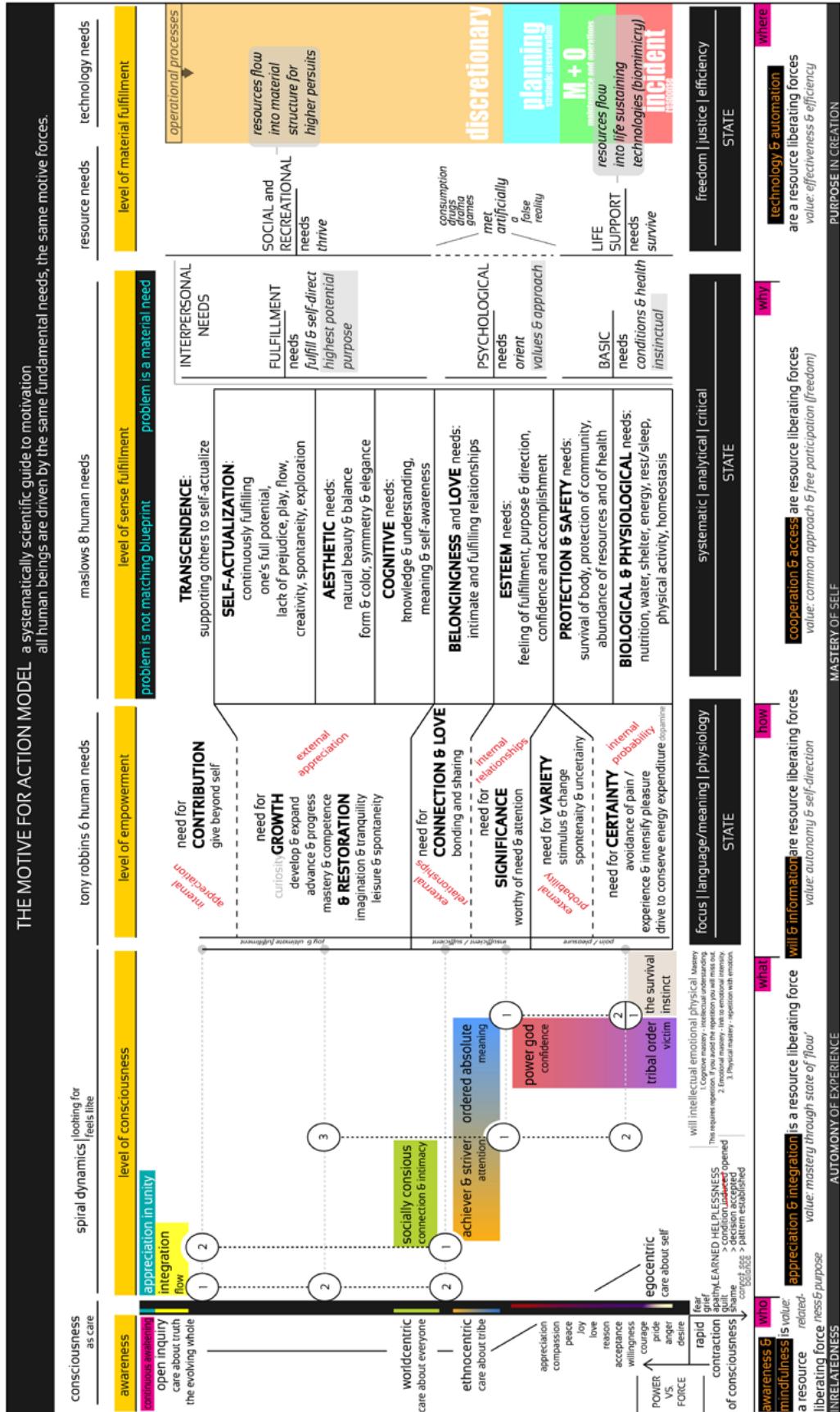
If motivation is driven to some extent by the existence of unsatisfied needs, then it is worthwhile for a community of individuals to maintain an awareness of their common needs and identify whether those needs are being fulfilled. When human needs are left unfulfilled, then individuals often exhibit behaviours that could harm the stability and conflict with the guiding purpose of a community. Hence, a stable community arises and is composed of individuals who recognize their needs and act in a common manner toward the fulfillment of everyone's needs so that no one's unfulfilled or pseudo-satisfied needs cause personal and social instability.

Human beings, like all living creatures and systems are characterized by needs - resources, energies, and states of experience required to survive and develop toward conditions of maturity, health & well-being, and sustainable prosperity. Human needs can be described in various ways, and they have been identified, categorized and documented by numerous scientific researchers, philosophers, and motivational facilitators.

The Motive For Action Model combines multiple different isolated 'needs-based models' into a single integrated 'needs-continuum model'. From left to right, the model includes the following eight sub-models:

1. The consciousness [as a Level-of-Care] model;
2. The Power versus Force model;
3. A modified version of the Spiral Dynamics model;
4. Tony Robbins human needs model;
5. Maslow's 8 human needs model;

Figure 3. The motive for action model represents humankind's innate and universal motives for action, their common needs and states of being. It is a model of the forces that motivate, liberate, and direct a human life [as they are presently known] toward a higher potential of self-expression and human fulfillment. This model assumes that all humans, regardless of culture and socio-economic conditions are driven by the same fundamental needs, the same motive forces. The model exists as a guide for the informed creation of a fulfilled society. By understanding what the human needs are and the different ways they may be fulfilled (or prevented from being fulfilled) it is possible to create an intentional environment where humanity can cooperate toward the fulfillment of all of everyone's needs.



6. The intrinsic, self-determined motivation model;
7. A physical resource needs model; and
8. A technological needs model.

Each of these sub-models categorically organize a different factorial component of the human life and learning system, extending from the subtle [as consciousness & mind] on the left of the model to the material [as physical resources & technology] on the right of the model. In other words, the Motive For Action Model represents a common spectrum of human need, extending from consciousness (left) to the material (right). When combined, these models suggest that humans have needs that extend from the "subtle" (or mental) through to the material - there are multiple integrated human systems, and there exist a set of human needs in each system. At the model's far right the spectrum may be seen interconnecting with the Community's operational processes elaborated upon in the Decision System 'design specification'. Fundamentally, it is useful to view motivation as:

1. Needs, which are felt and conceived of as drives.
2. Values, which are orienting structures composed of [mental] concepts and [physical] objects.
3. Goals, which are conceptual directions with meaning gain specific to needs.
4. Approach responses (action plans/patterns as a result), for obtaining the goal, which are information processing structures with the potential for self-correction at every level of societal experience (i.e., at the individual, social, material, and lifestyle levels of society).

The Motive For Action Model provides insight into those dynamics of experience that lead to a truly fulfilled life and the expression of an individual's fullest potential. Everyone needs love, friendship, and an opportunity to contribute. Everyone has a need for the certainty of survival and a variety of experience. It is comforting and healthy to be surrounded by people with whom one is familiar and uplifted; whom one cares about and whom care about one - people with whom one can connect. Everyone cares about someone, and deep within them remains the desire to thrive personally and socially as a human being. At some level all healthy human beings recognizes that there are forces that lead to a fulfilled life. And, although one may not realize it, everyone has the capability to impact their internal and external world in such a way that they orient themselves and their societies more greatly in the direction of a higher potential. It is empowering to know that every person has the aptitude to be and act in the world for the betterment of themselves and all others - the betterment of the evolving whole.

The human system exists at multiple levels, including the individual level and the social level. In each system there exist a set of conditional human needs that may

or may not be fulfilled by the structural design and orientation of the human system within its environment. Herein, individuals relate to form social systems and make decisions to form economic [decisioning] systems. In other words, humans exist within an ecological set of discoverable nested systems which they experience by means of consciousness and which form into a socio-economic structure that inhibits or fulfills the conditions necessary for human well-being. To some degree these 'design specifications' are intended to elaborate and clarify the operation and preferred function of these systems in greater detail.

Although humans have life needs, the way someone comes to know the world is, in great part, through the social organization of their life experience, which may or may not recognize life needs.

INSIGHT: If "you" care about "your" performance and potential, then "you" might want to care about what is limiting "your" potential performance.

The following sub-sections describe each of the sub-models of the Motive for Action Model.

6.1 *The consciousness as level-of-care model*

The Consciousness as Level-of-Care model describes an individual's motive level-of-care as existing along a spectrum from egocentric to ethnocentric, leading to world-centric and eventually to the state of open and appreciative compassion for the evolution of all conscious beings. The four care levels are (as levels of integrated conscious awareness):

1. **Ego-centric** - care about self.
2. **Ethno-centric** - care about group, tribe, nation.
3. **World-centric** - care about everyone [in a specifically recognized and acknowledge world space].
4. **Open inquiry (universally centered)** - open and active inquiry as an expression of conscious care about the truth and the evolving whole. Care about the truth is care about what is really going on in the world (and in the universe), and its impact on all living systems.

Compassion and truth are essentially similar. When consciousness initiates the process of open inquiry it places itself along a path toward the continuous awakening of its awareness to ever greater folds of truth, appreciation (or gratitude), and oneness [in experience]. In truth lies the understanding that one is essentially similar to all others and that care for all is also care for self, and that care for the self is also care for all.

ADAGE: *The mind is rarefied body and the body is solidified mind. In other words, we live in a*

continuum, and the compartmentalization of our total selves creates dis-eases of the body and mind.

6.2 The power versus force model

The Power vs. Force model delineates “energetic” fields of consciousness along a spectrum from that which is incomplete and an energy drain/consumer (i.e., “force”) to that which is complete and an energy supplier (i.e., “power”). In this model, “force” exists as an emptiness of meaning, an incompleteness and a state polarization. Polarization traps the otherwise actively open mind, and leads to the formation of competing [and fighting] camps and the creation of cults. A cult cannot exist when there are no hard lines and individuals remain steadfast in their power to inquire more deeply into reality.

The power versus force model assumes that individuals become strongest [measuring indicators of physical strength] when we think of loving thoughts and weaker when we enter states of fear, jealousy, and shame.

In “power” there exists a unifying meaning that transcends dichotomy in the open experience of consciousness itself. Herein, “power” is the will of consciousness to modify the dynamics of a system. The fields of being known as reason, love, joy, peace, and curiosity represent the powerful expansion of conscious intention into ever greater understanding and creation, eventually awakening into the states of appreciation and compassion. The fields of being known as courage, willingness, and acceptance form a foundation from which consciousness establishes a sense of self-direction and self-empowerment, and the unshackling of forceful and force-based interrelationships. Feelings of anger, fear, grief, apathy, guilt, and shame commonly accompany a sense of victimhood and helplessness; they represent a loss of self-direction and self-determination. They represent a contraction and dis-integration of consciousness. When these emotional states are not moved through effectively (or processed through fully), then they can block the realization of a higher potential experience [of life]. And, when primitive instincts such as lust, fear, and control [of others] are held/attached to, then there is a high potential for the generation of illusion that is likely to waylay the movement into higher states of consciousness.

Adopting a state of contracted consciousness takes away someone’s “personal power” to affect change within themselves and their environment, limiting resourcefulness, and leaving the individual feeling like they are no longer in control of their own lives (i.e., low self-efficacy). When someone sees themselves as a victim they stop creating a personal state of empowerment and cease learning—it becomes harder for them to experience the appreciation and compassion that is always there, but is not presently being “tuned into”. Those who sink down into a state of contraction often

lose the ability (or “power”) to effectively manage their emotive state and re-orient their lives (i.e., they lose the capacity and desire to select a beneficial focus (as in, intentional attractor), meaning, and physiology; they lose their mind[fulness]).

Individuals can focus their awareness, or not. They can select meaning, or not. They can re-direct their physiology, or not. Herein, “power” is the instantiation of potential capacity within the awareness of consciousness to select a new focus, identify a new meaning, and direct a new physiology.

INSIGHT: *Mindfulness is the experience of a conscious recognition of momentary interrelatedness. It is a quality of consciousness that denotes a receptive attention to and awareness of ongoing internal and external states, and relational patterns of experience; it is a state of being “present in the moment”. When people are mindful, internal and external realities are perceived openly and without [or with less] distortion. Once we are mindful we can become discerning of our decisions and thoughtful in our behaviors; we can become powerful in our actions, together.*

6.3 The modified spiral dynamics model

The modified Spiral Dynamics model categorizes an individual's core need orientations (or “developmental states/stages of need”) along a spectrum from base survival and reflexive instinct to the flow-based integration of emotional experiences into a state of holistic thriving. These “stages” represent the needs that are consistently cared about over time. Individuals with different core need states will maintain different thought and behavioral patterns that are reflective of their perceived experience of the world.

The seven need orientations (or “values”) are:

- 1. Survival and Instinct Driven (Gray)** - The drive for automatic physiological satisfaction of mammalian needs. This is a state of instinctual primitive reaction.
- 2. Tribal Order (Purple)** - The expression of a safe mode of living through sacrifice to tradition and customs. The emotive experience of victimhood. Mythical and traditional values become dominant without inquiry into their origination and ongoing usefulness.
- 3. Power God (Red)** - The expression of that which the self desires without guilt and without a recognition of commonality with others; often motivated by an avoidance of shame. This state represents the emotive experience of primal power accompanied by strong undertones of fear. Ego needs are dominant. Purely egoic values are expressed.

- 4. **Order & The Absolute (Blue)** - Sacrifice of the self for praise and reward through obedience to leaders and "rightful" authority. The search for heroic status (the "winner"), which often tramples upon the needs of others. This state is represented by the emotive experience of meaning. Authoritarian values dominate. Looking for heroism is a great way of avoiding one's own capacity for great moral action in the face of great suffering.
- 5. **Achiever & Striver (Orange)** - The search for material pleasure and satisfaction through the expression of self-goals and personal-objectives without rousing the ire of important others. The emotive experience of attention seeking. Individualistic and family values dominate.
- 6. **Socially Conscious (Green)** - The avoidance of harm and aggressive interaction, and the search for harmony with nature and social groups. The emotive experience of connection and intimacy, but not necessarily understanding (or wisdom). Communitarian and egalitarian values dominate.
- 7. **Integral Flow (Yellow)** - The search for an integral system that combines an organism's necessary self-interest with the interests of the largest system(s) in which it participates and supports; a state of unity and of holistic thriving. The emotive experience of flow. Systematic and universal values dominate.

Each of the value stages in the modified Spiral Dynamics model can be seen interconnecting with both the Level-of-Care model and the Tony Robbins 6 Human Needs model in the Motive for Action Model. It is relevant to note that from the 'tribal order' position to the 'achiever & striver' position on the modified spiral dynamics model there exists a mixture of egocentric to ethnocentric Levels-of-Care in the awareness of consciousness. The modified Spiral Dynamics model interconnects with the Tony Robbins model via the 1, 2 and 3 numbering system. Each of the value stages in the Spiral Dynamics model interconnects with one or more of the 6 human needs. The needs are ordered by the 1, 2, 3 numbering system in the Spiral Dynamics model to show which need is most actively expressed at a particular stage of need development.

- The 'survival instinct' and 'tribal order' stages interconnect with the need for certainty.
- The 'power god' and 'order & absolute' stages first link to the need for significance and then to the need for certainty.
- The 'achiever & striver' stage links first with significance, then with certainty, and finally with the need for growth.
- The 'socially conscious' stage links first with the

- need for connection and love, and then with the need for contribution.
- The 'integration' stage recognizes that the needs for connection & love, growth & restoration, and contribution are all important.

6.4 Tony Robbins human needs model

NOTE: *It is possible for trauma and the engagement of defense mechanisms to occur at any of these systems levels when needs go unmet.*

Humans have a variety of psychological and emotional needs. These needs accord (or harmonize) with certain states of being. Some of these states represent a more expansive and constructive level-of-awareness, understanding, and appreciation. Other states, however, are more indicative of a contraction of consciousness, and a reduction in someone's breadth of understanding and self-awareness. The Tony Robbins 6 Human Needs model presents the 6 fundamental needs that shape an individual's behavior and support an individual in identifying how to create new patterns of thought, emotion, and behavior that lead to lasting states of felt fulfillment. The six needs are: certainty; variety; significance; connection & love; growth & restoration; and contribution. The six needs are further divided into two principal categories, each with three delineations. The first category and three delineations are: pain/pleasure; insufficiency/sufficiency; and joy & ultimate fulfillment. The second category and three delineations are: internal/external probability; internal/external relationships; internal/external appreciation. The six needs and their accompanying categories are:

- The need for **certainty** - the assurance of avoidance of pain; the desire to experience and intensify pleasure; and the drive to conserve energy expenditure (i.e., Energy efficiency). The individual is seeking the internal probability of pain reduction and pleasure intensification. This is a pain/pleasure need.
- The need for **uncertainty / variety** - the desire for novel stimulus & change as well as spontaneity and experiencing the unknown (curiosity behavior). The individual is seeking the external probability of experiencing novel information (or content and meaning). This is a pain/pleasure need.
- The need for **significance** - the desire to be worthy and gain/maintain the attention of others. The desire to feel unique, important, special, or needed. Is the individual feeling insufficient and seeking sufficiency through external relationship when sufficiency really comes from one's relationship with oneself? This is a insufficient/sufficient need.
- The need for **love & connection** - the desire

for bonding, sharing, union, and closeness with someone or something. The individual is seeking meaningful and supportive external relationships. This is a insufficient/sufficient need.

- The need for **growth & restoration** - the desire to develop capacity and expand capability, to advance and progress understanding, to master and develop competence. The desire to maintain healthy states of creation and sensation through imagination and tranquillity. By growing and restoring individuals show internal appreciation for the existence of the self. This is a joy & ultimate fulfillment need.
- The need for **contribution** - the desire to give and serve beyond the immediate experience of the self. By giving beyond oneself shows external appreciation for all selves. This is a joy and ultimate fulfillment need.

Although each of these six needs are continuously present within an individual, the needs that are most active at any moment in time will direct the behavioral patterns of the individual. All healthy humans have the ability to spontaneously change their patterned states by shifting their **physiology, focus, and meaning** - they sometimes just need some support or guidance in learning *how*, and a resonant environmental structuring to maintain the state.

A fulfilled society accounts for the needs of the individual. Individuals who compose a fulfilled society necessarily comprehend that their actions may align the community more closely with a desired direction [as a commonly meaningful purpose], or set it on a course toward its eventual disintegration and downfall. They realize that it is through the intentional selection of different states of being (physiology, focus, and meaning), and the shaping of the material world (environmental structuring), that individuals and communities become capable of fulfilling their highest potential and living a life that leads in a desirable direction - a direction that is meaningful to everyone.

6.5 Maslow's human needs model

INSIGHT: *Give people what they need, and facilitate their motivation to acquire more of what they need, and it is likely to be experienced that needs and wants start to divide.*

The mental and physical needs of the human organism co-join within Maslow's model with the potential of generating a state of materially sensed fulfillment. Therein, Maslow suggested that unless the lower-order needs are fulfilled, the higher-order needs are not motivators of behavior. Humans need to achieve certain elementary states of being, such as health and safety, before they can start thinking about higher-level needs, such as social connection and self-actualization.

People who are seriously ill or lack safety would find it difficult to think about self-actualization as expressed, for example, in social morality, self-expressed creativity, and systematic problem-solving.

Maslow's original model from 1943 defined five hierarchically ordered needs ranging from physiological sustainability to self-actualization. (Maslow, 1943) The model herein is slightly adapted. Herein, Maslow's model maintains that there exist eight universal human needs represented as internally sensed states of being:

1. **Biological & physiological needs** - nutrition/food, water, shelter, energy, restoration/sleep, physical activity, biophysiological and energetic homeostasis, and hormesis. A feeling of restoration.
2. **Protection & safety needs** - survival of body, protection of community, abundance of material resources and of energetic (or metabolic) health. A feeling of protection.
3. **Esteem needs** - purpose and direction, confidence and accomplishment, and self-efficacy. A feeling of respect.
4. **Belongingness and love needs** - intimate and fulfilling relationships, social connection and sharing. A feeling of appreciation.
5. **Cognitive needs** - knowledge and understanding, meaning and self-awareness, integration of information. A feeling of intelligence.
6. **Aesthetic needs** - natural beauty and balance, form and color, symmetry and elegance. A feeling of harmony.
7. **Self-actualization needs** - continuously fulfilling one's fullest potential, recognition of commonality, play, flow, creativity in expression, joyful spontaneity, and exploration. A feeling of inquiry. The realization of human potential through the ongoing process of being open to new information and experiences, and fully and constructively applying one's abilities to one's interests for the sense of enjoyment and fulfillment that results.
8. **Transcendence** - supporting others to self-actualize, facilitation of fulfilling structures, and creating opportunities for one's own and all others growth. A feeling of compassion. All individuals love to feel like they can relate (and are related to), can support (and are supported), and can create (and share creation).

Herein, happiness comes [in part] from the sufficient fulfillment of these needs such that the sensation of a void in fulfillment (i.e., suffering) is no longer felt by consciousness. Happiness [as a subjective feeling] is a by-product of someone's quality-of-life as objectively related to the fulfillment of these human needs. Yet, happiness becomes malformed [as excessive pleasuring and addiction] in the presence of a victimization culture

wherein one person or group of people are victimized for the satisfaction of someone else's, or another groups, needs. Hence, happiness is not enough, there is also well-being; and further, there is generational well-being.

INSIGHT: *Happiness (as a subjective feeling)
+ quality-of-life (as the fulfillment of needs)
= well-being*

The needs identified by Maslow can be subcategorized into basic needs, psychological needs, and [higher] fulfillment needs. Basic needs provide the environmental conditions for general health. They are primal in that their insufficient fulfillment will generate primitive behavioral patterns to satisfy these needs, often at great cost to themselves and others [when methods for effectively satisfying them are unavailable]. When humans experience a reasonable threshold of primal need satisfaction, they will not necessarily be behaving specifically to satisfy their basic and primal needs; rather, they have the potential for doing that which they find interesting, important, meaningful, and useful.

When people live in a way where their most basic needs are "taken care of", then likely, they can be so much more present with the work they do, with their relationships, and in their life. When individual's basic needs are continuously fulfilled, then they have the room to fail and a metaphorical cushion to land on.

The psychological needs are those needs that allow consciousness to identify itself and relate itself to others in a social context. Values emerge therein as a principal form of [conceptual-linguistic] relation. They allow the self to orient in its relation to other selves. Fulfillment needs are those needs that fulfill the actual underlying conceptualizing consciousness, and facilitate consciousness in self-directing its own life toward a meaningfully unified purpose and higher potential state of creative existence (i.e., community).

6.6 The intrinsic motivation model

The model for intrinsic motivation is known in the literature by several names including "self-determination theory". Intrinsic motivation is discussed in depth in the value system under the value, intrinsic motivation.

Self-determination is a theory (or philosophic doctrine) that every present state or condition of the self is a result of previous states or conditions of the self. The self-determination continuum [theory] is an empirically tested macro theory of human motivation and behaviour. It has been applied and tested in a variety of life domains. According to self-determination [theory], degrees of motivation vary on a continuum that represents roughly three motivational states: absence of motivation; controlled motivation; and intrinsic motivation. Therein, the theory represents a broad framework for the study of human motivation and personality. Perhaps more importantly the theory's propositions also focus on how social and cultural factors facilitate or undermine

people's sense of volition and initiative, in addition to their well-being and the quality of their performance. In addition, the theory proposes that the degree to which any of the three psychological needs (of autonomy, mastery, and purpose) is unsupported or thwarted within a social context will have a robust detrimental impact on wellness in that setting. The continuum is visually represented in a variety of different ways in the literature, most commonly, as a matrix/table.

6.7 The physical resource needs model

A fulfilled society is composed of empowered individuals who apply knowledge, material resources, and technologies to sufficiently meet everyone's material needs. In the material world humans have two basic categories of material resource need: life support needs and social and recreational needs. These physical needs must be met with physical resources (or 'nutriments'). Humans will violate their values to meet some physical needs; hence, to maintain social stability there must exist an ordering (or prioritizing) of needs for any human system designed and organized to meet the material needs of human beings. In part, this model prioritizes through a set of formalized operational processes elaborated upon in the Decision System specification.

When basic needs are not met then a rapid contraction in consciousness is likely to occur and humans begin putting effort into harmful and destructive behaviours to "get" their needs met. This is particularly the case when individuals lack the information and tools for meeting these needs. However, when individuals' basic needs are sufficiently fulfilled, their highest potential direction and [current] emotive state-of-being are more clearly perceivable to themselves in the moment. The fulfillment of basic needs provides a foundation from which individuals may begin to orient their lives [through the adoption of a rational value set] toward a higher potential state of fulfillment.

The intelligent design of the Community offers the opportunity to fulfill all of the needs Maslow and others have identified. It is important to note, however, that if lower level material and social needs remain unmet, then individuals may lack the motivation (or health and desire) to meaningfully participate in a community of purpose, and they may begin meeting their psychological needs through artificial means.

6.8 The technological needs model

The technological needs of individuals are represented by the societal system's operational processes.

7 The directional-orientation model

NOTE: *Taking decisions is easy (relatively) when you use [at least] two compasses to guide you: your purpose (direction) and your values (orientation).*

The Directional-Orientation Model represents the relational arrangement of concepts that direct and orient an individual's decisive actions toward different states of the mental (of being) and the physical (of doing) world. The model presents a conceptual system, as a guide, for use by individuals or communities in adjusting their intentions and arriving at decisions that lead to desirable states of their world and the potential fulfillment of their total [human] being. It is a basic tool for thinking accurately, acting morally, and deciding strategically—it is a conceptual guide for decision making.

The upward arrow in the model represents an individual's or community's ultimate direction of intention, its life vector(s). A vector is an arrow (e.g., purpose or intrinsic goal). Pushing and pulling (e.g., extrinsic motivation or coercive pressuring) may lead to navigated movement, but a vector is more efficient. Herein, the vectored direction is sub-composed of three concepts: needs; purpose; and goals. Humans have needs that ultimately motivate and determine their direction toward particular internal and external states of the world. When needs are recognized and [at least] basic and psycho-social needs are sufficiently fulfilled, then a higher potential direction is likely to become visible. The higher (or highest) potential direction is conceptualized by the term 'purpose'. Individuals can have a purpose and a group of individuals can come

together to form a community with a common purpose (a 'community of purpose'). For every purpose there exists an accompanying set of goals. Goals clarify how a purpose is fulfilled. Needs provide goals with their psychological potency (i.e., motivation) and influence which regulatory processes (e.g., planning, monitoring, acquiring) direct people's goal pursuits.

It is important to note that the cohesion, coherence, and consistency of a community is highly dependent upon individuals in the community selecting, organizing, and coordinating a similarly directed orientation in life.

Whereas needs direct, values orient. Values determine [someone's] orientation and exist to meet needs by coordinating decisive action using information derived from a methodical approach. An orientation in turn determines alignment: more greatly aligned with a desired direction or less in alignment with that direction. In the Spatial Orientation diagram there exists a direction and an probable orientation (represented by the dashed elliptical circle) in a non-specified alignment with the axial direction. Note that an x-y-z three-dimensional axis coordinate (a.k.a. "gizmo", "gimbal" or "metaphorical compass") is also shown in the model. Herein, the notational references "x", "y", and "z" represent a referential framework for the directing of attention along three spatial axes.

In concern to an adaptive orientation, to get a compass pointing in the right direction, the compass has to [be allowed to] see the wrong direction. Hence the saying, "If you see where you are wrong, only then can you go right."

All decision-making at a personal level represents the process of values clarification - is this the right thing to do, the optimal action, for the good, in "my" best interests? Herein, the practice of objectively examining a personal value system is an attempt to live in authentic alignment

Figure 4. Directional-orientation model conceptual isolation.

Conceptual Isolation of the Directional Orientation Model

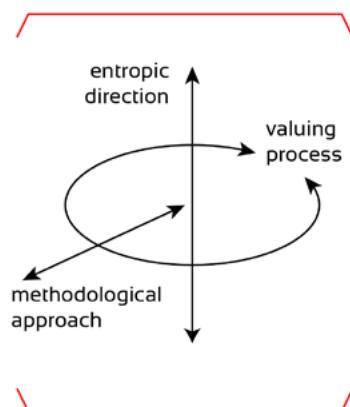
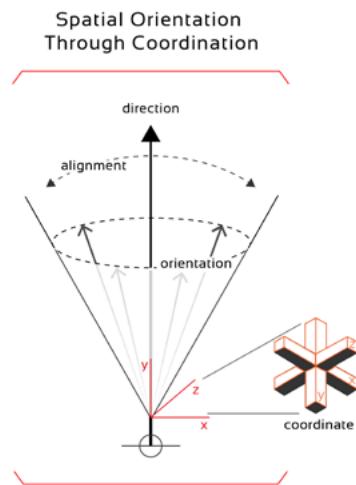


Figure 5. Directional-orientation model conceptual isolation.



and accordance with reality itself. Novel information and decisions lead to a refinement of an individual's value system and a potential re-orientation and re-direction.

Orientation also involves the idea of a coordinated approach, the coordination of interrelationships. Coordination involves relationships at a conceptual level, which rapidly become patterns of personal behaviors, social behaviors, and also, economic behaviors.

Every action in life is approached in a particular manner with some degree of organized knowledge and understanding (i.e., information). A diversity of approaches to action often lead to a diversity of end decisions (i.e., different orientational directions). Diversity within the context of decision-making may make it difficult for a community to align with a particular and desired direction, let alone identify their common needs. When individuals in a community follow different approaches to decision-making and maintain different understandings, then they are likely to arrive at divergent [directional] decisions, which increase the probability of conflict. When individuals arrive at similar decisions, then this is an indication that they have a similar direction and orientation in life. Within a system, a diversity of approaches is highly likely to turn individual against individual leading to "divide and rule"-type thought processes and behaviors.

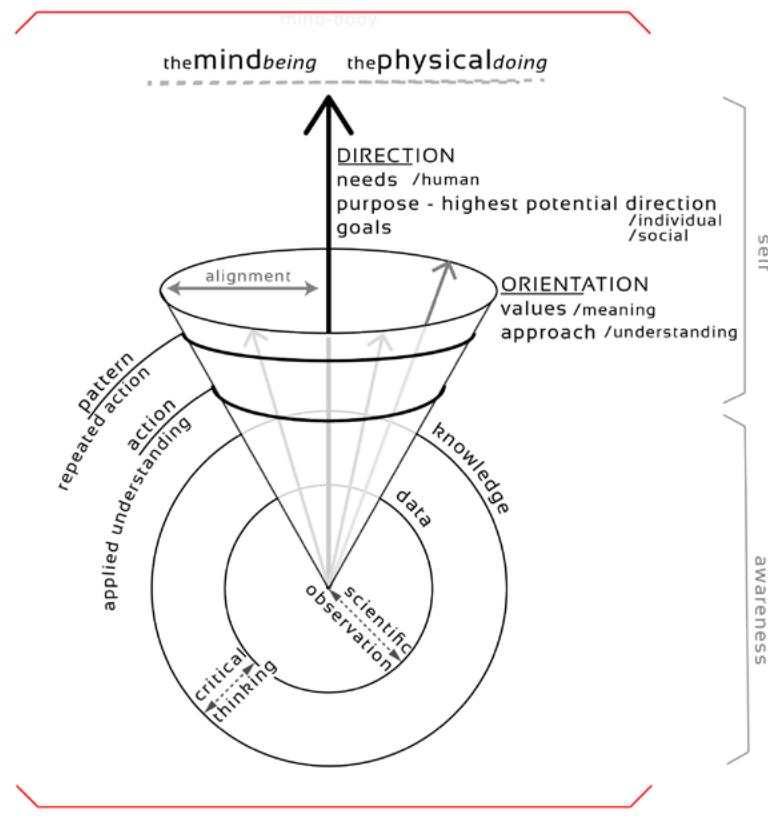
When actions are repeated, patterns [of thinking and of behavior] appear. Patterns of thought and action, of experience, occur in an iterative manner in the real world. Repeated actions will eventually lead to greater or lesser alignment with a particular direction. Because change is constant, patterns of action can either conditionally orient in a desired direction, such as toward a fulfilling purpose, or they can control and direct lives toward less fulfilling states of the world, more erratic behavior patterns, and an increasingly disassociated population.

Actions that orient in the direction of human need and a higher potential are derived from an aggregated integration of objective and rational information (Read: scientific inquiry

and critical thinking). Therein, new understandings may modify an existing orientation and direction so that they remain in alignment with one another and with a [stated] purpose—*inquiry and integration facilitate stable adaptation*. All living systems evolve through the unbiased discovery of new knowledge and understanding derived

Figure 6. Directional-orientation model. Also known as a model of an oriented direction. The model represents the relational arrangement of concepts that direct and orient an individual's decisive actions toward different states of the mental (being) and the physical (doing) world. The model presents a conceptual system, as a guide, for use by individuals or organizations in adjusting their intentions and arriving at decisions that lead to desirable states of their world and the potential fulfillment of their total [human] being. It is a basic tool for thinking accurately, acting morally, and deciding strategically—it is a conceptual guide for societal decisioning. The upward arrow in the model represents an individual's or community's ultimate direction of intention, the life vector(s). Herein, the vectored direction is sub-composed of three concepts: needs; purpose; and goals. Humans have needs that ultimately motivate and determine their direction toward particular internal and external states of the world. When needs are recognized and [at least] basic and psycho-social needs are sufficiently fulfilled, then a higher potential direction is likely to become visible. The higher (or highest) potential direction is conceptualized by the term 'purpose'. Individuals can have a purpose and a group of individuals can come together to form a community with a common purpose (a 'community of purpose'). For every purpose there exists an accompanying set of goals. Goals clarify how a purpose is fulfilled. Needs provide goals with their psychological potency (i.e., motivation) and influence which regulatory processes (e.g., planning, monitoring, acquiring) direct people's goal pursuits. Whereas needs direct, values orient. Values determine [someone's] orientation and exist to meet needs by coordinating decisive action using information derived from a methodical approach. An orientation in turn determines alignment: more greatly aligned with a desired direction or less in alignment with that direction.

The Directional Orientation Model



[at least] from observation, scientific study, and critical thought. This information enables human needs to be met in a more efficient and effective manner over time. New information leads to new approaches, technologies and organizations, and hence, new social and economic systems that are known to more greatly align everyone with their highest potential. Fundamentally, however, all inaccurate models have the potential for disorientating their users.

INSIGHT: *If you have an outcome and you keep missing your target, then what do you do? What you do is that you change your approach, you re-evaluate your orientation, or you set a new target. Therein, A change in approach is likely to lead to a change of orientation (i.e., values) and direction (i.e., purpose) over time. Whereas, a change in values will immediately re-orient a new direction; though, it might only be slightly different than a former direction. One common definition of 'insanity' is doing that which doesn't work over and over again with the hope that there will be some kind of different outcome, eventually.*

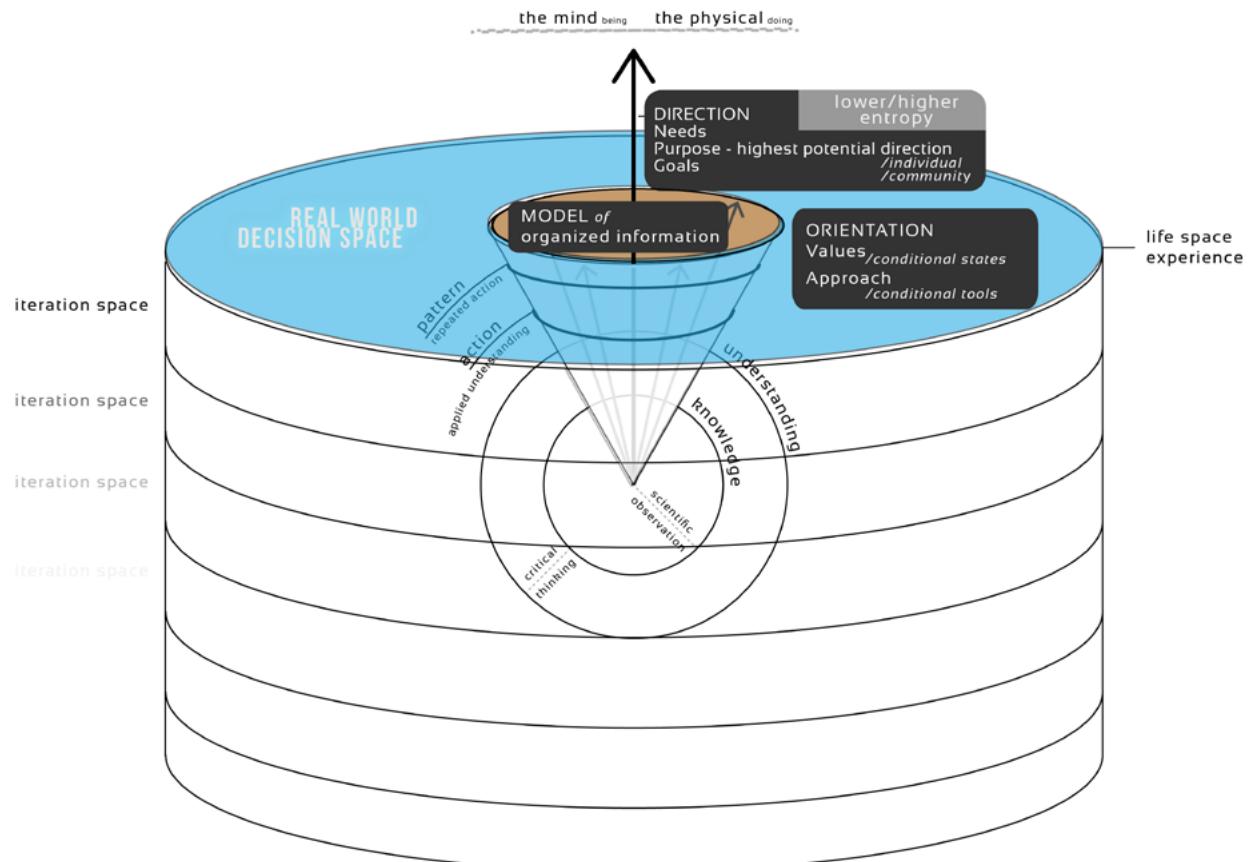
7.1 Gyroscopic stability

In a sense, the directional-orientation model could be compared to a gyroscope. When a system achieves 'gyroscopic equilibrium', then it becomes "untippable" (i.e., gyroscopically stable; without wobble). Herein, the idea of a gyroscope could be used as a metaphor for a common organizational structure that provides humanity with the coordinated power to remain flexibly fulfilled, and to perceive solutions along desirable axes. Herein, humanity may integrate changes from its environment toward the maintenance of a specified direction (e.g., lower entropy in the social information system). Practically speaking, a gyroscope is a balanced mass around an acknowledged center. And, the more mass is added (i.e., the more accurate information is added), the more stable it becomes. Herein, as long as humanity is centered toward the information system's state/dynamic of lower entropy, the more stable it will become.

7.2 An axiology

In some sense, the moral coordinating system described herein could be considered an axiology. 'Axiology' refers

Figure 7. Iteration applied to the model for directional-orientation.



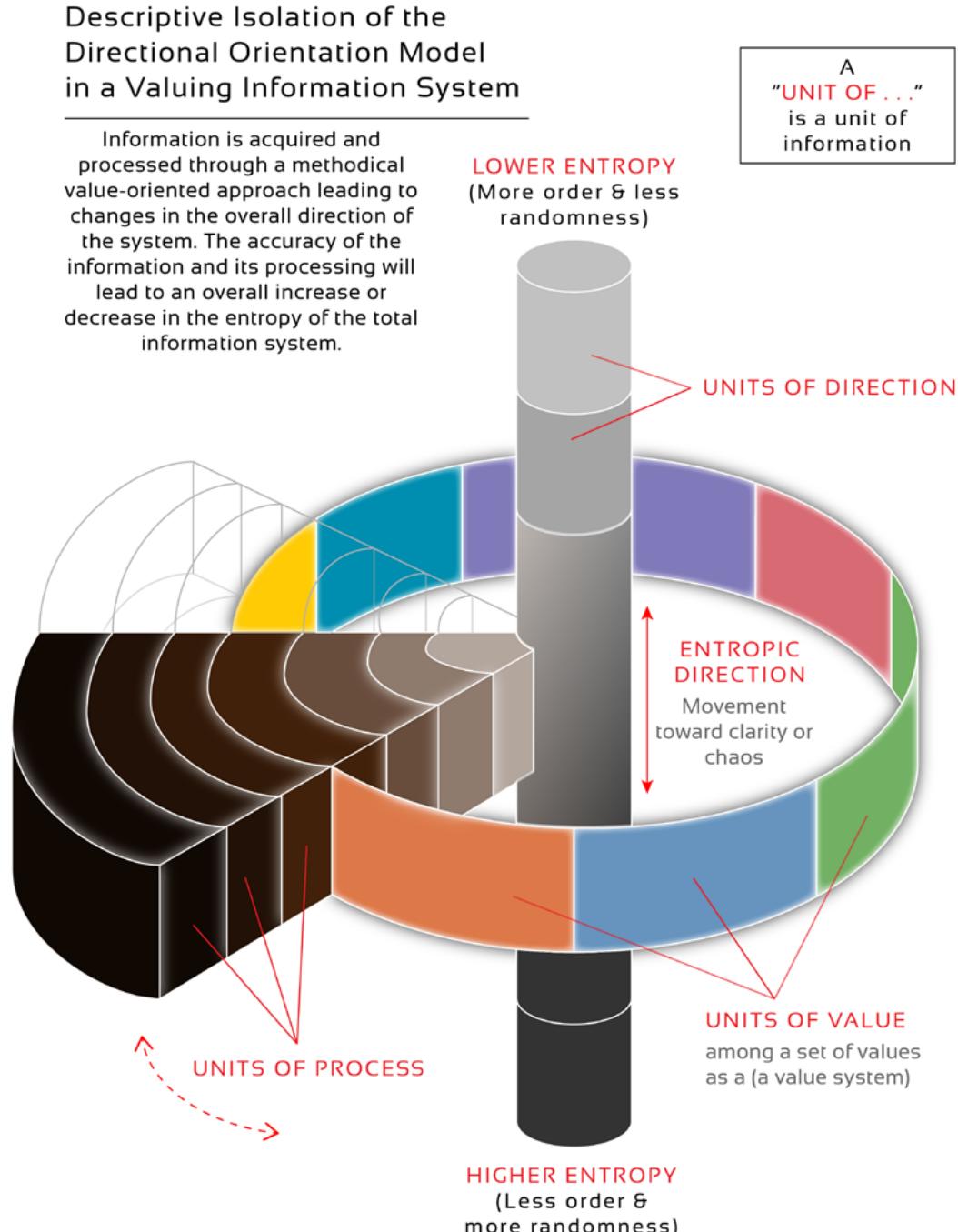
to the study of values and their logic, and it is primarily concerned with inquiring into and classifying what things are "good" (and fulfilling), and how they are so.

7.3 Diversion and division

In early 21st century society, a lot of that which is referred to as "diversity" is actually a division of common unity (i.e.,

division of the community), and it is not the beneficial thing that it is purported to be by politically correct mentalities; it is not equivalent to ecological biodiversity (as 'biological diversity' or 'biochemical individuality'). Biodiversity and 'biochemical individuality' are not the same thing as a diversity of approaches to common decisions within a human community (i.e., a diversity of values and approaches to common fulfillment). Note

Figure 8. Directional-orientation model for a valuing information system.



herein that the greatest barrier to overcoming any type of division is overcoming one's own indoctrination.

Biodiversity refers to the diversity of biological species in a biosphere, and it is an indication of the biological "health" of a particular ecological environment (and the functional capacity of land). A biodiverse environment is essentially a functionally information rich environment. However, a diversity of approaches to community decisions and to common heritage resources has little to do with the scientific concept of 'biological diversity'. The greater the diversity of fulfillment in the community, the greater the potential for misunderstanding and conflict. And yet, the "richer" (i.e., more accurate and plentiful) the information in the common information systems, the more accurate decisions are for real world, individual human fulfillment.

Even without malicious intent, conflict can arise in situations where an action carries different meanings when interpreted through a diversity of meaning and experience. Social diversity [of beliefs] sets the metaphorical stage for misunderstanding, mistrust, tension, and conflict. When the idea of "individuated diversity" is applied to social situations, then the conversation, which is often forced by an authority, moves into ambiguous territory where both sides may have degrees of validity. Therein, authority is presented with the opportunity to co-opt the whole conversation (i.e., the diversity of opinion) for its own agenda.

Social diversity (not biological diversity) is just as harmful as social conformity, for neither generate an emergent approach toward the optimal fulfillment of a community of individual humans with common needs. Individuals in a community must remain open to moving their "position" on any issue as soon as new and more accurate information becomes available and is critically understood (i.e., emergent verification occurs). Neither the idea of "social diversity" nor that of "social conformity" maintain the condition of emergence. Social diversity is not something to be treasured, but a challenge of fulfillment-oriented coherency to be overcome (i.e., sought resolution to).

Decisions based on evidence and common need are much more likely to create a fulfillment-oriented community than decisions based on forcing a bunch of people with different backgrounds and different skin colours to work together for the benefit of the authority.

The sociological research is quite clear, a diversity of values, beliefs, and other approaches to important decisions have a high likelihood of generating misunderstanding and conflict within a given population (i.e., the claim toward diversity at the social level becomes divisional). Therein, different approaches will lead to the selection of different decisions and the desire for the subjective allocation of common resources—social diversity is the product of and reinforces subjective values, while continuously re-generating a subjective economic environment. And, when conflict does appear, a diversity of approaches in resolving the conflict is not helpful. In general, any approach at a community level

that is not common is likely to generate conflict within the community.

INSIGHT: *The resolution of social issues lies in a society's evolving conversation, in learning to understand oneself and others in new and more compassionate ways.*

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The Social Orientation of a Community-Type Society

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Abstract

Society includes a social navigational system that may be changed, and otherwise controlled, to reorient itself more (or less) greatly in a particular direction. In order to adapt to dynamic conditions, society must identify and encode a set of statements (Read: values, objectives) that are likely to progress the system in a state emergent direction. A value system is, at the societal level, an orientational system for navigating a population at scale. Humans can orient themselves in a direction that generates and sustains greater fulfillment, given the situation, or they can not. There are a set of knowable values that are likely orient humanity toward an optimal state of mutual human fulfillment. These values can, and are sometimes not, composed into objectives and decisioning requirements. All values are encoded into decisioning. Humans can select, or may not select, the values that are most likely to lead to conditions of optimized human flourishing. Humans can confuse values and misunderstand the valuing system itself.

When objective values become disregarded for the subjective, then values tracing often becomes obfuscated because the subjective is less reliable, particularly when embedded within competition.

Graphical Abstract

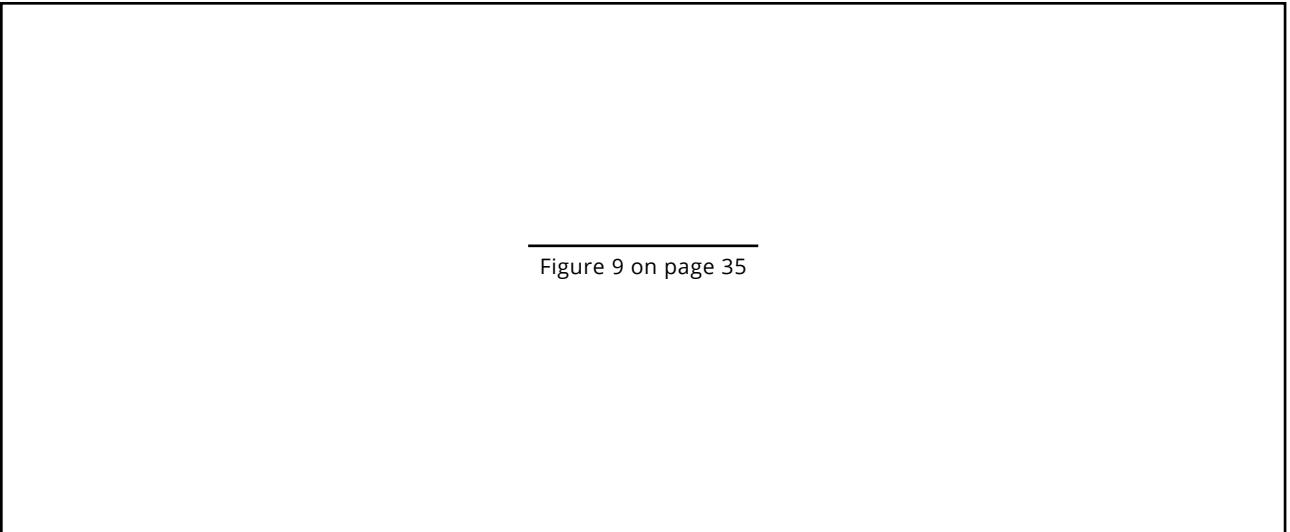


Figure 9 on page 35

1 Human values

The concept of value is extremely important for all forms of social organization in general, and for individual fulfillment in particular. Valuing is involved in every decision made by a conscious organism, and hence, maintains a relative degree of complexity. This section describes the concept of 'value' in general terms. The five characterizations of value are briefly detailed in the next section ("What is a value"), before each characterization is described at length thereafter.

In a general or broad sense, a value represents a conceptual understanding that when acted upon aligns an individual with a direction considered worthwhile. In concern to human fulfillment, as a worthwhile direction, values ought to orient toward the fulfillment of needs. A value is something being moved toward - something considered and selected as desired in the presence of an information set and an alternative (i.e., in the presence of a choice). In vague and general terms, a value is a principled preference (of which there are multiple forms). At a fundamental level, understanding is the true basis of value. Herein, a value is composed of the information humanity uses to identify its needs given its understandings. Valuing organizes and re-encodes an information set to facilitate the structuring and prioritization of decisioning. In a sense, it is where separation and attraction meet to form the reasoning for a desired direction. Values rank what is "good" as a desirable direction, action, or condition, and what is "bad" as an undesirable direction, action, or condition. In this sense, a value is a comparator function.

Ideally, a value is freely and thoughtfully chosen by a valuing entity as an identification of that which is desirable, and ultimately, fulfilling. Valuing influences decisions and behaviors, and provides a reference for action. Valuing impacts human organization and relationships, and actions taken in pursuit of a value have at the very least personal, social, economic and ecological (or environmental) consequences.

Valuing involves the process of synthesizing needs and needed conditions from knowledge. A collection of knowledge can't "do" anything; there also needs to be the awareness by consciousness to act upon the knowledge (Read: intention). In a sense, 'value' is the derivation or creation of orientationally useful knowledge (i.e., "valuable meaning") from pre-existing knowledge by conscious intention to generate orientationally useful knowledge. The presence of orientational knowledge to consciousness allows for a greater certainty in decisioning.

The continuous integration of new information leads to the flexible re-clarification of a society's value system. It is through the logical integration of all available information toward the direction of human fulfillment that a global, orientationally useful value set arise. The values clarification process refreshes the orientation so that a society may more greatly align itself and its systems with everyone's real world fulfillment and highest

potentials. By understanding the world, a population can more accurately orient its decisions toward ones that generate greater abundance and predictable fulfillment. There is an environment that humans may derive feedback from to inform their models, so that, together, they focus and select decisions that have a fulfilling influence on themselves and their environmental ecology. Therein, values become encoded into systems through decisioning, and then, the materialized systems in turn signal that encoded value back to humanity.

Fundamentally, by designing and deciding in accordance with stated values, individuals and society may increment their systems toward greater states of fulfillment.

For a valuing (or moralizing) entity, value provides a reference for what is good, beneficial, important, useful, desirable, constructive, and so on. Value is an indicator of a "correct" direction. Values reflect someone's motivations, as well as their worldview and culture. Values may give meaning to someone's life. Valuing is an inherent part of the human decision process and plays an important role in defining a society's structure and culture. Humans are social organisms and depend on values for their successful adaptation to a dynamic (and changing) social environment.

When 'value' is categorically aggregated into 'values', then value becomes ordered (or prioritized) by relative importance and forms a personally desired pattern of integrity, a 'value system'.

The emotional concomitants of a value are part a human's motivational force and values exist as representations of basic motivation [toward greater or lesser states of fulfillment]. Valuing influences an organism's subconscious emotional mechanism to account for desires, experiences, and fulfillment or frustration, through the continuous assessment of relationships to a perceived reality (a "blueprint").

Humans, at the very least, use values to orient their perception, their behaviors, and their life's direction among alternatives. Actions on behalf of values may be used to describe the orientation of an individual or a society. This is why it is essential for values to be made explicit. When values are unconscious, then it could be said that the individual is unconscious in their orientation to life, unable to self-direct or re-orient their patterns of thought, emotion, and behavior as they lack an awareness of what they value, and thus, how and why they arrive at decisions. It may also be said that when an individual maintains unconscious values, that they are not in control of their behavior and that they are acting out unconscious programs - that their behaviors are fundamentally unconscious to the objective reality within and around them.

All of humanity lives within a social context of values, whether its is acknowledged, or not. Many individuals in early 21st century do not comprehend the idea of a value nor do they arrive at their values through careful and rational consideration, but are instead enculturated, sometimes consciously and sometimes unconsciously,

into a value set by family, friends, authorities, established institutions, and role models, that provide an emotionally appealing explanation of their life in society and of the "matrix" of society itself.

Epistemologically, the concept of 'value' is dependent upon and derived from the antecedent concept of 'life'. To speak of 'value' as apart from 'life' is a contradiction in terms. It is only the concept of 'life' that makes the concept of 'value' possible. Wherein, values orient the lives of individuals toward life-fulfilling or life-frustrating experiences.

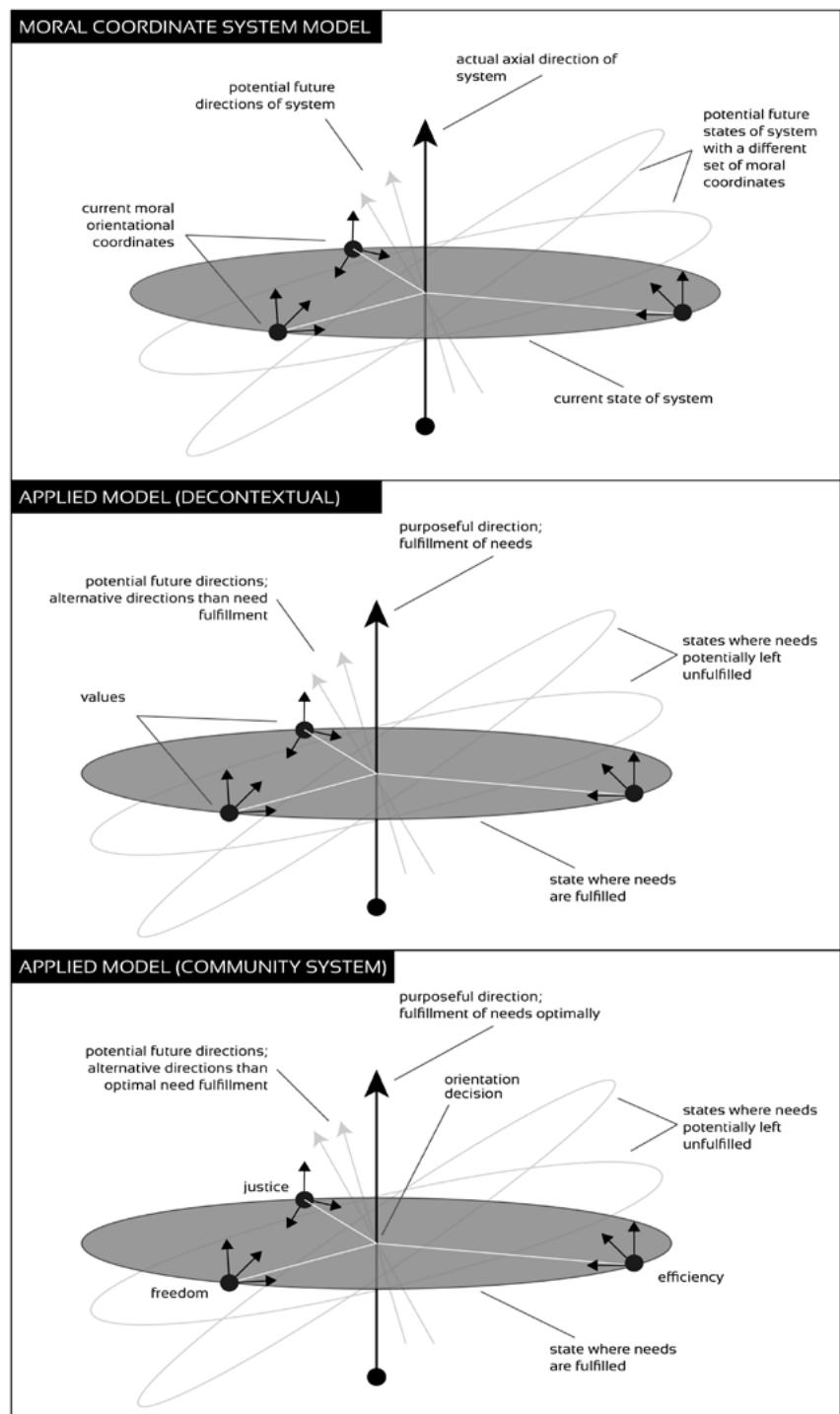
The existence of inanimate matter is unconditional; the existence of life is not: life depends on a specific course of action. Matter appears [at least] indestructible, it changes forms, but it does not cease to exist. It is only a living organism that faces a constant alternative: the issue of life or death, of adaptation or attachment, of lower information entropy or higher information entropy, and of growth or decay. Life is a process of self-sustaining and self-generated action. If an organism fails in that action, it dies; its chemical elements remain, but its conscious life goes out of this plane [of material] existence. It is only the concept of 'life' that makes the concept of 'value' possible. It is only to a living entity that things can be "good" or "bad", correct or incorrect, thriving or suffering, pleasure or pain, and fulfilling or unfulfilling.

Herein, society must ask, In what manner does a human being discover the concept of 'value'? By what means does a human being first become aware of the issue of "good" or "bad" in its simplest form? Human beings become aware of 'value' by means of the physical sensations of pleasure and pain. Just as sensations are the first step in the development of a human conscious, so they are its first step in the realm of cognitive evaluation. The capacity to experience pleasure and pain is innate in the human organism; it is part of human nature, and it provides a structure for learning; it provides a structure for valuing.

INSIGHT: *The human brain is amazingly tuned to social cues, which is [in part] why a change in values leads to a dramatic change in the expression of behaviors in a given society. And, at a*

neurological level, if someone changes who they associate with, they will find that their brain may automatically rewire itself to value things differently. These understandings are laid out in the book "Social" by Daniel Lieberman (2013).

Figure 9. Theoretical and applied moral coordinate system model.



1.1 What is a value?

The concept of a value maintains the following five sub-characterizations, which are briefly noted before each is described at length.

1. A value is a principal axiomatic concept required for the scientific discovery of objective and systematic knowledge, a perception of that which is. An axiomatic concept identifies a fundamental, self-evident truth (i.e., not dependent upon [as far as is known] the results of an experiment). An axiomatic concept is the identification of a primary fact of material existence, which cannot be analyzed from within the material system of reality itself. It cannot be reduced to other facts or broken into component parts. It is implicit in all facts and knowledge. It is the fundamentally given and directly perceived or experienced, a principal relationship requiring no proof or explanation, but upon which all proofs and explanations rest. Every attempt to explain reality [as a relationship] comes down to what philosophers call an ontological primitive -- the one starting point that has no further explanation is called an "axiom". Why can this not be explained? Because, someone can only explain one relationship in terms of another. If someone explains one thing, the question is, Is it reducible it to others? But, someone can't go on reducing forever. Eventually there is a bottom conception, an ontological axiomatic primitive. That thing simply exists, or that conception simply is; something that simply is "what it is". Notice here that different 'worldviews' postulate different ontological primitives.
2. A value is a conceptual category that has subsumed a set of related and verified rational understandings and scientific facts about the fulfillment of human needs, human well-being and flourishing. Stated in another way, a value is a set of facts, deriving a categorically systematic condition under which human beings' needs are fulfilled. The act of valuing (and categorizing) is a process undertaken by an existent conscious identity, a moralizing entity. Consciousness uses information to inform decisions. Hence, a conscious entity can utilize a value [as a set of accurate information] to inform its decision process so that the outcome of its decisions [which exist within the material existent system] are more greatly aligned with its highest potential, which is a meaningfully desired direction involving at least the fulfillment of its needs. When inaccurate information and incorrect premises are used to inform a value, then the probability that action taken on behalf of the

value will align an entity with an intended purpose becomes highly uncertain. The characterization of value as a category of fact involves the recognition that there are certain empirically discoverable states of the world (internal & external) that promote and orient toward a higher and lower potential for fulfillment. It is objectively valuable to a moralizing entity to have accurate information about states of the world that maintain the fulfillment of the entity's needs. The very idea of objective knowledge about the world, and the self in the world, is valuable to a "worldly" deciding entity. Accurate information has value to consciousness because accurate information reduces uncertainty in a [world] decision space and allows for the selection of decisions in greater alignment with a desired direction.

3. A value is an informed moral coordinate. It is a systematically dynamic state orientation that correctly aligns thought and action with an intended and desirable direction. Herein, value is a conceptual [moral] coordinate system for aligning a valuing entity with a desirable direction. For an individual, a value is a series of descriptive claims about desirable states of the internal and external world that verifiably orient the individual in a meaningful direction toward a higher potential of fulfillment. When this conceptual coordinate system is built on belief it is said to be subjective - it is a "belief system". When it is built on objectively referential knowledge, then it is said to objective - it is an "objective [moral] value system".
4. Value is objective, and objectivity is necessary in the development of moral conscience.
5. Value is information in [at least] the brain of a valuing organism. It is a component of a valuing organism's neurophysiological makeup of which the field of human sciences, particularly neuroscience and sociology, is increasingly illuminating.

To summarize, value is an axiomatic, factual, and orientational process state applied to a situational and directional context to arrive at desirable decisions that fulfill the needs of an organism within a larger social and environmental system. The information contained within a stated value may be objectively valid and independent of human opinion or attitude. Moral values are not Platonic objects existing independent of the world. Moral values are grounded in the natural world and grounded in the needs of conscious, living organisms. All patterns of conscious integrity in the material world are based upon values that involve [at least] information in the neurophysiological makeup of the valuing entity.

The following sections detail these characteristics of value at length.

1.1.1 Value is an attribute of objective and systematic knowledge

Conscious organisms in their pursuit of knowledge necessarily require (and possibly even generate) their own values. The very idea of objective and systematic knowledge (i.e., systematized knowledge acquired through unbiased and verifiable sensory observation of reality) has values built into it; every effort made to perceive facts depends upon concepts that must first be valued. There are three known categories of value as pertaining to objective and systematic knowledge: *the attributes of objectivity, the attributes of systems, and the attributes of science*. Herein, the term 'attribute' can be replaced with the term 'value': *the values of objectivity; the values of systems; and the values of science*.

The first and primary axiomatic concepts are those of what is generally referred to as 'objectivity'. The primary **axiomatic values of objectivity** are: *existence, identity* (which is a corollary of existence) and *consciousness*. Note that these are discussed at greater length in the Decision System specification. An organism can study what exists and how consciousness functions, but it cannot analyze (or "prove") existence as such, or consciousness as such [from within the material existent consciousness system]. These three values are irreducible primaries for the experience of consciousness in material existence. An attempt to prove them is self-contradictory for it is an attempt to prove existence by means of non-existence, and consciousness by means of unconsciousness. They are axiomatic precisely since all proof starts with them -- someone cannot know something without first admitting one knows anything.

Objectivity is a critically philosophical direction. It is the rational exploration of patterned and probable space (i.e., hypothetical space), and may be contrasted with science as the consistent exploration of real [world] space.

The primary **axiomatic values of systems** are: *interconnectedness, relatedness* (which is a corollary of interconnectedness) and *wholeness*. All questions about ourselves and the universe are asked within the bounds of an axiomatic understanding that the universe is organized as a whole relational system. A system is a network (or set) of connected, interacting, and interdependent components (or elements) and their relationships, which work together for a purpose (or objective) and form an integrated whole.

The very idea of an axiomatic concept may be understood [at least] through 'systems thinking', and it applies to all systems. An information superset (i.e., suprasystem) cannot be defined from one of its subsets (i.e., subsystems) -- it is logically impossible. The subset does not have the information inside of itself to define the superset. A subset is only a partial component of the larger set. Every system has a set of axioms that can

only be understood when a recognition and [minimal] comprehension of the supra-system is achieved.

Science is actually "in the values business" because the very idea of factual knowledge is itself predicated upon an identifiable (and definable) set of a priori values. These values include but are not limited to: logical consistency, reliance on evidence, parsimony, freedom of study and exploration, falsifiability, cooperative experimentation, open inquiry, honesty, and tentativeness. If desired, the **axiomatic values of science** may be divided into three principal value categories: *consistency, evidence* (which is a corollary of consistency and involves verification and falsifiability), and *openness* [to new questions and new evidence]. Together, these values form from a desirable orientation that seeks accurate knowledge of reality.

For someone to value facts that person must also value being open to consistency with evidential, verifiable and observable reality. Facts simply cannot be conceptualized, or spoken of, without embracing [at least] these "scientific" values. To "have facts", someone must also have these values [as well as having the values of objectivity and systems if integral understanding is to exist]. Hence, it is not that someone can't get an "ought" (i.e., derive an "ought") from an "is", someone simply can't get an "is" without embracing certain "oughts" [as 'value' axioms].

The very nature of science as a method for the discovery of knowledge to inform decisions is based on these sub-values (i.e., the attributes/values of science) that must be presupposed in order to "do science" or be a "scientist". Someone who does not share and embody these values cannot apply the scientific method to the discovery of knowledge [about the world they exist and operate within]. And, nor can s/he attack the results of science in a way that anyone should find compelling as the mere concept of 'evidence' has no value to him/her. An individual cannot grasp the concept of a 'fact' without also grasping the concept of 'scientific value',

CULTURAL CHANGE

Since culture is non-instinctive, we are not genetically programmed to learn a particular one. Every human generation has the potential to discover new things and invent better techniques and technologies, to evolve their structures. Wherein, new cultural skills and knowledge are added onto what was learned in previous generations. As a result, culture is cumulative, to a degree. The regular addition and subtraction of cultural traits results in culture change. All cultures change over time—none is static. However, the rate of change and the aspects of culture that change varies from society to society. People are not usually aware of their own culture until they experience another (i.e., until they have "travelled"). Therein, traveling provides an opportunity for the erosion of "-isms", particularly nationalism, and other harmful cultural boundaries.

and therefore, the premise of the "is-ought problem" (i.e. the fact-value distinction itself) is false. "Oughts" (as values) are built right into the foundations of scientific inquiry [as they are with critically objective inquiry and systematic inquiry].

The "is-ought" (a.k.a., fact-value distinction) problem puts forward the notion that science may be used to determine physical facts about the universe, but moral systems are used to determine questions of right and wrong. And, that science cannot be used for the latter. In more simplistic words, the problem is stated as: an "ought" cannot be derived from an "is" -- facts about the physical world cannot be used to determine how humans ought to live and act toward their well-being -- there is a limitless gap between "is" (a fact about the physical universe) and "ought" (a moral claim to how humans should behave).

Without the values of science, facts are meaningless, which is why facts mean nothing to those who hold beliefs that are in verifiable opposition to facts. Facts mean nothing to someone who does not value a consistent and objectively discoverable universe of facts. One of the attributes of science is the idea of consistency. In specific, it is the idea of consistency with a commonly verifiable reality that exists independently of the subjective [egoic] self and independent of opinion. The scientific method cannot accomplish anything if the phenomena being explored with it is not consistent [with some degree of empirical regularity]. Individuals may have their own opinions on issues, but they are not "entitled" to their own facts. After all, it is impossible to remain consistent with reality while being dishonest, illogical, mathematically inelegant, and selectively ignorant of evidence. Science [in part] currently represents humanity's best effort to remain consistent with an emergently understandable and real, existent universe.

Fundamentally, scientific "is" statements rest upon implicit "oughts". Consider the simplest verifiable statement of scientific fact: Water is [at least] two parts hydrogen and one part oxygen. Note that the bracketed phrase, "at least", indicates that there may be more to know. But, what if someone doubts this stated proposition, this declarative statement? What if someone comes forward and says, "I'm sorry, but that's not how I [at least] choose to think about water?" The only action the communicator can then take is appeal to scientific values. The communicator could appeal to data from chemistry research, describing the outcome of simple experiments - the value of evidence - in this case some hundreds of years of evidence in chemistry. In so doing, the communicator must implicitly appeal to the values of evidence, of logical consistency, and of active/open mindedness—the value of understanding the world. But, what if the interlocutor doesn't share these values? What can the communicator say then? If someone doesn't value evidence, what evidence are "you" going to provide that shows that someone should value it? If someone doesn't value logic, what logical argument could "you" invoke to show that they should value logic? This bears

repeating, what evidence could convince the interlocutor that evidence should be valued? What logic could demonstrate the importance of logic? Since evidence, logic, and reason (i.e., the ability to integrate experience) communicate and otherwise "show" people reality, if these conceptual understandings are not accepted, then reality cannot be verified or communicated. Therein, it would seem that communication, as the conveyance of accurate and verified information is not possible with such a person. Often such people protect themselves by repetitively hitting a reset button on their conversations -- the same conversation is likely to occur over and over again without any advancement.

This line of reasoning leads to the outright rejection of the idea of an is-ought problem: "ought" (a value) is dictated by "is" in the actual inquiry for objective, non-contradictory, and systematic knowledge of a discoverable real world. Hence, individuals ought to act in such a way that what is true can be verified to be so through openness to the consistency and verification of evidence [through experience].

It is relevant and important to note at this point that the concept of "ought" exists only in the context of a brain capable of defining that concept. A brain is [at least] a living and physical object, something that "is". If "ought" cannot be derived from "is", then "ought" does not exist. Any conceivable argument involving "ought" must include an "ought" somewhere in the premises. No being capable of understanding a concept such as "ought" is free of pre-existing "oughts", which are in fact physical consequences of their structure (their "is"). An "ought", which is in fact an "is", can be used to derive higher-order "oughts". In a higher-order organism, these higher order "oughts" are values (or factual sets of information) about the well-being, fulfillment and flourishing of the organism itself.

Humans do, in fact, have a set of common life-serving imperatives, natural phenomenological "oughts", and these are known as human needs. Humans ought to fulfill their human needs for their survival and for their general well-being. Humans are [at least] psych-sociologically driven animals with a spectrum of needs. These needs are part of a phenomenological 'field-of-being' of human nature. Human well-being is not a random phenomenon. Instead, it depends on many factors - ranging from [at least] genetics and neurobiology to sociology and economics, from psychology and phenomenological psychiatry to biological nutrition and social organization. It is unwise to abstract human fulfillment from the evidential, observable real world in every respect.

As conscious beings, individuals choose an orientation and direction in their lives; though it is also possible to state that if someone maintains these axiomatic values, then their oriented direction is chosen for them, because that is where the evidence points and directs them toward, human fulfillment. Human fulfillment and flourishing is a meaningful direction to everyone for it is the essential and desired commonality among everyone.

A community-type society is likely to choose to apply an approach involving a series of methods and tools to support in the discovery of the most accurate alignment of actions and systems with the chosen direction of human fulfillment. Said society is also likely to categorize its knowledge into a conceptual system representing states of the world (Read: values) that are understandable, and have been verified to be desirable, in aligning with that direction.

1.1.2 Value is a category of fact

Reality exists as an objective and consistent absolute - facts are facts, independent of a conscious organism's feelings, wishes, hopes, faith, or fears. A fact is a real and verifiably regulated [dynamic] state of the world. Factual knowledge of the phenomenological world is discovered through science. Science is in part a methodical tool (or process) used to determine facts about the world, including facts about organisms in the world. Science does not choose facts; the method(s) of science only allows a conscious organism [with the axiomatic value set described previously] to recognize what is and is not a fact.

Well-being and the conditions that support it are scientific questions that can be answered through scientific research and inquiry. If the role of science is to establish facts about the nature of the universe, then clearly, that is inextricably linked to questions about what will enhance or detract from human flourishing. Scientific understanding can be used to differentiate between actions that contribute to more well-being and actions that contribute to less well-being, assuming of course that well-being is the goal [of the design of the social system]. Because, some societal systems are not designed with human well-being as a goal.

"There are truths to be known about how human communities flourish, whether or not we understand these truths; and morality relates to these truths. So, in talking about values we are talking about facts."

- Sam Harris (2010)

Science does not choose what to value -- this is a category error; science does not choose anything because science is a method, not an agent with choice [and a decision space]. Science does not exist to determine choices. When someone puts forward the phrase, "science applied to social concern", they are likely not advocating for the scientific management of any individual or of social organization. Instead, individuals as conscious entities determine their own direction through choice within a decision space; and, the knowledge discovered through the methods of science facilitates individuals in aligning their decisions with their desired life direction(s). A tool can only help someone on their journey toward a destination, assuming there is a destination. If there is no destination (i.e., no goal), then tools are useless. If someone or some population does

not have a desired goal, then they would likely not care how, let alone try to find, the best way to reach a goal.

There exist layers of essential commonality among human beings, and scientific discoveries provide a common ground for identifying those systematically related (and regulated) states of the world that lead to a higher potential of fulfillment. Fundamentally, human needs are objectively real and discoverable. They are independent of opinion. They are composed in large part by features of the world (and individuals' reactions and responses to the world) that individuals often don't have, or don't realize they have, a say in (i.e., they often don't realize they have potential for a decision that can change the outcome). Humanity does not have a need for a group vote on whether human individuals need shelter, nutrition, air, stimulation, connection, growth and so on - human individuals just do need these things, due to the nature of their existence. There are, however, situations where people can trick themselves (or be manipulated) into thinking that they are hungry, even when they are not, or that they are sated when they are starving. But, the fact of the matter is that their thirst or hunger does not depend on how they have chosen to interpret their bodily signals.

Fundamentally, human needs are a common and objective interest of all human beings and must be a component of any plausible idea of a value system, and of morality in general. If the fulfillment of human needs is objectively valuable, then knowledge about how to orient oneself and society toward the fulfillment of human needs is of value. There are scientific facts to be known about the healthy (and optimal) functioning of humans, about well-being and the fulfillment of needs, and humanity can fail to know them to its great detriment. This is a fact. And yet, it is possible for people to deny this fact, or to have perverse and even self-destructive ideas about how to live and how they would like to force others to live.

What do people mean when they talk about well-being, flourishing, and human need? This is a scientific question and the ability of science to provide useful answers to this question has increased rapidly over the last 100 years, and will continue to do so given a continuity in discovery and communication. Well-being can be measured, and tragically, it is often ignored.

Objective steps need to be taken and new states of the world need to be realized if human needs are to be sufficiently fulfilled in common. Therefore, "ought" is derivable from the discovery of a human bio-physiological and psych-sociological nature. The distinction between a value and a fact, in this sense, is a linguistic trick. There are observable facts about the world, and these facts have value to organisms in the world. If individuals desire to move toward human fulfillment (a continuous and emergent state), then they must determine what values will hold in their lives as desires, motivations, outcomes, and preferences toward that end, which is really not an end, but a continuous and emergent experience. And, these "ought" to be

based on facts about the totality of the environment in question (i.e., they "ought" to be scientifically verified and organized systematically). In community, all values are "equal" in that they are subject to scientific inquiry and corrective feedback in the same way. However, all values are not equal in their potential for generating fulfilling [process] states of socially structured existence.

Value is derived from a system of conditional imperatives that reduce to fundamentally desirable alternatives and the respective facts pertaining to them. If one wants to live, one ought to eat; if one wants to eat, one ought to produce food; if one wants to produce food, one ought to learn about gathering, permaculture, or hunting, or maintain a socio-economic system that regeneratively produces [real] food. And, if individuals in a society want to maintain their health and well-being, then that society ought to produce nutritious food and limit the production of toxins that reduce a state of healthy functioning. Because the sustainment of prolonged existence or one of its corollaries is the sustainment of a consciousness living in the material world, then there is a consistent and empirically derived basis for sustainably resolving the content of the latter portion of conditional imperatives. In this sense, values are objective: they cannot be achieved consistently by arbitrary whim or erroneous opinion. A value is merely a higher-order expression of the basic imperative, "If you want to live, eat," which is one of the many imperatives relating to an individual's need-based relationship to the fundamental outcomes of existence versus non-existence. In other words, because humans are in human form, they are committed to the conditional imperative, "If you are human, and if you want to flourish, then fulfill your human needs". And, "If you want to live a fulfilling and meaningful life, then design social and economic systems that fulfill everyone's needs", or "If you want to live well, facilitate everyone living well."

Science is a means of making sense not simply of facts about the world, but it is also useful in forming novel orientational concepts (i.e., values) that maintain an alignment with a desirable directions. Some of the facts we can determine about ourselves include: what our values are, presently; what values are possible; and which of those values might be more effective and efficient at achieving some goal(s), such as orienting society toward fulfilling more needs on a larger scale.

There are genuine, scientifically discoverable facts about what promotes well-being and what interferes with it. And hence, there are scientifically demonstrable right and wrong answers to questions of human flourishing, and morality relates to that domain of facts. Herein, a consciousness has free will with consequence (due to the nature of reality), and long-term wrong action leads to chronic states of suffering in the individual, and in the social, of which the individual is a part.

With these understandings in mind, one might ask, "If human fulfillment, well-being, and a higher potential state are not the highest moral goal of a social system,

as a universal goal of all humans, whether they have an awareness of it or not, then what is the goal of morality?" And, whatever the goal of morality might be, individuals would still require the use of science and other rational approaches to determine where they are and where they are going, otherwise morality is cut off from any authentic relationship to the real world.

Values can be derived directly from [empirical] descriptive claims about the way the world operates (Read: scientific technical principles). If values cannot be derived from scientifically descriptive claims, then the malignant alternative may just be a fallacious appeal to authority. It is not obvious how else someone knows what the most appropriate course of action is, aside from looking at the world as it is and how it might be. If value propositions (or "ethical propositions" depending upon how "ethics" is defined) are not derivable or definable from non-value propositions, then it would appear that morality, and action in general, is cut off from the world. To be useful in the physical world, morality must reference the physical world [sciences].

The values that compose a community-type society's value system have an observable relationship (a "systems trace" or "bridge") to the world. Just as someone can determine a particular plant's nature and then ascertain what states of the world benefit its continued existence, we can also learn what would have to occur for it to flourish. Consider the claim that nitrogen, in certain quantities, is objectively valuable for many varieties of plants. Such plants have a specific nature, and there are certain states of the world that will sustain or promote their continued existence. Nitrogen would be objectively valuable for such plants. Nitrogen is involved in the fulfillment of said plants nutritional needs. No special faculty of affective perception or "intuition" is needed to understand this. No authority is required to force such plants to value and uptake nitrogen. Simply put, nitrogen is objectively valuable to nitrogen requiring and acquiring plants [within context and by degree].

Thus, value leaves no gap to be traversed and is clearly not an indefinable, intuited, or an unknown quality or relation. For humankind to flourish and reach greater approximations of its highest potential, certain states of the world must be sought, must be oriented toward, and obtained. These states are objectively valuable and informed by facts about the environment in relationship with the behavior and nature of humankind.

Individuals can visualize a 'decision space' of possible changes in the experiential fulfillment of human beings. As a metaphor, it is possible to imagine a probabilistic moral spectrum or moral continuum that corresponds to differences in the potential fulfillment of individuals. Some thinkers use the metaphor of a "moral landscape" with peaks that represent more fulfilling states of the world and valleys that represent less fulfilling states. If questions impact human well-being, then they do have answers, regardless of whether or not a given individual can identify them at present. And, just admitting that there are answers to the question of how humans

flourish changes the way a society talks about morality and changes a populations expectations of human cooperation.

For instance, is it a good idea, generally speaking, to subject the young in age of a species (i.e., "children") to pain and violence and public humiliation as a way of encouraging healthy emotional development and "good" behaviour? Is there any doubt that this question has an answer and that it matters. Does the answer to this question involve an objective notion of well-being, and factually informed values? The concepts of 'well-being' and 'health' as generally open for revision, emergent in their definition as discoveries continue, does not make them vacuous.

Even if there were ten thousand different ways for groups of human beings to maximally thrive (all trade-offs and personal idiosyncrasies considered), there will be many ways for them not to thrive -- and the difference between luxuriating on a peak of the moral landscape and languishing in a valley of internecine horror translates into scientifically understandable facts.

Humanity should no more respect vast differences in notions of human fulfillment (and values), than it should respect vast differences in the notion of how disease spreads, or in the safety standards of buildings and airplanes. Humanity simply must converge through some commonly useful means on the answers given to the most important questions in human life, and do so through [at least] a common community approach. And, to do that individuals must first admit that the questions asked about oneself and one's society has objective answers -- and recognize that the answers are not and cannot be arbitrarily dictated by an authority or by someone's opinion.

If there are objective truths to be known about human well-being - if kindness, for instance, is generally more conducive to fulfillment than cruelty, then science is able to understand and to make very precise claims about which behaviors and uses of attention are morally "good", which are neutral, and which are worth abandoning. A society that abandons scientifically verifiable claims about well-being is no human society at all and is diseased at its very core, it is a society without a means of orientation, it is a group of people gone crazy.

Thusly, a value is a category (or type) of fact - namely, a value is an empirical claim about the state(s) of the world that fulfill human beings and the conditions under which the well-being of human beings is optimized so that humans flourish and lead meaningfully fulfilled lives. In other words, since facts and values are not distinct, values can be regarded as a type of fact: they are facts about the conditions under which human beings are fulfilled and flourish. They are facts about the states of the world that all humans have an objective reason (a bridging factual rationale) to promote or to inhibit.

Hence, value is a conceptual category consisting of factually verifiable statements about an organism's intra- and inter-relationships (their internal environment and the environment around them). Values are categorized

facts about 'states of the world' and 'states of the human mind/brain' that if acted upon provide the right conditions for fulfillment, and may even "re-generate" well-being in a dis-at-ease organism. With this understanding in mind, it is no great stretch to consider that science can be, and currently is being, applied toward the discovery and clarification of valuable knowledge and the identification of how accurately claimed values are at structuring and aligning humanity with its highest potentials. Herein, a population might ask, "How are we structuring our lives so that signals, internal and external to our individual selves, are reliable and sufficiently certain to generate mutual fulfillment?"

Clearly, questions about human values are really (i.e., quickly become) questions about human fulfillment. Values translate into facts that can be scientifically understood. Science [and neuroscience in particular] does not simply explain why someone might respond in particular ways to situations involving material equality, or torture, but also whether equality is a "good" and a fulfilling [process] state, and why torture might be morally unacceptable and fundamentally unfulfilling as a socially accepted practice.

Herein, morality is discovered through the identification and measurement of behaviors, environments, and systems that contribute to human flourishing. The discrepant answers people give to questions about values eventually translate into differences in their brains, their behaviors, and their ultimate fulfillment.

It is at this point, while discussing "value as a category of fact" that there must exist a deliberation on the difference between 'values' and 'ethical principles'. This deliberation is an essential component toward the philosophical argument for 'value' being a category of fact and the selection of a 'value system' for the community as opposed to a set of stated 'ethical principles'.

INSIGHT: *It is indisputable that are better and worse ways to treat a cardiovascular event or to facilitate an individual in making "healthier choices" so they are less likely to experience such an event, when it is preventable. Hence, so too can morality be understood in terms of empirical information.*

1.1.2.1 Values versus ethical principles

NOTE: *The social prism with which we view ourselves will affect how we view (or judge) others. Individuals within some societal configurations view themselves as part of a larger ecological whole, whereas individuals in other societal configurations may view themselves as players in a competitive game. Some configurations of social and economic systems are empirically better in their coordination of the fulfillment of human needs than other.*

A distinction must be made between values and ethical principles. Values and ethical principles are similar

in that they both define someone's ideas of what is important versus not important, what is right versus wrong, what is true versus false, and what is optimal versus non-optimal. However, whereas values [as they are defined herein] are an evidentially verified orientation toward fulfillment, ethical principles are unbreakable rules of conduct that often maintain the allowance for authority's subjective interpretation and for consequential punishment [by authority] when violated. Please note that the definitions are sometimes, though more rarely, reversed in common parlance. Abstract ethical principles are useful for control, but not useful for orienting individuals among a community toward an emergently fulfilling direction.

Ethical principles are defined herein as consequential authoritative statements on human obligations, duties, or restrictions on relationships and conduct. Ethical principles do not maintain the condition of emergence (or tentativeness) and are not "allowed to be compromised", and there are often punitive consequences when they are violated. Ethical principles are embodied and established by tradition, religion, culture, leadership and authority (e.g., political leadership and governmental legal authority).

The black and white thinking that accompanies the dictator nature of ethical principles adds little value to a community that seeks a solution orientation that recognizes a commonly discoverable and consistent reality. Life is not about those who abide by ethical principles (e.g., "governmental citizens") and those who violate ethical principles (e.g., "criminals"). Instead, life is about the fulfillment of needs, aspirations and creative desires. Life is about discovery and mistakes, it is about adaptation and integration; it is about that which has reference so that growth has a meaning.

There exist both 'ethical principles', which concern ethics as the governing (or ruling) of behavior, and 'technical principles', which are the technical rules of operation of a system. Scientific principles are the technical principles of phenomenological reality; they are facts. In natural environments, these principles are the mechanisms of what is sometimes known as 'natural law' - or more accurately, scientific models - they describe how a natural environmental system works and presume that it always works in that way until verified evidence indicates that it works in another way. A scientific principle is a verified regularity in an emergent and probabilistic reality, in phenomenological nature. In science, laws are not so much "rules that are not broken", but emergent descriptions of regularities in phenomenological reality. These regularities do not change with the whims, likes and dislikes, affective states, or preferences of humans. Until proven otherwise everything and everyone's experience appears bound by them. They are the formulas of the phenomenal world. And, knowledge of them is useful to conscious organisms. Conscious organisms may use more accurate information about the world (i.e., more accurate technical principles) to arrive at more informed decisions and design systems that are more effective

and efficient at fulfilling human needs.

The notion that a practical system of values is derivable from ethical principles [as defined herein] may be flawed. Any decision that does not involve objective reality—the world as it is—as its starting point is doomed to end in futility. Objective reality is composed of natural living systems and these systems are composed of a set of discoverable technical principles (or scientific principles), not ethical principles. Verified technical principles are not open to opinion or authoritatively "told" or "scribed" interpretation. Technical principles are descriptive. Ethical principles are authoritatively prescriptive and generally imply the idea of duty, obligation, and command; the notion of compliance, or else. Ethical principles can quickly become commandments and form into duties that one is to obey under compulsion or threat. Invariably, duties of this nature entail some form of self-sacrifice. Yet, in truth, life requires the attainment of needs through the adaptation of values, not their sacrifice. Hence, one might go so far as to say that every ethical principle contains at least one belief: the belief in "authority". Rational morality is neither about "duties" nor "obligations". It is about applying reasonably emergent associations to the task of living and enjoying a common existence, one's social life.

The idea of "duty" commonly denotes the moral necessity to perform certain actions for no reason other than obedience to some higher authority, without intentionally thoughtful regard to any personal fulfillment. A "duty" is not the result of one's own choices and actions - the near opposite of truthful "moral responsibility".

The motive idea that each individual has the innate ability for adaptation, self-direction, and self-development, that desire exists for purposes of fulfillment, and that each individual in every moment has the power to perceive themselves as sufficient regardless of the dictates or self-serving claims of another, seems more empowering than punitive statements of right or wrong behaviours, attitudes, and authoritative standards; true morality relates to a state of freedom versus the state of authoritarianism, totalitarianism, and fascism.

Every time someone makes or takes a choice as to what is true or false, that choice entangles that individual very quickly in an unfathomable network of implications, with the potential to increase or reduce the freedom to make new choices. Every choice leads to the unfolding of a network of implications. It is only wise to entangle and align a future probable decision space with objective reality and real world fulfillment [as a commonly desirable direction]. Ethical principles do not maintain this characteristic for they come into being through the dictate of an authority figure(s), an "authority leader".

In antiquity personal difficulties were often explained as an offense to the gods, and even today said difficulties are explained as an offense to authority. Open inquiry steps in and provides the freedom for individuated consciousness to take a step back and say, "this is just a natural and discoverable phenomena that is not yet

immediately understood"; it is not magic. It is ok to be curious and explore, there is no such thing as authority; life is explainable [in time].

Scientifically informed values will evolve and change with new discoveries, and thus, support in a population's adaptation to new environments, new contexts and understandings, and new directions. The concept of an ethical principle does not maintain the idea of adaptation as one of its conceptual characteristics. Ethical principles are intended to be enduring until interpreted otherwise by a legitimized authority. This is not to say that ethical principles should not be used to direct action within a context or that the authority cannot hire "scientific advisors" to "advise correct courses of action"; it is just to state that ethical principles will hinder adaptation and rational decisioning for they do not maintain the axiomatic understandings of science, objectivity, or systems. Instead, ethical principles are highly likely to create barriers to adaptation and change, particularly when they become established [by an institution of legislation].

Established systems represent a danger to the survival of a community because they do not acknowledge the evolution of information [systems] through the discovery of knowledge and persistent necessity for adaptive change. They maintain no mechanism for self-correction (e.g., science); wherein, life is a path of constant self-correction. Alternatively, factual values are a flexible reflection of what is important, and they represent an emergent and integrated guide to action based upon verifiable facts. A value composed of emergent scientific understandings might be considered "flexible", whereas an ethical principle would not maintain this descriptive characterization.

A community that exists in an emergent and adaptable state will likely maintain a community value system instead of a set of ethical principles. Such a community of individuals might recognize the technical nature of the world and allow this information to inform their emergent systems while maintaining transparency of change(s) to those systems as they occur (as opposed to secreting and obfuscating changes).

Adaptive behaviour depends on the accurate evaluation of environmental changes. The extent of accuracy is itself dependent upon the individual's level of what is commonly referred to as personal-development (or self-development), which involves many factors, not the least of which is a reduction of non-corrective thinking processes. One must be prepared to change one's ideas and understandings in the face of new evidence if one is to effectively adapt to a new [information] environment. One must have a stable self-image, a reasoned and realistic awareness of their behaviors, and the consequential influences in the behaviors of others. A person with inner freedom is able to adapt to the environment as it is rather than as s/he thinks it should be. Perception, thus, is complete or incomplete depending upon a person's "stage-of-development" (i.e., how many layers of filtration do they

have in place). The quality of perception is a function of the level of personal development, integration, and self-actualization, and it is based on motives for learning and human needs.

When values are in alignment with needs and maintain a physical reference in the process of arriving at decisions that benefit all of humanity in kind, then humanity will no longer be in a fight against nature. To fight actively against nature in any of its forms is not only doomed to failure, but will inevitably condemn the individual to profound dysfunction within a larger dysfunctional society. One simply has to look at modern market organizations (businesses) and jurisdictional authorities (governments) to witness such dysfunction. Fundamentalist environments simply provide an less obfuscated view of such dysfunction. Please note that it is hard to see the dysfunction of one's own society when one has been enculturated since birth (i.e., normalized) into that society's dysfunctional beliefs, principles, and values. Fundamentally, to dissociate behavior from the environment and from that which is discoverable (i.e., nature) is a contradiction and can only lead to more contradictions.

It is hard to notice when someone's own culture, the one that person has been deeply enculturated and assimilated into, is less than optimal, possibly, hideous. Then, the question quickly arises, "Is one acclimatized to a degraded way of being; has a lesser potential that what is knowingly possible become normalized?" It can be very easy to find oneself loving things that aren't great for oneself or others; things that are more "expensive" and "costly" to the expression of one's higher potential state of living. One can live in a police state (and in fascism), and not know it, if one is not sufficiently alert. One can live around and participate with horrific actions and have no realization as such. One can advocate for violence and have no realization of what they are actually supporting.

Philosophically speaking, there is at least one ethical principle that makes contextual sense at the social level: the non-aggression principle (also called the non-aggression axiom), which includes consideration of any principle following from it or intrinsically related to it, such as the principle of self-defense. The non-aggression principle is a potentially valid ethical principle because in its claim as to how behavior "ought to be governed" it principally negates authority, force, and coercion. The non-aggression axiom states that the initiation of structural, physical, or psychological force, violence, and coercion against persons, or the threat of such force, is inherently "illegitimate", regardless of excuses used to aggress (i.e., it is not "legalizable"). The non-aggression principle is a personal statement that,

I should not use violence or the threat of violence (i.e., coercion) to get what I want; though, maybe I can use violence if someone is acting on an intent to harm me or others, but I should not initiate the use of force to get my way in the world.

In brief, the principle goes something like this: Thou shall not initiate force, though thou may respond to it in kind if the receiver of an assault. Under the conditions of a community-type society, "authority" (as a structure) is seen as an inherent form of aggression, as a form of structural violence. Whereas, the non-aggression axiom is the inherent negation of any person's authority over any other person. Fundamentally, the non-aggression principle is something to think about in living more consciously. Simplistically, the non-aggression principles is saying, "Do not aggress against others, and if aggressed upon, then it is natural for an organism to seek to protect through aggression".

To some degree, the non-aggression principle requires a victim -- as in, the "aggressor" and the "victim" of the aggression. If it is the axiom of a paradigm, then any argument from that paradigm may potentially include the "aggressor" and "victim" model. If the regenerating source of aggression is found to be [in part] the system, then where is the "victim"; is not everyone then a victim of the system [structure]? In regulated competition there is care over who started, or instantiated, aggression; which generates the formation of a State (as a state of regulation on competition to protect all competitors). In cooperation there is care over why the system created an environment where aggression manifested. In regulated competition it matters who started a conflict and it matters who is capable of owning or dominating the conflict. What environment allows one human being to be aggressed against by another and punished by a third? In truth, it is incredibly frustrating to be wronged by another's aggression (non-consensual harm) and to be punished for defending oneself. In cooperation, the environment is accounted for; in competition, initiation and dominance are accounted for. If someone see themselves as a "victim" then figuratively speaking, one is "dead in the water". If "you" acknowledge that "you" are a victim, then "you" need a rescuer. Those who are "victims" are seen as incapable of doing things for themselves. And herein, it must be recognized that a victim is someone who is giving over (or, has given over) their own internal power to a so-called "rescuer" (e.g., to the professionals, to industry, to heroes, or to the State; to the authority of the day).

Anyone who thinks they are a "victim" is already working with a tank [of esteem] half empty. Individuals have to think of themselves as being in control of their own lives; having a high 'locus of control'. In the absence of this not much else is important. In every moment individuals have the choice to be a "victim" or a self-integrator. Herein, it is necessary to realize that trauma, like victimization, is a repeating feedback loop of self-limitation; and, it is important to note that someone who has been traumatized may not realize they have encoded the trauma (figuratively speaking, when people are traumatized, and have become "stuck", then people need to "release" the trauma to become unstuck and to continue a path of self-development).

It must be mentioned that there are definitional and

relational issues with the principle, and hence, if it is to be applied, it must be applied in the larger context of objective values, human well-being, ecological consideration, and with a consideration of other forms of structural violence. Notably, coercion cannot be reduced to just behavioral (or policy) action; instead, it is more accurately the result of a larger process. And further, nature is inherently "coercive" (or restrictive); can't just do anything want, for nature sets real limitations. There are laws (or technical regulations) that in a very real way restrict behavior in this real world environment.

The non-aggression axiom is strongly advocated for by those who identify themselves as anarcho-free-market capitalists, Austrian economists, right libertarians, among others. Yet, oddly enough, the market system does not promote non-aggressive thinking. When viewed historically, the market is a competitive [life] system that forces individuals to compete and otherwise fight over resources to survive, and within which, there will inevitably be problems of aggression (i.e., there will exist inherent structural violence). As such, the market exists in contrast to a cooperative way of living, which recognizes that resources ought to be cultivated carefully so that everyone can survive, thrive, and facilitate a healthy ecology. A competitive market-based socio-economic system will by its very [obligatory] structure generate behavioral aggression between some competing parties (i.e., aggression is structurally reinforced). And, there will inevitably be people who are going to use force to do things that should otherwise not be done (i.e., that systematically reduce well-being among the population). Essentially, the non-aggression principle is not systematically reinforced in the market; in fact, aggression is incentivized. Hence, the principle assumes no environmental affect.

In concern to the application of the concept in a market-based economic paradigm, there is also the potential issue of the withdrawal of support in the form of resources, which would itself not be identified as aggression per the principle, but could quite easily lead to suffering. For example, a parent may withdraw resource support for a child who is less capable of supporting themselves, which is technically not aggression, but could technically lead to starvation.

Since the non-aggression principle is an ethical principle it can only be applied to humans and between humans, and hence, it doesn't facilitate a respect for (i.e., a respectable relationship with) all other living systems, creatures and beings on the planet, and its adoption (to the negation of ecological concern) has the potential of engaging a speciesist mindset -- it is not "rightful" to aggress against other humans, and aggression against other species is not a "rightful" consideration. Speciesism, as the assigning of different "rights" and values to different species, quickly leads to the belief that one species has more of an ethical "right to life" than another ... because it isn't human. It is a subtly disguised bias against other species in a common ecology, a presumption of superiority, an epic kind of

wastefulness. Thus, the question quickly arises, "Is the non-aggression principle not worthy of being extended into the total ecology of the planet, and if not, why not?" If someone harms the environment then they will inevitably harm the people and other creatures that live in said environment. And, under market conditions such behavior is not a question of if, but of when. What might have begun as a defensive mobilization [for survival in a competitive market environment (i.e., business organization)] ends up a self-serving apparatus (e.g., government) intended to boost a given population's lifestyle at the expense of others.

It is also relevant to note that although the non-aggression axiom objects to the imitation of force, there is no coherent objection that an aggressor could make if s/he were treated with force by those s/he aggressed upon - this is known as the self-defense principle, and it is a natural survival mechanism (it exists in nature as an instinctive reflex, regardless of the non-aggression principle). The self-defense principle states that when someone makes a claim of being allowed to do violence to another person, then that other person is always "right" (i.e., has the "legitimized right") to defend oneself with physical force. If think about it, nature defends itself in many ways and sometimes it uses violence.

The self-defense principle makes the claim that if one is being accosted with violence or the initiation of coercive action, then always reserved is the right to use defensive force (i.e., defensive violence) against the entity who is exerting the initiation of violence. Therein, there is a necessary usage of force to put down violence if accosted with it. It is relevant to note that some people believe that it is never valid or valuable to use self-defensive force to stop an act of violence if necessary; this is known as "pacifism". Yet, organisms in nature frequently protect themselves from predators through force (both "a show of" and real), and sometimes they use extreme violence; pacifism is rarely, if ever, found in nature.

It seems that if the environment is evoking a stress response (e.g., survival in a competitive gaming market) in an organism, then "you" are asking an awful lot of the organism to be less violent.

MAXIM: *It is wise to make evaluations in terms of needs, and technical existence, as opposed to what is claimed [by an authority] to be "right" and "wrong".*

1.1.2.2 Functional ethical principles

Ethical principles are prescriptive boundaries within and beyond which an authoritative entity has fully imagined legitimate use of force, violence, and/or coercion. The authority, through the enactment of an ethical principle, acts as a restraining force (or fear inducing force) on those persons and objects the authority has believed control and legitimized (or legalized) force over. In nature, however, the restraining force is not that of an ethical principle dictated by an authority, but instead is

observationally verified as a phenomenological 'scientific principle' (or 'technical principle').

Generally, ethics is the term used to discuss all moral or value terms. In this sense, the primary purpose of "ethics" is to critique and to design the operationalized orienting system of a society (e.g., a value system). The term "meta-ethics" is used to discuss the origin and nature of both a normative system and ethics.

Social control can be coordinated through many different types of relationships. Different types of relationship will likely create different types of society [on a values circumplex]:

1. A State-type society uses authoritarian-based coordination relationships to control society (e.g., coercion).
2. A market-type society uses competitive-based coordination relationships (e.g., trade).
3. A community-type society uses contribution-based relationships to control society.

"Control" can carry a negative connotation for many people. However, here, the term "control" is used in its broadest sense to include any psychological, social or material activity that directs, guides, regulates or influences a person to perform or refrain from performing certain actions. It is used the way the term "control" is used in reference to the activities of design and usage. Societal control may be either informal or formal. Informal societal control is exemplified in the functions of traditional culture. Formal societal control is exemplified by the explicit development and usage of a shared information system with integration and change procedures. There are many categories of control method (Read: methodical control) that can be used by a society's population. In the market-State, control is "delegated" to specific groups with the "authority" to enforce [a monopoly on force] the control (e.g., laws, decrees, regulations, codes enforced by justices, police, and military). In the market, control is delegated with the authority to use violence to restore normative property relations. In the market-State, control functions as the organizing force (Read: violence) in society, providing structure to organizations and institutions. In community, control is an iterative programming of society by means of an openly standardized informational decision/resolution (i.e., procedural) system. In a community-type society, control functions as the programmable contribution (Read:

When removed from the context of authoritarian ethics, the generalized and pluralized term 'principles' may be loosely defined as: rules intended to be enduring and seldom amended, that inform and support the decisions an individual, group, or system makes to fulfill its purpose. In this sense, there exist functional ethics (a meaning that is synonymous with values). In the sense of functional ethics, ethical language (i.e., statements of right and wrong) can be analyzed from the viewpoint of its function. (Russel, 2008) Functional ethics (values)

are statements of right (in alignment) or wrong (out of alignment) alignment of conditions (Read: conditional relationships/dynamics) with behavior and intention. Here, values could be seen as social directives (or, vectors; atomic vectors). A control system is, in a sense, an imperative application system (or, an imperative operating system).

A computer model (or, computer processing analogy) can demonstrate some necessary features of a control system. Computer processing requires two systems to obtain any organized output:

1. The information system consisting of data or facts.
2. The control system, the system of commands (instructions, operations).

Command in the presence of facts enables function. The operation of a computer is produced by an algorithm which combines commands and facts. The application of a command is usually based on an item of fact. For instance an algorithm may state: "If there are more than 10 items in category X go to C, if not go to D". Here, the information or truth aspect of the operation (the number of items in category X) is a fact that the command uses to make a decision. The command does not operate as a fact within the system. (Russel, 2008)

Information and control are not interchangeable in the operation of a computer program. Commands are "do" statements, that is, imperatives. Information statements in themselves, do not require the computer to do anything. The end of the algorithm is to produce an output, that may be to answer a question or to control a physical process, such as telling the printer to "PRINT".

It should be noted that commands can be stated as facts or information. A command when listed, is information and can be treated as information. Information, in the computer analogy, is equivalent to truth or fact in philosophy or science, while the command statements are equivalent to ethical or moral imperatives. Organizations of information and materiality control human behavior in a manner similar to the way commands control the computer. A major obvious difference between computers and people is that the computer is externally programmed and must obey the command, while the human is self-integrating and need not do so. The situation that humans do not need to obey a command, accounts for much of the difference between computer imperatives and the various kinds of orientational (ethical/moral) concepts.

1.1.3 Value represents a moral coordinate

INSIGHT: *Punishment sacrifices human needs.*

Value represents a moral coordinate system for the orientation of [process] state-based decisions along a desired axis. A coordinate system is a means of assigning coordinates to a location and establishing relationships between sets of such coordinates, thereby enabling the interpretation of a set of coordinates as a representation

of an orientational position in a 'world space'. A 'world space' is a [space of] pattern that are calling a 'world'. It is a space that may be experienced in a sensorial manner, and senses may be used to more greatly align ourselves along an intended path within a probable territory (i.e., to navigate).

When the coordinates have a relationship to the real world, then the representation is that of a position in 'real world space', in reality. In a real world referential system, value coordinates are identified through scientific discovery and refined through critical thought prior to their integration into the system that maintains navigation among the community.

In a system, each coordinate represents a partial description of the current state of the system, and together, the coordinates orient (or orientationally describe) the actual axial direction of the system. In other words, coordinates descriptively identify the positional state of a system, and together, they form the dynamic of the system. In systems thinking the 'state' of a system is a complete description of the system in terms of its present conditions, its parameters, values, and variables at a particular moment in time. Hence, each coordinate represents a sub-state, and partial description, of the overall system. A moral coordinate system represents a framework for the directing of attention.

Values are a requisite component of an orientationally coordinated approach to decisions within the real world. Herein, a 'moral coordinate' is another name for a value. As a value, a 'moral coordinate' describes a position in the dynamic state of a socially interrelated system relative to an axial direction [or purpose]. A moral coordinate is a [partial] description of the current or future desired orientational dynamic state of a system.

A 'value system' acts as a 'conceptual coordinate system' for orienting a community in a desirable direction. Each value in the Community's value system is a moral coordinate (as a sub-state of the overall state of the system), and must maintain a reference to the material world in order to accurately orient toward the fulfillment of discovered, real human needs.

A full description of a moral coordinate system necessarily involves a discussion of the concepts of coordination and morality. Coordination is discussed in the next sub-section, and then morality is discussed at length following.

MAXIM: *That which is outside the possibility of choice is outside the possibility of morality.*

1.1.3.1 *Organizational coordination*

Systems are comprised of elements that interact to produce a predetermined output, condition, or state. Coordination is a necessary functional attribute of an effective system where elements of a system with differing functions must be adjusted in order to reach a common purpose (or objective). Coordination is a principal activity in the organization of energy, resource and effort, and a

vital component of the organization of every system. In a living system, coordination is required for a strategic response to challenges, problems, and other dynamic issues that might arise. The aim of coordination is not new - improvement of performance is a universal organizational goal - the better the coordination, the higher the organizational performance. And, in concern to a social system, it would be wise to point coordinated organizational performance at the fulfillment of human needs as a moral direction.

An organizing act can also be viewed as coordination. To organize is to assemble ongoing interdependent actions into *efficient* sequences that generate *effective* outcomes. One important purpose of coordinated organization is to formalize actions thereby reducing undesired variation, and to control and to anticipate actions, which increases predictability and stability in the system. Stability is an important aspect of organization and of system continuity. Hence, the existence of a common value system with a rational and objective selection of core values for stabilizing the social system and orienting decisions in a meaningful direction - to fulfill human needs and facilitate in the persistence of well-being.

Actions within a system are mutually dependent, and an important part of coordination is to harmonize these dependencies. Definitions of coordination also involve the acts of dividing goals into tasks, the allocation of resources to the completion of actions, the migration of different actions into a whole, and fed back evaluation of actions compared to an objective (or direction). Researchers have identified at least three mechanistic activities that are necessary in order to perform coordination:

1. Coordination through **standardization**,
2. Coordination through **planning**, and
3. Coordination through **feedback**.

Note that these activities are necessarily encoded into the Community's decision system and they are discussed at length in the Decision System specification.

If a social system seeks to coordinate decisions so that the systems maintain a stable alignment with the needs of individuals, then the system must account for these three mechanistic activities in its decision process(es). In other words, they must be accounted for within the [economic] decision system of a community.

Coordination also involves some form of 'coordination logic'. In a social system, coordination is the process through which two or more desired conceptual coordinates (i.e., values) interrelate and complement the functions of one another (i.e., conceptual synergy) in the performance of a social objective, a common and mutually beneficial purpose. At a dynamic community level, coordination is the process of integrating values with situational needs (e.g., wants) as well as absolute needs (e.g., human needs) to arrive at decisions that

maintain an orientational alignment with a desired direction. In the Community, coordination is concerned with maintaining harmony and cooperative efforts toward the fulfillment of human needs [through at least the three mechanistic activities previously noted].

Accurate coordination necessitates accurate information. Knowledge about the universe is knowledge that is consistent with the universe, and that tends to make it extremely useful for purposes of coordination. Scientifically referential values will logically identify desirability (and probability-out conflict) within a coordinated decision space. Hence, the community maintains a coordinated value system for [at least] three purposes.

1. Values exist as a form of useful information in the coordinated fulfillment of needs.
2. Values exist to coordinate individual and social activities in a desired direction. The "desired direction" represents a context for alignment.
3. Values may change (or adapt) over time as life conditions (including understandings) evolve.

Hence, can create the life conditions (i.e., "structures") that facilitate the emergence of a particular set of values. Herein, it is important to recognize that to some degree have made up social existence together, and that if have made it up, then can make up something different, possibly a social existence where are all thriving.

Some systems are simply unsuitable in their structure for generating and maintaining human fulfillment. Some structures by their very nature minimize human potential. Other structures, by their very nature, evolve human potential. Do not allow structures to become strictures. The potential of anyone's life experience is reduced or enhanced by the structures and strictures they accept. Herein, values orient the next [design] iteration of a structure, and they can facilitate the creation of structures that reduce potential or enhance potential. Community generates structures where it is possible for people to have self- and life-fulfilling experiences. Fundamentally, socio-economic structures are [in part] a reflection of the value system of partaking individuals.

Values serve as a means by which complex social problems may be resolved in a local structure (i.e., a system). And, "optimal values" are the "optimal means" by which complex problems are resolved in a local structure. Some values and choices are not optimal for human fulfillment; they do not coordinate in the direction of human flourishing. Herein, values become the organizational logic used to coordinate state changes in a socio-economic system, in community. The premises that values are based upon must be accurate (i.e., in alignment with reality). If "you" start with an invalid premise, "you" end up with an invalid result (i.e., decisions and behaviors that are not likely to align individuals and communities with their desired direction).

The foundational premises upon which a conclusion is based cannot be faulty or without proper evidence for the conclusion to be considered factual. Needless to say, being logical within the cognitive framework of being illogical only takes someone "so far" toward the notion of organized and coordinated fulfillment in a common reality. Logic is necessary, but not sufficient - the logic may be sound, but the premises may be inaccurate. Both the logic and the premises must be "sound" for the continued and stable existence of a community and accurate alignment toward a "culture of ascent" (i.e., social movement toward a higher potential state of existence).

As a logical systems process, optimal values have the potential of coordinating the arrival of an optimal decision. Herein, 'optimal' means whatever is thought optimal; the concept may only be applied relative to a context. It is relative to whatever is considered an optimal state or outcome, the objective of the system. If fulfillment is thought optimal, then what organization of conceptual understandings might coordinate decisions that lead to ever greater states of fulfillment?

The concept of information is closely associated with that of coordination. All coordination involves information and every living system is at its core an 'information system'. Information systems involve *storage*, *retrieval*, and *transmission* capabilities. They require processes to accomplish tasks, which involve rhythms and schedules. Information systems accomplish more than their individuated components through *events*, *objects*, and *relationships*, and through coordinating tasks (and activities) over time and space.

In an information system, the choice lies between less entropy (less randomness) and more entropy (more randomness), between order and chaos. Patterns exist within which choice exists—this is a fractal process—the same structure in a repeating pattern. A fractal is a self-similar structure that repeats itself in different ways. The context is the rule-set for that particular local information structure. A decision that creates greater coherency also optimizes resolution (a computer term; [[webopedia.com](#)]) of that which "is", to consciousness. A decision that reduces coherency will optimize randomness, while reducing understanding and coordinated organization.

In an information system, morality represents motion toward a state of lower entropy (i.e., less randomness and more accurate information). Information is the foundation for the evolution of systems and evolution as conscious human beings is predicated upon clearing up misinformation that is keeping from making those necessary steps toward a higher potential of creation. In information systems, to de-evolve means to lose *order*, *structure*, *meaning* and *significance*. Essentially, when an information system de-evolves it loses its information and becomes less able to coordinate its fulfillment.

QUESTION: How complete is the information being used to inform a coordinated action?
Would it be prudent not to act until more

information becomes available? Will an action align an individual or society with a common and universally desirable direction?

1.1.3.2 Morality

Morality (from the Latin *mōrālitas* "manner, character, proper behavior") is defined herein as the differentiation of intentions, decisions, and actions between those that are in alignment with a coherent direction (or right/true) and those that orient away from this axial alignment (or wrong/false). Morality is a rationally justifiable set of claims about an objective [behavioral] direction, and it is not illusory. Morality exists within the context of a definable direction and must always involve the freedom of conscious choice (i.e., a decision space) and some form of logical reasoning. In the Community, the contextual direction is that of a systematically discoverable universe and an intentional social organization that maintains a meaningful direction for all human beings, the fulfillment of common human needs. Thus, morality becomes the logical and rational reasoning of [behaviors that facilitate] human fulfillment and well-being, based on knowledge. Herein, accurate evaluations of the environment are a necessary condition for the existence of morality. And, action against (i.e., thwarting) the fulfillment of human needs is considered regressive (i.e., immoral).

It is important to note here that although morality and ethics have two separate definitions, both herein and in common parlance, they are words that are often semantically interchanged, though not interchangeable. They have two separate definitions, and sometimes someone gives one definition to ethics whereas another person gives that same definition to morality. As was discussed earlier, herein, they have two distinct definitions.

Every definition of morality address questions of right and wrong, good and bad, direction and orientation, and it always relates these questions to well-being, in some way. Every moral framework regardless of context involves:

1. Right/correct—desirable action, orientation and direction.
2. Wrong/incorrect—undesirable action, orientation and direction.

Wherein, an action is desirable when it more greatly aligns the individual and society with an intended direction and undesirable when it orients away from such alignment. Ecologically speaking, an action is desirable when it favours equilibrium between an organism and its social environment (i.e., socialization), though not at the cost of the fulfillment of the organism's needs.

The fulfillment of humankind is a paramount consideration when discerning whether an action is "morally correct" or "morally incorrect" for a community. Moral choices come from rational efforts to improve human well-being. Authority-based prescriptions and

cultural relativism are not helpful when discussing human fulfillment. Human flourishing, well-being and fulfillment are an objective basis for human morality. Hence, whatever tends toward human flourishing is objectively moral and whatever mitigates against human flourishing is objectively immoral.

If morality means anything relevant, then it has to do with the well-being of conscious creatures; and likewise, an inquiry into what may enhance or diminish this well-being (i.e., correct and incorrect action), which has not only a conceptual and spatial aspect to it, but a temporal one as well. Temporal [moral] logic isn't necessarily immediately visible. For example, spanking a child may give a parent immediate results, but s/he isn't likely to notice the probabilistic, yet scientifically definitive cause and effect relationship between the spanking and the manifestation of other issues in the future, such as a lower IQ, more "acting out", and being more prone to aggression toward others, which are the probabilistic, scientifically factual results of spanking. Notice here, that there is no is-ought problem. And, this is [in part] why science is so important in answering moral questions and why the scientific method (and a systems approach in general) is useful in addressing moral questions.

Human flourishing arises [in part] from the sufficient fulfillment of human needs. When real needs are not sufficiently fulfilled there exists a high likelihood that individuals will express self- and socially-directed corrosive behaviors. Hence, it may be said that human flourishing is the sufficient fulfillment of human needs such that corrosive behaviors are not manifest and individuals are meaningfully fulfilled within a larger, stable and socially cooperative environment. A social environment may be considered "stable" (i.e., cooperatively functional and dynamically progressing, and not oppressive or regressive) when social cooperation is normative and moral behaviors are manifest within individuals [in common].

Fundamentally,

1. If morality doesn't critically involve well-being, it's a meaningless term, and
2. the fact that people often make mistakes about the definition of morality, polluting morality with abstracted bias and debris, does not make it a meaningless term.

The very idea of right and wrong moral action may be understood in the context of the "moral actor". Humans, for example, have emotions and desires; they also have a decision space. Healthy humans as "moral actors" care about their own well-being, about those who they love, and traditionally, about the well-being of others in their social community (e.g., a "tribe"). Humans are social animals, and in fact, have no choice but to share a finite planet with each other. One individual's behavior affects others. If had no cares at all about what happens to or others, or actions had no effect on anything but

ourselves, then potentially there would be no need for morality, and in fact morality might have no meaning. However, that is not evidential reality.

Questions of right and wrong depend upon minds. They depend upon the possibility of the consistency of conscious experience. Minds [at least] are vehicles of consciousness. Minds are also a natural phenomenon and rest within the "laws of nature" in some discoverable way. Morality and human values, therefore, can be discovered through science, because in talking about these things, are talking about all of the facts that influence the fulfillment of conscious beings who maintain a decision space. In the case of an emergent community, 're talking about [at least] genetics, neurobiology, psychology, sociology, and ecology. Hence, values can be evaluated empirically, in terms of their universality, their neurological basis, and the effects of their implementation in a society, and on the well-being of individuals.

If there are facts to be known about how human minds and conscious creatures can experience the worst possible misery and the greatest possible well-being, then it is objectively true to say that there are right and wrong answers to moral questions. And, whether or not can always answer these questions in practice is based largely on a sufficiency of information, rational and critical thinking capabilities, and an openness to verifiable information.

If the emotive terms "good" and "bad" are to be used, then it can only be said that what is good is to ever more greatly align with highest potential nature, and what is bad is to ever more greatly distance ourselves from that potential of experience. In the permutation tree of all human choices, is it not wise to choose the most strategically effective and efficient path to human well-being? In other words, some choices verifiably lead to deterioration (physical and psychological) and so can have rational and integrated agreement that those are to be defined as "bad" choices. Whereas, some choices could select are verifiably more likely to lead to prosperity and flourishing, and they may therefore be defined as "good" choices.

Reality, along with the decision to remain in it, (i.e., to stay physically alive) dictates and demands an entire system of values. Unlike organisms with a smaller decision space, modern industrialized humans do not appear to pursue the values that fulfill real needs automatically; humankind in its present state must [re-]discover and choose them, but this does not imply subjectivism.

Every fulfillment-aligned value involves the identification of a fact as a given object or action that will fulfill a need: or threaten the fulfillment of a need. The good, therefore, is the recognition of nature. The bad is a form of contradicting nature and maintaining illusory realities. Knowledge for any conscious organism is a means to surviving and thriving. To a living conscious being, every 'is' implies an 'ought' - every discovered fact of reality has, directly or indirectly, an implication for

humankind's self-preservation and for its wisest and most moral course of action. For instance, sunlight is a fact of reality, but once its effects are discovered by humankind and integrated into intended direction, a long series of evaluations follow: the sun is a good thing (an essential of life as know it - photosynthesis is the basic economy of the planet). Within the appropriate limits, its light and heat are good, good for you; other things being equally dynamic, therefore, ought to plant crops in certain locations, build homes in a certain way (with windows and airflow), expose eyes and skin to the sunlight, and so forth; beyond the appropriate limits, however, the sun's radiation is not good (e.g., it causes burns). All these evaluations are demanded by the cognition involved - if one pursues knowledge in order to guide one's actions. Similarly, tidal waves are bad, even though natural; they are bad for if get caught in one, and ought to do whatever can to avoid such a fate. Even the knowledge of what now know as gravity, which represents a somewhat different kind of example, entails a host of evaluations - among the most obvious of which are: using a parachute in mid-air at a calculated height above the ground is good, and jumping out of an airplane without one is bad, bad for a human's life.

Humans have needs if they desire to remain alive. Those needs ought to be fulfilled in the most efficient and effective manner so that individuals in a society have the freedom to pursue that which they find most meaningful - this is true 'social morality' - a conceptual arrangement designed to re-generate the dynamic state of fulfillment.

Grounding [social] morality in things that people abstractly value or desire or care about or prefer or hold an opinion on (e.g., market economic value) appears to miss the point of morality altogether. People, for a wide-variety of discoverable reasons, often act against their deeper preferential well-being or live in ignorance of what their preferences would be if they had more experience and accurate information.

To suggest [in context] that aberrant and irrational cultural variations create insurmountable obstacles to a common morality is to suggest that the existence of hand amputees prevents the manufacture of gloves.

In a community organized around human needs, it is obvious that morality must involve objectivity and must not involve authority. Evolution toward a higher potential is possible on the basis of objective morality as informed by discoverable human needs and acted upon through scientifically derived values.

As conscious individuals existing within an intentional community identify options with the information have available. And, if need more information to arrive at an optimal moral decision, then gather more information prior to action. Without accurate information in context, moral decisions are not possible -- [moral] lifeboat scenarios are a waste of time. And herein, it is wise to remember that people can very easily fool themselves into thinking they are taking correct action after shoving accurate information through the filter of their ego,

personal circumstance, and all manner of narratives and perception biases, the consequence of which is thoughts and behaviors that are completely out-of-touch with the reality of human fulfillment.

1.1.3.3 Authoritarian moral and ethical oughts

INSIGHT: Authority replaces choice with obedience. A coercer might say, "If your will doesn't conform to my will I will use psychological or physical violence against . I am going to hurt in some way that don't want me to hurt if do not do, or become, what I tell to."

In natural reality, there are no authoritarian "shoulds" or "oughts" as commands and threats from "authority". The belief that an authority gives rights, liberties or freedoms, or is the basis of any form of morality is fundamentally flawed. Morality is not an authoritarian social system, or any system of force, violence, and coercion. It is neither legal codes nor retribution. And, morality does not involve dictation to people as to what they must and must not do, and punishment of their transgressions. If desire to transcend such limited beliefs, primitive instinctual reactions, and erroneous conceptions, then it is important to reveal the biases and falsehoods inherent in them in order to attain a truth adequate for humankind's effective usage in creating fulfilling common[unity] environments.

Morality is considered as an attempt to answer a question, "What should I do?" Morality is a question that only a rational and freely thinking consciousness can explore the answer to; morality is not a force from authority. And yet, a community that acknowledges a consistent and discoverable universe ought to attach its moral sense to the maximization of human needs and the minimizing of individual insufficiency otherwise its very persistent existence comes into question.

When words like "wrong" and "should" are used, many people feel quite uncomfortable, as these words can imply some higher power or authority that decides what is "wrong" and how people "should" behave. In fact, this is quite often given as the definition of ethics, where ethics [and sometimes moralism (or "authoritarian morality")] are defined as the governing of behavior by institutions and [actual] actors (i.e., humans in suits and uniforms acting out predefined and programmatic roles). Ethics is concerned with normative evaluations and judgments, which are interpreted by an authority who is either an institution or an actor [often acting on behalf of the institution of authority]. Ethics is dependent on another (or other person/entity) for *definition, interpretation, and inquisition* (e.g., the jurisdictional court system).

Most disputes on questions of morality actually concern ethics; that is to say, they concern objecting to other people's behavior, not one's own. Definitions go on to state that ethics are the external rules and standards provided (or dictated) by "institutions" that define (and may themselves interpret) allowable, and therefore punishable, inter/intra-personal thought and conduct. Violations of ethical rules are [nearly]

always considered a punishable offense (i.e., retributive justice as a consequence), which may come in the form of ostracization, forced labor, physical pain and/or kidnapping, caging, death, isolation, and torture. Ethics, as defined herein, is formulated on the premise that the individual is a powerless and insignificant inanimate thing. The concept of 'crime' is a sub-conceptualization of ethics - a violation of ethics - and may involve "thought crime", "consciousness crime" (e.g., drug use), "victimless crime", and "victim crime", and extends from pre-cognitive crime through to pre-meditated crime. One might see how the concept of "crime" when applied to the authoritarian organization or "governing" of a society could be problematic and lead multiple hierarchies of interpretation, judgment, authority, jurisdiction, retribution, and punishment. In a monetary market economy, criminal law and punishment enforcement might even work its way into becoming a for-profit industry where jurisdictions, bureaucracies, courts, and prisons are operated as for-profit corporations - a hellish monetary dystopia.

You can't get healthy, happy, well-adjusted and fulfilled people to go out and be prison guards or soldiers, which is to a great extent what early 21st century society relies upon, and although it may not (or may) be engineered that way, people naturally take advantage of the situation. Lions get together to hunt gazelles, they don't have to plot it out in some smoky room. It is just their instinct and desire under their natural environmental conditions.

Morality, as opposed to ethics, requires context and choice. Go to prison and try to convince the prisoners to eat better meals. They will laugh at and tell that are crazy; they have little choice in their meals. Nutrition advice is meaningless when don't have a choice about what eat. Moral advice is meaningless when don't have a real choice about your actions, when authority and other abstracted external concepts govern individuals' real interrelationships.

When some external individual or entity defines reality for "you", then "you" lose your freedom and sufficiency, and exist within what may be metaphorically called a[n artificial] "matrix" - reality defined by an outside other - a reality in which peoples actions mean nothing to their fulfillment. "you" lose touch with reality and lose touch with "your" natural ability to integrate reality into "your" mental model(s) of the world and coordinate "your" fulfillment. This very quickly creates intellectually vacuous and willingly insufficient individuals who are incapable of adapting and growing (i.e., they are incapacitated). Most people, when they begin to become aware of the matrix, simply get rid of one program and adopt another less restrictive program in its place; they do not drop all programming [from authority]. It is important to become fully aware of the nature of the "prison", its patterns, and how it functions in order to remove all compulsion from the system.

What if, in nature, there is not "ought", and that all that exists is that which "is"? Then, choice becomes

paramount and the results of a choice are not open for interpretation; they are the truth of that which was chosen and that which has occurred. Some choices verifiably lead to a higher potential of fulfillment and others a lower potential, but since there is no authoritarian force telling everyone what they "ought" to do and punishing them for what they "ought not to have done", that leaves only that which "is". There are only choices that lead to a higher fulfillment as have been empirically observed or probabilistically shown, and choices that verifiably lead to states of nature that are less than optimal for human flourishing.

When removed from the biases of authority and of limiting belief, then morality is bounded by the fulfillment of human needs and human well-being within the context of a natural, life-serving ecological environment.

In reality, there is a universe of possibility that can be known about maximizing human well-being and the well-being of all other conscious creatures. And so ask, what will maximize well-being? There is every reason to think that this question has a finite range of answers. Given that changes in well-being are bound to be a product of natural regulations in nature, must expect that this space of possibility—the "moral landscape" as it has been referred to—will increasingly be illuminated by scientific discovery. And therein, maintaining an evidence-based (i.e., research-discovery-based) approach to any coordinated and oriented direction seems eminently useful. *Evidential reference* is necessary for all forms of navigation, and are truly navigating within a universe of possibility. Yet, the term 'evidence-base' becomes meaningless when the evidence cannot be trusted (i.e., when it not open verifiable and/or given by authority).

QUESTIONS: Who in your life and society has a monopoly on the usage of coercive action? Who has a nearly infinite ability to escalate violence?

1.1.3.4 Authoritarian conscience

The authoritarian conscience represents the irrational internalisation of authority - it is a state of being where conscience has no logical referential tie to the phenomenological world and human fulfillment, but instead has attached itself to the commands, taboos, and approval of an external authority. This internal voice may be backed up by fear of punishment, or spurred on by admiration, and it is often created through idolization of an authority figure. Notice that the voice of the authoritarian conscience is obeyed not because it is imparting the wisdom of fulfillment, but because it is in authority. The presence of the authority figure is necessary to strengthen and maintain this voice, otherwise it loses its power and the conscience that considers and desires fulfillment can reassert itself. And, in order to maintain power [over another], authority will seek to insert itself into all forms of inquiry such that it is always ready with its "gifts of knowledge" or punishment for transgressed inquiry, were applicable. Most people

conditioned into early 21st century assign their value and power and control outside of themselves, and they feel good about it.

The conditioning of an authoritarian conscience can come from:

- Projection onto someone of an image of perfection.
- The experience of "parental" rules and expectations.
- An adopted belief system with its own authority structure.

Authoritarian conscience does not function toward adaptation (or adaptability) and creates a cycle of insufficiency (or deficiency) both within the individual and in future generations conditioned to accept the authority. The failure to fulfill human needs in a self-empowering and non-authoritarian manner results in a stifling of all areas of potential growth. As a result of persistent growth inhibition an individual's sense of identity becomes perverted and threatened, which can lead to their continual dependence on others, particularly the authority, for approval (i.e., psychological dependence) and may manifest the behavior known as 'pleasing'—someone who is constantly trying to please others [to everyone's downfall].

The "good [authoritarian] conscience" produces a feeling of relief and security, for it implies approval by, and greater closeness to, the authority; the "guilty conscience" produces fear and insecurity, because acting against the will of the authority implies the danger of being punished and - what is worse - of being deserted by the authority. In order to understand the full impact of the last statement must remember that character structure of someone who has given their mind over to an authority. Such a person has found inner security by becoming, symbiotically, part of the authority felt to be greater and more powerful than oneself. As long as s/he is part of that authority—at the expense of his/her own integrity and fulfillment—s/he feels that s/he is participating in the authority's strength. His or her feeling of certainty and identity (Read: the need for significance and for certainty) depends on this union; to be rejected by the authority means to be thrown into a void, to face the horror of nothingness. Anything, to the constructed authoritarian character is better than nothingness. To be sure, the love and approval of the authority gives him or her the greatest satisfaction; but for many, even punishment is better than rejection. The punishing authority is still with him or her, and if s/he has "sinned", the punishment is at least proof that the authority still cares.

Psychologically dependent individuals often persist in their efforts to retain the approval of others (or of authority) even if it means repression of their own growth and social relationship needs. In the absence of motivation for growth their thought and behavior patterns are dominated by basic psychological needs,

including the needs, as mentioned, for certainty and significance. When these needs dominate a personality they are sometimes designated as 'deficiency needs' or 'deficit needs'.

Motivation by deficit needs is known as 'deficit motivation'. Deficit motivation results in meta-pathologies of feelings of de-humanisation, repression, and a wide-variety of other neurosis, which are likely to be present in both "good conscience" and "guilty conscience". Therein, the neurosis will likely involve the irrational projection of images of perfection (i.e., perfection ideals) onto an external entity or onto authority. Yet, it is a delusional construction to create a higher power and then give one's own will (or autonomy in the present) over to it; it is a self-destructing orientation - an orientation of higher entropy - an orientation that de-constructs one's own will power in the construction of the authority. Therein, the individual loses the ability to re-orient themselves through the self-selection of a more fulfilling focus, physiology, and meaning; which are instead "given" to them (or "commanded" to them) by the authority.

The construction of an "authoritarian conscience" involves the interaction of two processes that are based on the instinctive desire to admire as well as to have and to strive for an ideal (or for perfection): first, the perfection of character is projected onto another individual or an external agent of authority as a parental, religious, spouse, sports, or State figure; and second, the projected image of perfection is internalised or interjected into the individual's consciousness, whereby it becomes an "authoritarian conscience". Internalisation of the projected image of perfection leads to the individual's unshakable conviction in the external authority as the personification of the perfect character. The conviction may be so strong that it is immune to all empirical evidence that might prove to contradict it. The power of adoration of, or fear for, the authority replaces the power of objective reasoning, and the individual loses the capacity for rationality and objectivity in cognition. As a result the programmed (or constructed) conscience becomes increasingly authoritarian and irrational, which this leads to the rigidity of all forms of authoritarian conscience. The irrationality of authoritarian conscience interferes with a comprehensive understanding of the self and of others preventing the formation of meaningful interpersonal relations and personal growth.

Hence, authoritarian conscience is inadequate for effective evaluation of interpersonal relationships and social conditions. Its rigidity fails to produce behaviour that is adaptive to changes in the social environment (i.e., it is socially in-adaptive), and it regeneratively manifests corrosive relationships and behaviors (sometimes given the emotionally laden labels of "wickedness", "evil", or "anti-social behavior"). Even weak authoritarian conscience, which doesn't have the appearance of expressing pathological behavioral traits, can be extraordinarily intractable.

Authoritarian conscience is in part a direct result

of aberrant conditions for healthy growth, which are prevalent in a cultural environment that focuses on *the control of human needs for subjective ends* as opposed to the fulfillment of all common human needs in a transparently objective, participative, and supportive manner. The artificial and manipulative forces of external control, which become internalized (Read: the internalized policeman), deprive the individual of the means of empowerment and fulfillment.

In many cases, individuals may become ambivalent or fearful of re-engaging their willingness to create a fulfilling environment. The integration of fear will in turn stimulate the psychologically reactive responses (i.e., impulses) of repression and denial [about the situation in which they reside], which further inhibit growth motivation and stimulate deficit motivation. The resulting cycle prevents healthy growth, adaptation, and self-development - at scale, it prevents a systematic understanding of social and economic problems. Someone who appears as a human adult, but is caught in this cycle might be identified as an "immature adult" (i.e., they lack wisdom or maturity in their basic understanding of the universe's truthful operation). Therein, the emotional states of frustration and aggression, which are natural by-products of an authoritarian conscience, uncouple volition while engaging fight or flight, and other stimulus-response instinctual sub-routine programs.

Mature individuals whose basic psychological needs are fulfilled in a real [and not pseudo] sense, generally have self-respect, self-discipline, and self-direction; therein, they experience a state of being where purpose, worthiness, and authenticity are maintained. Such individuals might be referred to as 'self-actualizing'. With a basic sense of worthiness and a sense of purpose, such individuals are likely (or likely to become) self-disciplined and self-directed toward growth, maturity, and self-actualization.

How does the idea of "authority" prevent the conscious self from intentional re-unification with community?

1. Take away personal thought and individual understanding. Knowledge is given from an idealized persona or from authority!
2. Take away personal action and responsibility. Responsibility and punishment are given from authority!
3. Isolate consciousness. Wherein, structurally re-generated discipline removes self-determination and self-regulation creating the "internalized policeman".
4. Imprison consciousness. Self-generated consequence.

The very idea of "authority" is the tyrannical final common pathway for control [of the mind by an exclusive other] and the elimination of volitional thought, behavior, and understanding. The whips and rewards of authority

exist in opposition to the drive toward fulfillment.

Eric Fromm (1947) identifies several categories of conscience:

- "Good conscience is consciousness of pleasing authority, guilty conscience is consciousness of displeasing it." (Eric Fromm, 1947:09)
- The 'humanistic conscience', in contrast, is "own voice, present in every human being, and independent of external sanctions and rewards" (1947:118). Fromm sees this category as humanity's true self, found by listening to ourselves and heeding deepest needs, desires and goals. The result of listening to oneself and of introspection is to release human potential and creativity, and to enter into a higher potential; "the goal is productiveness [in self-growth], and therefore, happiness" (1947:120). This is something gained over a life of learning, reflection and setting and realising goals for ourselves.

It is sometimes said that the degree to which conscience is developed determines whether cognition is complete or incomplete. Therein, cognition is incomplete if moral development is incomplete. And, cognition is complete if moral development is complete, emergently speaking.

1.1.3.5 Free will

If there is no free will, no choice within a decision space, then no one is morally responsible for their behaviors and growth has no meaning. However, humans do have choice within a decision space; hence, they have free will [bounded as it is by the natural environment]. There are aspects of consciousness that appear automatic (e.g., perception, the subconscious, biological processes, emotions, and reflex actions), and there are those that are volitional (the choice to *focus*, and other choices that follow from it such as the selection of *physiology*, the *meanings* ascribe to language -- choice to direct inquiring mind possibly being the most important). Yet, long practicing meditators will tell you that even those processes that appear automatic can be gained an awareness of and conscious command over [through intentional and focused meditative practice].

Focus is the precondition of all thought. "You" must first be in focus to have a thought. Focus is the first step to thinking—by its definition, it must exist before "you" can make any other choice. The choice to focus is the choice to think; the choice to think is the choice to use that faculty that allows an organism [as embodied consciousness] to pursue life and creative desire. In this sense, one might be able to perceive that it is a choice to focus and that what is now known as "will power" provides the ability to shift focus (or attention). It is sometimes said that the real technology for self-change is 'attention' [of mind toward focus of thought].

There is always a reason to focus - but there are

times when individual consciousness is not in focus (e.g., authoritarian conscience). The question, "Why did I choose to focus?" is like asking, "Why does the universe exist?" Existence is axiomatic to the universe, and irreducible. Focus is axiomatic to thought in the same sense; it exists and is irreducible. Free will is not affected by the content of a mind, but the content of a mind and the neurophysiology that allows a mind to direct its material organism can mean the difference between being in focus and being out of focus (i.e., thinking and acting clearly, and thinking irrationally and acting impulsively).

Note that having free will within a decision space does not imply that a conscious organism can think whatever or do whatever it wants. Conscious biological organisms can only think within the bounds of information they have access to and can only choose from the available choices within their decision space. There exist real limitations to choice, including but not limited to: awareness, fear, ego, neurophysiological processes, environmental conditions and conditioning, and the technical principles of reality. There is no evidence to indicate that a material human being can choose to start thinking about a topic that its consciousness / organism has no derivatively referential prior exposure to.

MAXIM: *Fear not only makes vulnerable to those who would oppress , but it tempts to be oppressors.*

1.1.3.6 Behavior and the environment

QUESTION: *Under what conditions and states of the world are you at your full potential?*

The environment plays a critical role in behavior and is an input into every organisms' [moral] decision space. Human behavior is fundamentally influenced by the environment (i.e., environmental signals). The environment, in relation to human beings, is at the very least the natural and man-made physical surroundings, the institutions and social organizations, and the knowledge, opinions and ideas that surround individuals [that thwart or satisfy fulfillment]. Behavior in specific, and biology in general, are not deterministic; they are responsive and adaptive. They exist in a dynamic and emergent relationship with their environment. Early 21st century society tends to overestimate personality-based explanations and underestimate situational influences on other people's behaviour. Though interestingly, that's not the case for most people in early 21st century society when explaining their own behaviour. Human behavior cannot be judged outside of the context of environmental influence. Such judgment represents an emotionally subjective reaction to a discoverable context and is not conducive to understanding or to solving problems in the long-term.

When broken apart the word 'responsible' becomes "response" (a state of feedback) + "able" (capability). The term represents the power and ability to respond to

an event [from the environment] with focused and informed intention. And, whenever want to perform some kind of conscious act, have to assume that there are preferable ways to realize intent [given the information have available and the information can collect].

Different environments reflect themselves in different modes of being, which are reflected in different externals (e.g., doing and having), such as language. Specific types of environmental organization lead to the manifestation of specific types of behavior, which may also be known as "organizational behavior". At a social level this becomes what is known as culture (or "cultural behavior"). In many ways minds (and behaviors) are programmed by the cult[ure] are "enculturated" into.

At a basic and fundamental level, the environment affects the way people live and behave, down to the smallest detail. The environment reflects itself in those systems that reside within it. The environment does not control the choices someone makes with regard to his or her goals, moral actions, and behavioral expressions, but it limits the possibilities open to an individual and provides a context for all decisions. From a behavioral perspective, the study of morality is necessarily the study of behavior, including the contexts in which a behavior occurs and the environmental events of which it is a function (or product / result). Analysis from within this framework (i.e., frame of reference) may allow the successful identification of the variables that influence moral behavior, and ultimately, the development of coordinated social organizations and decisions to increase the occurrence of fulfilling behaviors (i.e., moral behavior).

Physical behavior exists within a physical environment. To abstract behavior from the discoverable environment is to abstract it from all useful inquiry -- inquiry is no longer open, but agenda and ideologically based (i.e., it is political - it becomes a political social system, not a humane social system). Fundamentally, exploratory and anxiety behavior is [in part] determined by the characteristics of the [eco]system, the environment.

Individuals are highly shaped by their environment. If individuals are placed in a depraved environment, where they must fight to survive, then they will fight. If they are placed in an environment of abundance where they must cooperate, then they cooperate. Some [environmental] systems just bring out the worst in people.

Fundamentally, bio-social pressures (that are products of the dynamics of a system) influence behavior. And when fulfillment pressures are recognized, then a more fully developed and intentionally directed human being becomes probable. At a base level, environmental pressures provide an opportunity for inducing adaptation.

ADAGE: *are what are through circumstances. communicate the way communicate through circumstances. live the way live through circumstances. become who become through life circumstances.*

1.1.3.7 Social insufficiency

'Social insufficiency' best refers to a society that is neither designed nor organized to serve in the fulfillment of common human needs. Such a society generates insufficiently fulfilled individuals, some of whom will behave in a highly selfishly self-interested and socially corrosive manner. Such a mentally unwell society may even go to the extreme of punishing the expression of fulfilling moral behaviours and real world reality-based value identifications. In a socially insufficient society, morality is an empty term with no empirical referent.

What matters: pleasure (vs. suffering) matters; empathy (vs. psychopathy) matters; thriving (vs. trauma) matters; fulfillment of needs matters; living within the regulated limits of nature matters. Even if can't say precisely how much each matters, what do agree on might be sufficient for at least the maintenance of a stable and socially fulfilled environment.

1.1.3.8 The naturalistic view of morality

The naturalistic view of morality is that human beings are just animals, like every other animal, and animals have no moral obligations or moralizing relationships with (or to) one another. When a lion kills a zebra, it kills the zebra, but it does not "murder" the zebra. When a cat kills a rodent, plays with the carcass for a short while and then leaves it to decay without consuming it, then it is not said to have murdered the rodent and committed necrophilia - cats behave in this manner naturally and regularly. When a great white shark or dolphin forcibly copulates with a female, it forcibly copulates with her, but it does not "rape" her - for there is no moral dimension to these actions. Dolphins are known to regularly behave in this manner and even form "gangs" to do so. Such actions are neither correct nor incorrect, prohibited nor obligatory. These organisms have a different nature, a different 'need space' as well as a different 'decision space'. The fulfillment of their conscious organisms should not be confused with that which determines the fulfillment of the human organism. Moral behavior is contextual to the organism to which the term is being applied, in context.

Certainly, there are perceivable "horrors" in the natural world. The violently aggressive social arrangement and behavior of gorillas and baboons is just one example. Often times, however, these evolutionary "horrors" stem from an environment of scarcity. Such violence exists in species when conditions of scarcity persist and there is no intelligence to behave and create otherwise.

Healthy humans are capable of [at least] empathic distress as well as the realization of axiomatic values and cognitive reasoning, which lead to critical, analytical, and systematic thinking processes. Herein, formal reason represents the emergence of human knowledge and wisdom over base instinct and belief, which allows for a much larger decision space than any other known species on Earth. When humans act in a manner that

causes suffering in [at least] other humans, then a socially destabilizing environment is established, which puts the continuity of a community of humans at risk, and with modern technology it threatens the very continuity of the species and planet. And, it takes cognitive and social intelligence to arrive at this understanding. Violence, particularly at a young age, is a "bomb in the brain" of every individual who experiences it, and will only continue a cycle of insufficiency in the human species. Such a realization requires not only empathy (and 'sensitivity processing'), but intellectual comprehension and mindful behavior. It requires the reasoned non-participation and non-support of institutions that create and maintain violent environments.

1.2 Value Is objective

There are, in essence, three schools of thought on the nature of value: the subjective, the intrinsic, and the objective. The following sections discuss value in each of these contexts [of value] and provide argumentation toward value as that which is objective.

1.2.1 Subjective value

QUESTION: Why believe when you can experience?

Subjective value is the idea that something is a value because it is chosen to be a value. Anything a valuer decides is a value is valuable. In the realm of subjective value there are no objective references, standards, or measures when it comes to decisions in a social or moral/ethical environment. "you" do whatever "you" want, and pursue whatever value "you" happen to want - whatever state of the world "you" desire. Everyone chooses their own values, and there is no possibility of objectively or commonly understanding other people's values. At a cross-social level this becomes "moral relativism" and leads to the negation of existent cause and effect relationships in the real world.

Subjective values come from the subject only and value is determined by the importance a human individual or collective group of individuals place on a "good idea" for the achievement of their desired subjective ends. Here, humans do not have common human needs (as that would be objective). To exist in a world of subjective value would mean that everyone, or every collective group, lives in their own personal universe—possibly a definition for being out-of-touch with reality.

Humans clearly value a wide range of objects, activities, goals, and pursuits. When asked what is valuable include things like, a nice day on the beach, enjoying the company of friends, nature and learning, food, transportation, relaxation, and good music. When itemized, the list of things that find valuable is nearly infinite. But, what thread (or pattern) runs through each item that makes it count as valuable? A subjective response is that they are valuable because they are subjectively desired or that they bring [relatively] subjective sensations of pleasure

and happiness. The rationalization is that humans want things and when they come to pass or are achieved, then value has been brought into the world for that person or collective. Value becomes reduced to the status of mere preferential desires and affections without relation to anything other than oneself.

When the concept of subjectivity is applied at the economic level of a society, then the concept of a 'monetary market' manifests, for it is the most efficient and effective form of societal organization for achieving subjective ends.

Subjective value is a monetary economist's view of value. Monetary economists maintain the belief that value is subjective—a valuing entity ascribes a subjective degree of importance, meaning, or worth to something. And, when economists talk about "subjective value" they are speaking very precisely about the way the price system works, which then turns into a translation issue between different monetary economic disciplines. Austrian economists, for example, state that subjective preferences and valuations give rise to "objective market prices". This is simply a translation problem and there is little actual objectivity here. To believe that objectivity can arise out of subjectivity is illogical. In other words, to state that "subjective valuations" lead to "objective market prices" is a fallacious contradiction.

When the economist says that value is subjective, this means that people have different tastes and preferences and that people value things differently. One person likes chocolate and another person prefers strawberry. Individuals have perceptual tastes for what is valuable (i.e., value perception). For the economist, the decision to sell an item is a value proposition and the decision to buy an item is a value perception and the difference between the two is the "value perception gap". So, the economist asks how much the chocolate lover is willing to pay for chocolate, possibly a lot more than the persons' whose preference is for strawberry. This is what economists mean when they talk about value being subjective. That different people value things at different levels and the way to know what something is worth is to say what it is worth via "price" to someone in "the market" - and this is how value is said to be created "objectively" [by Austrian economists]. Things are only worth something to a particular "market entity" that values it or prefers it and is willing to pay a particular price for it. Now, if that is true, this explains why real objective value (discussed at length later) is necessary. If it is true that all have different tastes and preferences [as identifiable patterns of preference], then an objective moral decision framework would appear useful for organizing the achievement of these desires when live together in a dynamic society.

For the economist, value does not afford a single uniform measure of preference, but a measure relative to each "valuer" - it is subjective and has no reference to the natural, phenomenological world. And, although values are ascribed to states of affairs, the ascription is attitudinal and not observational, subjective and not

objective. As a measure of preference, value is and must be contingent on preferences for its very existence. Hence, for subjectivists, value is a product of humans' affections. The order of explanation is from preference (or affective want) to value, not from value to preference. Monetary economists do not recognize objective human needs [along with not accounting for natural resources, which they refer to with perspicuity as "externalities"].

Subjective accounts of value (e.g., "subjective selection") fall prey to the problems of at least arbitrariness, preference manipulation, and value elitism. These are socially destabilizing concepts. In nature, subjective selection allows for to differentiate things because of how they affect , but it can become harmful and maladaptive under a wide-variety of conceptual influences. Essentially, divisionary thinking at a social level (e.g., racism, sexism, ...-ism) has a high probability of generating conflict and violence when encoded socially. can imagine a situation where a child's preferences are manipulated so that the child prefers a particular kind of hurtful lifestyle or detests certain people. are not born inherently knowing that a "Chinese", "White", "African", or "Indian" baby is any worse or better than the other. Instead, grow up reading statistics, hearing stories, accepting the beliefs of others, and witnessing hatred in order to conceive racism, for example. adapt to environment and conditions. As perceptive consciousness have the potential to discriminate, but discriminations can be artificial and false. Just the notion that an individual's preferences (as well as thoughts and actions toward self-preservation) can be contrived and manipulated clearly shows the implausibility of maintaining the claim that the sole standard of value, in fact, that which creates value, is the satisfaction of arbitrary preferential desires and subjective selection [in the market]. The entire market-based industry of 'advertising & marketing' exists to selectively manipulate preferences and desires. Advertising is designed to condition [and dominate] the mind by changing behavioral patterns.

It must be asked why anyone's mere arbitrary preferences count morally or at a social level? Since preferences can be arbitrary (and erroneous), and according to this view, value is intimately tied to arbitrary preferences, this arbitrariness will contaminate any subjective theory of value.

Subjective value does not lie in the accuracy of a conceptual organization in resolving problems and needs in the complex, real world. Even though, accurate organization, particularly at a conceptual level, is valuable for the cohesion and fulfillment of human needs in a social system. Instead, the market (and sometimes government) is said to appropriately organize this for everyone -- or some "invisible hand" somehow does it. This is clearly not the case. The invisible hand [of the market] is invisible because it was never there to begin with.

If are going to all live together in the face of many different tastes and preferences [patterned and

influenced as they are], then could, if so choose, maintain a transparent and commonly objective value set - an identifiable, relational standard (open and rationally chosen) - as is necessary for the continued functioning of every coordinated system. Therein, know what to expect from each other and how to treat each other (i.e., clarity in normative behaviours); everyone has access to the same accurate information, which can be commonly verified, and hence, objective. Might such a socially organized system provide a framework for social living amongst people with their variety of tastes and preferences?

From the 'subjective' point of view the issue is always about the subject (i.e., it is all about "me"), regardless of how limited that subject's point of view and awareness of the totality of a situation may be. From an objective point of view, the 'objective' the issue is always about the nesting of systems, regardless of any subject's individualistic perception.

Subjective value may be discussed in the negative: It is the belief that nothing can be good for an agent unless the agent has a resonant or appropriate attitude - desiring, preferring, endorsing towards this good. Such reasoning plays out in the subjective claim that a loving relationship is only good for if want it, which does not accord with the objective fact that humans have a bio-physiological need for loving connection, particularly at an early age. What is most logical is doing that which [at least] fulfills the common needs of everyone so that everyone remains healthy and stable.

1.2.1.1 Moral relativism signifies subjectivism

NOTE: To say that morality is arbitrary, is to remove the notion of human well-being from morality, and thus, make morality meaningless.

Moral relativism is the view that what is morally "right" or "wrong" depends on what someone thinks—it is subjectivist. To which, the claim that opinions vary substantially about right and wrong is usually added. This subjectivist perspective comes in two related forms:

- **Subjectivism:** What is morally right or wrong for depends on what think is morally right or wrong (i.e., right or wrong is relative to the individual and socio-cultural context [to consciousness]). The "moral facts" may alter from person to person; there is something known as "subjective truth". What is true for "you" might not be true for "me".
- **Conventionalism:** What is morally right or wrong depends on what the society (or culture) in question thinks (i.e., morality depends on the conventions of a society). The "moral facts" may alter from society to society and from culture to culture. Every society's culture is morally right because that is what they believe is right.

Herein, moral relativism is the belief (note: all "-isms"

are *systems of belief*) that moral standards are purely products of consciousness, either personal or collective. The relativism part crops up when people inevitably disagree with one another; and so, the subjectivists claim that humans can at most have "truth" relative to one person versus another, or relative to one group versus another. The salient factor missing from any form of moral subjectivism is a role for external reality, the real world in general and human nature in particular. Conversely, objectivism [at least] recognizes the factual existence of human nature and its crucial role in morality, and is therefore not subjectivist.

The idea of an "objective morality" exists in contrast to what is known as "moral relativism", which is the idea that what is moral is dependent on the subject or culture (as in, "cultural relativism"), which commits what is commonly known in logic as "the relativist fallacy", fully impeding an objective moral understanding of a culture. The relativist fallacy, also known as the subjectivist fallacy, is claiming that something is true for one person but not true for someone else.

Moral relativism fundamentally claims that moral standards are purely human inventions, created by either individual people or human societies. Therein, moral standards are not unchanging - they change throughout time and from society to society. And, moral standards are not universal - they do not necessarily apply universally to all human beings, and their application depends on human whim and preference. In consequence, moral relativism essentially negates the existence of common and objective human needs. Hence, "truth" (or more accurately, "justification") is relative to an individual, culture, or society. The underlying assertions are that all knowledge is biased, no common standard is legitimate, and all morality is subjective. Essentially, the subjectivist theory of morality (or ethics) is, strictly speaking, not a theory, but a negation of morality. And furthermore, it is a negation of reality, a negation not merely of humankind's existence, but of all existence.

Since cultures (or ways of life) are created directly to serve the people who create them, the question that might arise in an inquisitive mind is whether or not a given culture's social and economic organization functions to fulfill common human needs. That is, does the society have a viable framework within which its participants can flourish and lead fulfilling self-developing lives, and can the society so progress on a sustainable basis in a manner that satisfies the spectrum of known human needs. If a culture spawns and nurtures attitudes, beliefs, practices, values, perceptions, principles, and behavioral patterns that can be shown to hinder its development or effective (and efficient) functioning, then it can be said that such a cult[ure], as presently constituted, does not serve as an adequate moral framework for the fulfillment of the needs of its participants or "followers".

Cultural relativism and moral relativism deny the universality and objectivity of values, and hence, the existence of a common and universally fulfilling purpose [as human flourishing and fulfillment]. Instead, the

moral relativist's system of belief asserts that values are relative to particular cultures in the sense that values held by a particular society or culture are true and valid for that culture or society [and may not be valid for others]. Any culturally dominant conception of the good is as valid as any other, there being no single or common culture-neutral (or trans-cultural) standard by which the various "goods" or values can be measured and evaluated. Further, moral relativism is the negation of science as applied to social concern as it negates validity and reliability, which are the two main measures in science [by degree].

That which leads necessarily to moral relativism leads necessarily to a re-endorsement of the status quo. In other words, moral relativism is a non-adaptive system of belief.

In the moral relativist world-view every value becomes valid and probably acceptable. Conversely, for something to be objectively valid it must be valid to someone for a verifiably fulfilling reason - an identifiable relationship with natural need fulfillment must exist. Therein, objective values can be called "relational" because values are always values to someone for some purpose. Validity is [at least] a relational concept. Hence, the following question must be asked by an openly inquiring consciousness: "To what is an opinion, perspective, or value valid?" Is it valid to an authority's claim, to an individual consciousness, to a cultural context, or to a discoverable and objective reality [in context]? Clearly, many opinions, values, and perspectives about the organization of social and economic systems are invalid in their related alignment with human fulfillment and the existent reality of a situation (i.e., they have a delusional and non-existent relationship with nature).

An opinion is not a fact that anyone knows, although it often appears as something that the opinionated thinks everyone else should know. An "informed opinion" might involve a mixture of facts and presupposition, but it is not verifiably and reliably factual ... that is why it is called an opinion. Something that has truth in it shouldn't be mistaken for the truth. Holding an opinion is like stopping at a rest stop and not the destination. And herein, it is important to recognize that opinions can be manipulated and contrived. There is a common saying, "Skillful manipulation sways public opinion".

Opinions are regularly manufactured and manipulated. Commercial television programming, for example, is an applied tool for the mass transmission of a whole host of opinions. And, watching television is an extremely passive process that puts people in a passive neurological state (inducing an alpha hypnotic state) that makes them highly suggestible to others' opinions, ideas, and "suggestions" (or commands). The television [set] is hypnotic. Ideas that one may not notice consciously may still be absorbed by someone's subconscious, and they may be bypassing his or her 'critical factor' (or critical thought). When engaged, the critical factor accepts nothing without deeper inquiry. In particular, propagandistic entertainment media accustoms people

to tyranny and other reduced, conflict generating, and maladaptive associations, while suggesting their compliance (e.g., modern television programming cop dramas). Why do we think television programming is called "programming"? There are no questions in the [mainstream] media; there are only 'talking points'.

Essentially, moral relativism does not account for consequences and consequential relationships; and, it cuts itself off from the generative lifeground of natural existence. When the logic within the belief structure of moral relativism is philosophically argued out, it leads to someone having to stand back and say, "it is ok for another person to kill me, even if they have absolutely no pre-tense to do so," something that is not natural for a healthy human organism to do, and for which defense and restorative mechanisms are designed into the central functioning of the human organism. To say that all cultures are valid is to say that all acceptable behaviors in all cultures are valid. Then the admission must come that there exist a spectrum of cultures from psychopathically violent and tortuous to peaceful and compassionate. After which it must be admitted that all behavior is valid because all behavior, from the most highly fulfilling to the most unfulfilling, will be expressed along this spectrum. And, if all behavior is valid then killing or torturing another human for no reason other than say, retribution, is valid ... because all opinions at a social level are valid and all cultures are valid ... Or, maybe they aren't.

The relativist approach could be used to justify unlimited (illimitable) harm-inducing ideas and outright atrocities themselves. If a society is to ascribe any useful, functional meaning to the word "morality", then it must relate to the well-being of conscious creatures; and this is not a culturally relative notion (i.e., this isn't subjective). Moral relativism is dangerous in that it can essentially be used to justify a broad range of highly destructive and counterproductive behaviors, values, and social traditions under the guise that "it is right according to that culture". Or that it fits safely within the realm of "personal choice / opinion", and hence, cannot be scrutinized for its social consequences.

Notice how moral relativism could very easily lead to what is known as a "police state" where the mass public believes their leaders have a different moral context because of their roles [in governance] and authoritative positions, and they can therefore behave in a manner that no one else could or would because they aren't in this other person's position. Notice the lack of a common ground, an empirical referent, and the nature of existence. Notice how moral relativism paralyses the defense mechanism and allows corrosive thoughts to go unchecked and harmful behaviors to go unchallenged. It allows for the creep of concepts and behaviors that reduce freedom and impose tyranny.

There are people who are interested in pursuing the truth and not just accepting what is comforting and what is conformist. In the objective view of morality many of the old philosophical battles have been settled.

There has been a historical rift between rationalists and empiricists. For the rationalists, reason was what someone used in pursuit of the truth. Rationalists believe that trust in the existence of a relationship is just in your own mind, and your mind creates truth. A form of this belief is seen in the claim that "create your own reality". Empiricists, however, claimed that truth was found through verified observation (and consensus of observation). Eventually, a third belief came along and said, "can't trust either reason or consensus", and truth is whatever the authority says it is. Finally, an objective philosophy came along and said, "No, don't disregard empiricism and reason, embrace them both and use them together". The objective involves participation in the verification of that which may be experienced, in evidence, and in logical reasoning, and it is an example of the application of an "objective" philosophy.

From the perspective of a moral subjectivist, there isn't necessarily any truth beyond opinion or authority - subjectivity is the basis of moral relativism. Yet, truth is not contingent upon one's belief in it, nor is it altered by the words one chooses to describe it, nor even wounded if neglected. It is simply truth, and truth is a constant throughout time. It is an unchangeable pillar that can be masked or distorted, but in the end truth always remains. Discovering truth is a personal task [of discernment]. But this does not imply that it is different for each person. Only the form in which each of experiences truth changes; the content remains the same. In moral relativism, there is no discernment of truth, there is only [arbitrary] acceptance [of opinion and/or authority] cloaked as "truth".

Morality today, in early 21st century society, is generally thought of as culturally subjective. Subjectivity obscures facts about [at least] the physical world that impact well-being, and thus, blinds from thinking about moral questions in light of that which can be discovered and verified to exist, which is desperately needed. Without an underlying goal that orients toward social practices that strive to maximize well-being and flourishing there is no useful platform from which to think about such needed changes.

1.2.2 Intrinsic value

NOTE: *Some cultures are wrong about how to maximize well-being, and hence, they are wrong about their values [orienting them toward flourishing].*

The alternative to subjective is objective. Since subjective values come from the subject, then it is sometimes thought that objective values must come from the object. However, this is what "objectivists" call "intrinsic value". It means that the value is supposed to reside inside the valued object itself, for what it is, or as an end. If subjective value is dismissed, then one possibility is that the value isn't just own opinion, but it actually is an aspect of the object of value. For example, humans are [in part] water and consume water for life - they need and desire water.

Hence, water must have some value characteristic that can somehow be observed. Similarly, pandas eat bamboo, and therefore, the bamboo must have some value characteristic emanating from it, according to the intrinsic view of value. The idea of the intrinsic value [or the "inherent value"] of objects is considered "objective" because the value is out there, where anyone can see it. Note, this is similar to the Austrian monetary economists who claim that "objective market exchange value" exists because price exists. Except of course nobody can see it or explain how exactly knowledge of this value characteristic claimed as intrinsic to objects is acquired. The object or state is intrinsically valuable, and everyone just has to accept that "fact". The intrinsic theory initially escapes subjectivism, but it has the side-effect of being abstracted from any sense of the real and verifiable world, and hence, there is no evidence for accepting it as valid. It is circular reasoning without evidence or reference.

The belief that objects of any form, natural or conceptual, have intrinsic value is at best a crucial unsupported assumption, and at worst, is straightforwardly circular reasoning: ought to have moral regard for nature. Why? Because it has intrinsic value? But how do know it has intrinsic value? Because ought to have moral regard for it. A chain of values must end somewhere. Arguing for the intrinsic value of nature on the grounds that any other way of arriving at values will inadequately protect nature is illogically circular and will always be capable of being quickly argued against, and thus, will not achieve the protected caretaking of nature. If someone seeks to protect nature, then they must be open to another argument.

Intrinsic value (i.e., intrinsicism) is a rationalization. This means that an object can be valuable or not, "good" or "bad", without reference to who it is good or bad for, and without reference to the reason it is being claimed as good or bad. The idea of intrinsic value holds that value and "goodness" is inherent in certain things or actions as such, regardless of their context and consequences, regardless of any benefit or injury they may cause to the actors and subjects involved. It is a belief that divorces the concept of 'good' from beneficiaries, and the concept of 'value' from valuer and purpose - claiming that the good is good in, by, and of itself. The "good" is an intrinsic, inherent property of an object, state, or action. When value is intrinsic to some state, then certain organizations of matter are simply inherently good for no reason other than the belief that they are inherently good - which divorces the concept of a 'state' as an evidential characteristic of a referential system.

If a human believes that the good is intrinsic in certain objects, states, or actions, s/he may not hesitate to force others to perform them. If s/he believes that the human benefit or injury caused by such actions is of no significance, then s/he may regard a "sea of blood" as of no significance. If s/he believes that the "beneficiaries" of such actions are irrelevant (or interchangeable), then s/he may regard wholesale slaughter as a moral

duty in the service of a "higher" intrinsic good. It is the intrinsic theory of values that produces a Robespierre, a Machiavelli, a Lenin, a Stalin, and a Hitler. The intrinsic theory holds that the good resides in some sort of reality independent of the conscious experience of a common existence whose properties are commonly discoverable and verifiably.

It must be noted that intrinsic values, in practice, act as subjective values. This is because there is no explicit means of determining what is or isn't a value, someone basically just has to guess ... or follow what other people say ... or follow what the authority says ... or whatever feel like today ... or whatever emotions are feeling in the moment. Intrinsic value allows one to rationalize their values while claiming the mantle of objectivity.

How do gain knowledge of an intrinsic value? How do compare two intrinsic values if a choice is to be made between them? If an object or state is intrinsically valuable, but have no way of gaining knowledge of it, then how do compare (i.e., ratio) between values. And, hence, are left with subjectivity. "You" simply think it "into creation"; it has such and such amount of value, and that's good enough. "You" make trade-offs by whatever end up feeling like or "Intuiting". But, that is not "good enough" for organizing a society toward the fulfillment of human needs on a single planet with other living organisms that have their own discoverable needs and a commonly shared lifeground.

Although both subjective and intrinsic values claim to be values, they don't actually have a common measurement, because they don't have a common method of identification. If think animals have some intrinsic value in staying alive, how do compare that value to the human value of consuming their tissues for nourishment, having a fur coat for warmth, having a leather jacket for protection from the elements, etc.? Intrinsic values are essentially non-relational values. Relational values are valuable to a conscious organism for a reason other than momentary emotion. Intrinsic and subjective values cannot be compared based on a single cognitive standard, and thus, cannot exist within any real, existent living system. A standard is necessary for functional existence within a real system. Hence, with intrinsic values 're left with comparing them based on how much "you", and only "you", desire them. Since any kind of value can lead to an emotional desire, then that is the only standard left to compare them by. And, if it is not obvious already, it means that by accepting intrinsic values, "you" need to treat everything as subjectively valuable. Once someone accepts a value that has no relational purpose, s/he can't trace the value to its consequential impact(s) in the real world. Instead, s/he is forced to choose the only thing that intrinsic values have in common, and that's his or her level of emotional desire toward the value. This is why intrinsic and subjective values are so appealing to those who are driven by their emotions without the inclusion of intellectual discernment and cognitive fortitude. Take note, mixing a little poison with your food leaves the

whole thing poisonous.

A person who attempts to build a social organization grounded on intrinsic value is in no better shape than a person who attempts to build a society on fiction or on authority.

Nature, as the natural regulations of discoverable reality, does not value "you" or value anything. If "you" walk out into a savannah without any local survival skills or situational awareness, a lion is likely to eat without any care or empathy for "you" whatsoever. "You" are prey to that lion. Nature is an evolutionary process and evolves [at least] predators and prey. It also evolves conscious organisms with a larger valuing decision space - organisms capable of higher cognition, empathy, and greater nervous system sensitivity to the environment (Read: "sensitivity processing"). Regardless, in nature, a human has no more intrinsic value than any other animal.

The fact that human neurophysiology allows for the human organisms' conscious experience of empathy is not a valid argument for the claimed existence of intrinsic values. It is a fact that humans have an evolved psychology and decision space, and that there is [at least] a neuroscientific explanation for empathy; but, there are no explanations for the belief in intrinsic value. Instead, value [actually] describes an existent [environmental] relationship, and intrinsic value is the absence of any such a relationship, because it is intrinsic (Read: internal only).

1.2.3 Objective value

MAXIM: *Admire those who seek the truth and question those who claim to have found it.*

Objectivity states that values are not properties that exist arbitrarily and in complete abstraction, nor can they be identified and measured coherently without conscious and interested beings becoming involved. Values have meaning to a valuer for an identifiable reason; they do not exist in the absence of a valuer [with a decision space]. Herein, value arises from the relational needs and consequential desires of conscious organisms who maintain a 'need space' and a 'decision space' in a phenomenologically regulated, scientifically discoverable universe.

Anything that maintains a decision space has the capacity to value, and a value is the logical and referential description of a valuable, existent relationship. The very process of valuing [on the part of consciousness] maintains the structural existence of a decision space for a valuing organism for focused intent toward a meaningful purpose (e.g., the fulfillment of real world needs). And, effects of actions in the real world are sensed before being fed back and integrated into the decision space such that its next iteration (ΔT) is more greatly in alignment with a known and fulfilling direction. Herein, effective valuing represents [the] adaptation [of consciousness] to existence.

The concept 'value' is not a primary; it presupposes

an answer to the question: "of value to whom and for what?" It presupposes an entity capable of intent and of acting to achieve a desire or goal in the presence of an alternative. Where no alternative exists, no goals and direction, and no values are possible - no decision space exists. A volcano is not callous when it wipes out a village of humans or burns trees and animals alive. It is not aware on any influentially recognizable level. A volcano does not hold any spite against either geography or conscious valuers if lava is diverted to some other location. A volcano does not appear to maintain a decision space.

Objectivity does not postulate that value resides in objects or states, or is just a figment of imagination; it holds that there is an objectively identifiable relationship between the value (as that which is being valued) and the valuer (as a conscious organism or entity with a decision space and the desire to fulfill discoverable needs (needs that the organism may not even be consciously aware of). There exists an objective reason or rationale for the value of something, and value exists independently of human affective states. There are discoverable reasons and desires for action. Water, for example, is needed for a human's survival, and survival is a reason for collecting, drinking, and not polluting water. Objectivity provides a framework for understanding life through the logical fulfillment of discoverable needs as inherent to living organisms.

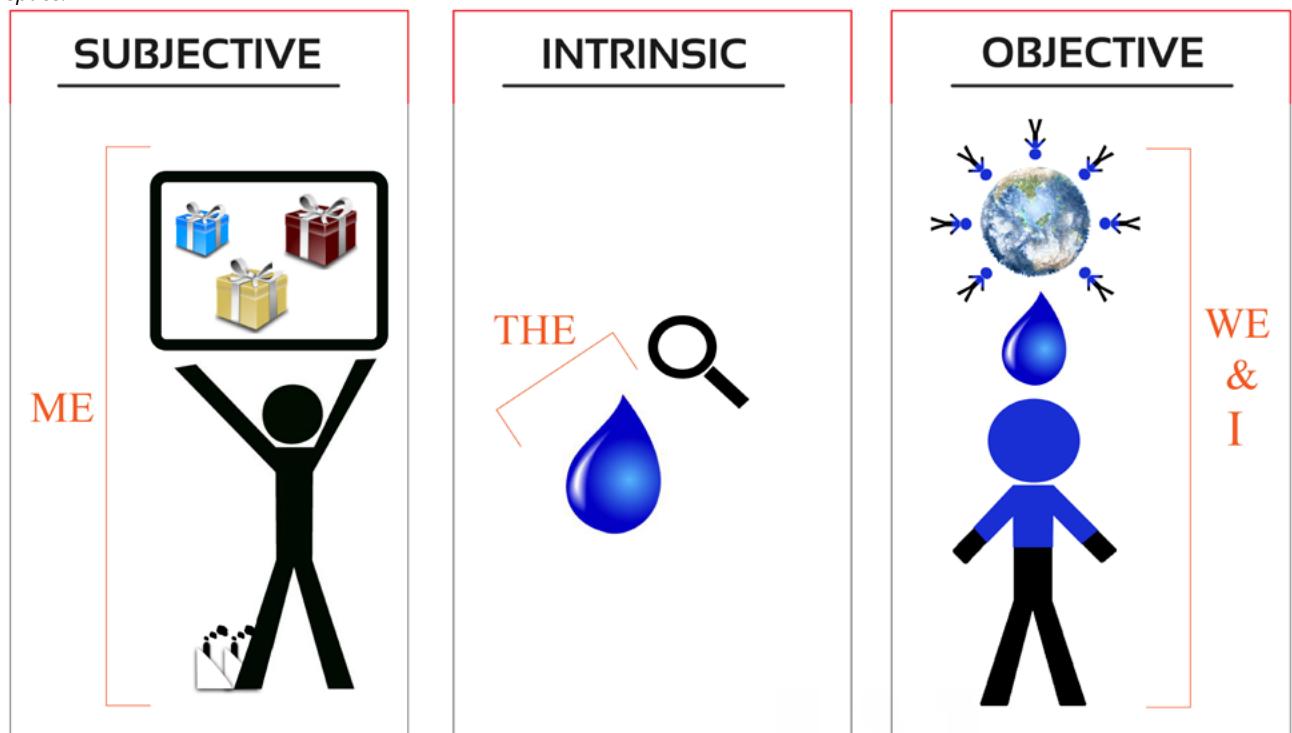
Each orientation toward that which is valued will

answer *why* questions about social decisions in a different manner: the subjective orientation may answer *why* questions by stating something along the lines of "because I want it to be that way"; the intrinsic orientation might answer *why* questions by stating something along the lines of "because that thing is ... [some quality some individual subjectively perceives it to have]"; and, the objective orientation might answer such questions by stating something along the lines of "there exists a discoverable relationship between that which is in environment and fulfillment, and therein, is a space for describing *how* might arrive at an answer to that *why* question.

When value is relational, it is also 'contextual'. Someone may like a glass of raw milk because it tastes good and has beneficial nutrients and micro-organisms, but someone else may be lactose-intolerant. Both persons have nutritional needs, which milk might or might not fulfill, and that relationship can be objectively determined (e.g., allergy testing, lactose-intolerance testing, skin observation post consumption, taste, quality/type of milk). The context under which the two persons are fulfilled by milk is different, even though both have a common need for 'nutrition'.

When operating with an objective value orientation the "good" is defined by those actions that increase the presence of need fulfillment and the self-directed adaptation of humanity. Therein, the "bad" is defined as those actions that diminish or violate fulfilling human

Figure 10. Subjective, intrinsic, and objective values. Biocompatible hydration is necessary; it is a desired and shared relationship. Subjective value is all about giving gifts to oneself at the cost (or pollution) of others; intrinsic value is all about the finding of [ideal] value in objects; and objective value is about objectively discoverable relationships in the context of need, well-being, and a decision space.



relationships, prompted by the magnification and distortion of reactive human instincts [as finding ideals in objects and giving gifts to oneself at others' expense]. Without knowing the difference between "good" and "bad" action (i.e., action in and out of alignment with need fulfillment), no individual can evolve self-actually.

Since value is relational it cannot be spoken of in an abstract, disembodied way. Value is always a value [to a living organism] for a specifically discovered or discoverable [terminal] reason. An objective discussion of values presupposes the conditions of a conscious entity with a decision space and a desired direction (or purpose), such as, the fulfillment of common needs.

Objective morality (or sometimes, "universal morality") is not contingent on culture or other subjective notions. Subjective notions are more about making pronouncements of what is right and wrong rather than describing a system for how human fulfillment and well-being might be optimally determined and verified.

No one likes to suffer, physically or emotionally. No one can claim to enjoy suffering since 'suffering' is by definition a state in which consciousness does not want to remain (i.e., a state of not wanting to be in the state that one is in). The word, and the experience itself, relate to the opposite of enjoyment. By definition, suffering is bad. Some people enjoy pain, but that is not suffering. If "you" are in pain and "you" enjoy it (or have chosen the state because "you" expect hormetic benefit), then "you" are not suffering. Since no one enjoys suffering by definition of the word, the implicit goal of a consciousness that accepts the conceptual definition of 'suffering', is to avoid it. If suffering could not be considered "bad", then the word "bad" is meaningless. If grant this, then a moral imperative surfaces: should avoid suffering, and hence, by reverse interpolation, should maximize well-being and flourishing. Since well-being is inextricably linked to facts about the physical world, such as how interact with the environment, what optimum nutrition means, social structure, and so forth, then how should behave can be logically deduced from these facts. And, this is how get ought from is, objectively.

If someone grants that the worst possible misery for everyone is bad, then a continuum could be established of rights and wrongs, that which is better and worse, and in which the peaks of a moral landscape correspond to the heights of well-being and the valleys correspond to the depths of misery. Therein, the worst possible suffering for everyone is the worst case scenario and embodies the deepest valley (or farthest of one side of the continuum), whereas the height of flourishing [in its emergent form] would be the highest peak (the farthest known point on the other side of the continuum), and where nearly an infinite number of scenarios exist in between.

The moment someone grants that the worst possible misery for everyone is the worst case scenario could imagine, and that morality has to do with well-being, then they must also admit there are [objectively] better and worse ways to proceed with respect to morality, which

is of course contingent on the "laws of nature" and the method(s) applied to uncover them. If , as a society, are to care about well-being (Read: if this is goal), then there are better and worse ways to attain it. If well-being is not goal, then the conversation is over and have no basis for speaking about a better world - look around , how many people in early 21st century society care about a better world and then act upon their care in a sensible manner. For , to have a constructive conversation about anything, on some level, have to have parallel goals (Read: a common direction).

The more humanity learns about itself, the more humanity learns that one's individual well-being is directly tied to everyone's well-being. The best way to maximize an individual's well-being is to work toward a society that facilitates everyone's well-being. If a society's purpose is to maximize well-being and facilitate all individuals in their development toward a higher potential, then there are right and wrong ways of behaving and of designing systems, particularly, socio-technical systems ... which impact the existence and persistence of fulfilling behaviors.

Objectively speaking, there are better and worse ways to structure a society to maximize human fulfillment and well-being. In other words, science [in context] can help to determine socio-economic arrangements that are better and worse for human flourishing, as well as for other beings in the habitat and the environment in general that all rely on for survival. For example, and in brief, know that a society with a greater the degree of income inequality will have a larger number of social problems. Also, it is clear that, in general, those of a higher social class become more indifferent with respect to the social well-being of others. A social system that alleviates or completely removes the basis for such disparities will be more conducive to enhancing well-being, versus a social system that is predicated on competition and consequently income inequality. These points are developed more fully elsewhere in this specification. It is also important to note here that what was said should not be taken to say that science has all the answers or that science should dictate all the minutia of individual choices, even though in principle, with enough time and information, science could [possibly] discover such truths. But, since are discussing all aspects of well-being it is safe to assume that a society that "grants" all of its inhabitants the highest degree of individual freedom [within the bounds of natural law and general sustainability protocols] would be one that maximized flourishing in this regard.

If a system causes gross social distortions, then someone cannot just take a syringe and inject morals into it (i.e., it is not possible to patchwork morality into a system not designed from a moral foundation). Herein, each individual must ask themselves, what is the structural goal of the socio-economic system I live within? For in truth, and as Stafford Beer is known to have said, "The purpose of a system is what it does." Look around, what is the result of the socio-economic

system live within, and are "you" trying to patchwork it?

Herein, there is a difference between objective morality and absolute morality. The former refers to a process of discovering what will enhance well-being, while the latter generally refers to pronouncements about what is always good and always bad and maintains no accounting for the complexity of a situation or inquiry into reality. Somewhat inappropriately, objective morality is sometimes known as "situational morality" because it seeks to account for the totality of the situation (or environment) in which a behavior occurred, which should not be taken to imply subjectivity.

Facts that relate to the well-being of conscious creatures are objective, though might not know them in the present moment. This is why a moral decision might involve the abstaining from decisioning until more information becomes available.

Could the relationship between factual reality and morality be represented as a function, or possibly, a query function?

- If factual reality "F" were represented as a function $F(M) \rightarrow M$ [from moral instruction to moral instruction]; then, for example, given the fact that burning people hurts them, $F(\text{"suffering is bad"}) \rightarrow \text{"it's wrong to generate situations and structures that cause suffering by burning"}$, then there may exist discoverable, "universal" moral attractors for given reality.
- And, as a query function if factual reality "F" represents a function $F(M) = ?$; then, $F(\text{"suffering is bad"}) = \text{"what do verifiably know about reality that will facilitate well-being and life enjoyment without burning?"}$ This would, however, still not be able to motivate an agent that starts with an empty set of moral instructions (or, no traceable axiomatic values).

The objective theory of values is the only moral perspective incompatible with rule by force, authority, or coercion. If one knows that the "good", as the fulfillment of human needs, is objective (i.e., determined by the nature of reality) and to be discovered by humankind's mind, then one knows that an attempt to achieve the "good" by force is a monstrous contradiction that negates morality at its root by destroying humankind's capacity to discover and recognize through its intelligence the "correct" and most fulfilling action (i.e., the capacity to value). Herein, intelligence is the *response-ability*, *accessibility*, and *technical-ability* to modify matter intelligently [toward common fulfillment among a larger ecology]. Therein, an intelligent community might be said to be composed of a network of objectively "-able" interactions.

Force invalidates and paralyzes humankind's learning and cognition, its freely "-able" nature, demanding that social populations act against it. A value of which one is forced to accept at the price of surrendering one's mind, is not a value to anyone; the forcibly mindless

can neither evaluate nor choose nor value - they have a null decision space for they are obliged to obey the commands of others, they are forced. An attempt to achieve fulfillment by force is an attempt to provide a human with a picture gallery at the price of cutting out his or her eyes. Values cannot exist (cannot be valued) outside the full context of an organism's life, needs, goals, and verified knowledge.

Certain states of the world are beneficial to conscious organisms because they promote the fulfillment of the organism's needs, of which a healthy form of that organism desires fulfillment (and an informed individual organism recognizes and pursues). The fulfillment of needs is worthwhile to a conscious organism if the organism wants to survive and thrive, and [at least] for a healthy human, leads a meaningfully fulfilled life. States of the world are not intrinsically valuable themselves; they are valuable because of a rational desire to fulfill needs within the context of a decision space, need space, and a common real world environment; wherein, certain states of the world verifiably fulfill needs more meaningfully, more effectively and more efficiently than other states - more objectively.

Normal healthy growth involves the development of a natural valuing (or evaluating) process, which is manifest in the proper development of the human 'conscience' and a similarly aligned neurological structure. Human development must be approached systematically as cognitive development (or intelligence), moral development (or moral conscience), and neurological development (or neurophysiology) are all interconnected in a human organism. The development of 'conscience' depends on an awareness and understanding of human needs and their motivation in the behavior of all human organisms. The development of a rational conscience is dependent upon the right environmental conditions (i.e., states of the world) for its growth and the emergent actualization of its human potential. If environmental conditions are not conducive, then conscience either will not develop or not develop fully. And, each functional human individual is born with the biophysiological potential for development of a rational moral conscience.

The development of a rational conscience depends on favorable social conditions for its growth within an individual. Unfavorable environments [as environments that do not meet developmental human needs] are unlikely to manifest individuals with a mature conscience; instead, dogmatic belief and rigid thinking will pervade, and neurosis and psychosis will maintain a corrosive, unstable environment - an environment where values are decoupled from the objective existence of human needs in a real world with serious real world consequences.

It is unwise to accept another's claim to existence; it is wise to test and verify existence for oneself, and herein, a community will facilitate access to said verification (instead of thwarting access in order to maintain hierarchy). If truth is what matters, then humanity should be naturally skeptical of unsubstantiated claims.

No one needs to believe anyone, for among community individuals do not need anyone to validate their experiences for them.

Rational conscience is necessary for the actualization of an objective value system, and it is a function of systematic, scientific, and critical reasoning, which depends upon this "holistic" perception. Herein, 'sanity' is a function of a holistic perception and of accurate evaluations, an objective comprehension of that which is. Sanity maintains [a] recognition of the connections between existent identities and it eliminates distortions and dichotomous perceptions of the nature of reality and of living organisms in reality. The absence of rational conscience is irrational conscience (i.e., 'neurosis'). A "developed conscience" has achieved a holistic perception of reality - a function of sanity - necessary for correct evaluation of the real world environment and for the cooperative structuring of fulfilling environments. It eliminates distorted perceptions of reality and incorrect dichotomous perceptions of value. Metaphorically speaking, conscience is the "guardian of integrity", and integrity of action with reality does not exist without an objectively identified relationship to a common reality.

There are some forms of insanity which driven to an ultimate expression can become the new models of sanity. Generations habituate to the new normal. The next generation accepts a new baseline [even farther off a fulfillment-oriented direction]. Established interests build-in associations from early childhood and maintain those associations through systematic social engineering through life.

A rational conscience, which allows for the accurate perception of the objective social reality, is a function of correct perception of the self. A neurotic or psychotic mind has linked itself to an environment not really there: its responses are to fantasies and illusions; to dangers that are the projections of its own fears; to slights that are the projections of its own self-doubting. It is "psychotic". Inaccurate perceptions will maintain an individual in a state of being "unsane" and irrational, a state of persistently chosen insufficient fulfillment. Unsane people are stuck in a state of internalized frustration. The gap between their frustration and their fulfillment may be reduced [in part] through a re-engaging of their will and their curiosity to inquiry.

When a person says, "ought to do X," this invites the party being addressed to ask, "Why?" The only sensible answer to this "why?" question is, ultimately, an end-reason for intentional action that exists in the commonly sensed and verifiably experienced real world. Answers that invoke an appeal to authority and other fallacies, including specious arguments (i.e., sophistry) and neurotic / psychotic emotional exaggerations, are not valid responses to why questions for they do not accurately address an existent relationship in reality. When two rational consciences meet in discussion a 'philosophical argument' occurs. A 'philosophical argument' involves two or more parities objectively discussing a subject matter (Read: information) to remove all contradiction

and approach ever greater approximations of a single, cohesive, real world [common] truth for all participants. Fundamentally, the less chaos live in personally, the more are able to notice that other people are there.

In truth, the desire to fulfill human need and support (or caretake and steward) in the needs of other conscious creatures are the only end-reasons for intentional actions that actually exist, for they represent the refinement, growth, and development of consciousness. They are the only end-reasons for intentional action that actually play a role in explaining and predicting the behavior of intentional agents. Divine commands, intrinsic values, subjective whims, categorical imperatives, social contracts, committees sitting behind a veil of ignorance, and the like, do not exist as the real object of any moral relationship to consciousness. Consequently, a useful answer to the question, "Why ought I to do X" will relate "doing X" to some desire or set of desires that fulfills a discoverable and commonly verifiable need.

INSIGHT: *Dogma limits thinking because of the "gravity" of belief.*

1.3 Value is a component of a valuing organism's neurophysiological makeup

QUESTIONS: *How do stop recycling concepts that limit a life fulfilling orientation? How do become better human beings? How do become the best that can be? What actions objectively and verifiably lead toward human fulfillment, and what actions lead away from human fulfillment?*

At one level, value is the expression of a desired state of reality, and at another level, it is an expression of an actual state of reality, that of the neurophysiological makeup of a valuing organism, the brain. If are going to discuss human well-being, are of necessity also discussing the human brain; because know that experience of the world and of ourselves within it is realized [at least in part] in the brain. Whatever can be known about the desire to fulfill the needs of organism must at some point translate into facts about brains and their interaction with the material world at large. Fundamentally, if humanity wants to understand itself, then it is not enough just to know about their cognitive adaptations to physical environments, it is also necessary to understand changes that occur in the brain.

Literally speaking, value is [at least] information that interfaces with (or within) brains. (Shomrat et al., 2013) When value is defined as a desired state of reality, the packet of information that is that desire becomes a piece of information inside the brain [structure] of the valuing entity. Even if abstract the word "desire" to mean what collectively understand will fulfill an individual or society, it all still logically reduces to observable facts comprised of the information stored inside [or passing through]

homo sapiens' brains.

Desire itself is a functional neurological state. It [at least], and more is still to be known, describes how the brain is structured so as to relate input to intentional action given other brain states. With this in mind, it is important to recognize that neuroscience is a young scientific discipline. And, it is important to remember herein that not only does the brain entrain to its environment, but it is [in part] fulfilled by its environment (e.g., the nutrient content of consumed food feeds or damages the brain).

Though neuroscience is a young discipline, it does seem to support the thesis that intentional action is motivated by brain processes that at least roughly correspond to the properties are familiar with under the concepts of mental models and human need. Of particular importance is the progress that has been made in understanding how praise, condemnation, reward, and punishment work to strengthen some desires and weaken others, and may have the reverse of an intended effect.

situation in the world can be understood at many levels, from the level of the genome on up to the level of economic systems and social arrangements. There are many levels to the human system. And, if are talking about human need, and the needs of all other organisms on this finite planet, then are by necessity [at least] talking about brains and the brains of these other organisms; because know that experience of the world and ourselves within it is realized to some degree in the brain, which renders embodied experience. Human values are at some point reducible to a concern about conscious experience and possible changes in the states of the human brain, which in turn affect behavior. Who doesn't desire a healthy neurophysiological state to support them in identifying and meeting their needs and improving their performance potential, and maintaining their happiness and sanity as they live an embodied life.

When admit that humankind is on a path toward understanding minds at the level of the brain in some important detail, then it must be admitted that humanity is going to understand many more of the life fulfilling qualities of ourselves in much greater detail. are going to understand "positive" social emotions [and pro-social motivations] like empathy and compassion, and are going to understand why some forms of communication actually inflict suffering in others and lower their potential to sustain a state of fulfillment. will also understand how social and economic organizations affect the makeup of brains, and insofar as begin to shine light on that are inevitably going to converge on that neurophysiological fact space. are going to enter the fact-space of human fulfillment and well-being at the level of neurophysiology.

Any scientific account of human values is one that places them squarely within the web of influences that link states of the world and states of the human brain to human well-being and fulfillment. Imagine that had a machine that could produce any possible brain

state (this would be the ultimate virtual reality device, more or less like in the film "The Matrix", or what some individuals experience as 'lucid dreaming'). This machine would allow every human being to sample all available mental states. Ignoring the philosophical and scientific wrinkles here, it is likely that given an infinite amount of time and perfect recall would agree about a range of brain states that qualify as good (as in, "Wow, that was so great, I can't imagine anything better") and bad (as in, "I'd rather die than experience that again"). There might be controversy over specific states -- after all, some people do like some unusual things and others have traumatic childhoods that warp their perception of themselves and of reality -- but being healthy members of the same species with neurological similarities [relative to any other known organism], are likely to converge to remarkable degree. One individual might find that brain state X242358B is among their favourite, and someone else might prefer X979793L, but the fear that will radically diverge in judgments about what constitutes a state of well-being seems far-fetched. The possibility that one individual's hell [as a healthy human being] will be someone else's heaven, and vice versa, seems highly unlikely. And yet, whatever divergence did occur must also depend on facts about the brains in question.

INSIGHT: *Entrainment means coming into similar alignment.*

2 What is a value system?

A value system represents an orientational guidance system with the potential for effective and efficient decisioning to free humanity for its higher pursuits. A useful value system identifies systematically desirable conditions likely to generate persistent states of fulfillment and flourishing among the human population. As an information set, a value system represents the integrated understandings behind why some states of existence are likely to create environments where needs go unfulfilled and other states of existence are likely to generate a higher potential of fulfillment.

Values interrelate systematically in what is known as a *value system* (or *value set*). A collection of values into a value system represents a value priority system that all humans have - whether they acknowledge it or not. In someone's decision process, their value system commonly "blankets" all decisions -- as if all decisions are arrived at after passing through a conditional filter composed of their values. The Community, in part, uses values to coordinate and prioritize decisive action, and the Community's value system acts to orient socio-economic decisions in a rationally desired direction.

Besides providing cohesion and unity, value systems give a sense of consistent rationality and "rightness" to a social organization. In a community, a set of common values provide a common foundation for discussion, understanding, and progress. They provide reasoned and rational legitimacy for particular practices and usages, including the existence or non-existence of power structures within a given society.

An rational value system is an organized set of compatible, consistent, and congruent values held by an individual or group of individuals. This key understanding is important in creating a community that fulfills and supports the individual in his/her progression toward a higher potential -- some value systems involve incompatible and incongruent values.

Some values are mutually consistent whereas others tend to act to oppose one another. In other words, some values are compatible, and others are not, as they work (or exist) in a state of opposition to one another. Some values are psychologically compatible with each other, such that it is relatively easy to think about them at the same time, and to pursue commensurate behaviours simultaneously. Other clusters of values tend to be in psychological opposition to one another, such that most people find it relatively difficult to think about them at the same time, and difficult to simultaneously pursue behaviours that are commensurate with these "contradictory" values. Incompatible values are said to be psychologically contradictory. Understanding this is crucial to grasping the importance of values in how they influence behaviour and how the valuing of incompatible values has the potential of generating chronic states of cognitive contradiction in individuals and irrationality in their behavior.

Evidence from value studies strongly suggests that

the human value system is organized in such a manner that some values tend to be relatively consistent with each other, and thus, easy to pursue simultaneously; whereas other values tend to be in relative conflict, and thus, difficult to pursue at the same time. The extent of compatibility or conflict between values can be statistically represented in a 'circumplex model'. In scientific literature, many researchers aggregate values into circular maps (or circumplexes) that spatially identify the relationship between different values. Values that are found to be compatible are plotted adjacent to one another on the circumference of the circumplex (or within the circumplex), while antagonistic values are plotted opposite to one another. Values are placed near each other in the circumplex when the pursuit of one of the values facilitates success at the another value. (Grouzet, 2005; Schwartz, 1992; Kasser, 2012) For example, most people in early 21st century society experience the values of self-image and status as compatible, as buying an in-fashion handbag or automobile not only enhances one's [egoic] self-image, but also conveys greater status in a competitive materialist environment. Values are placed on opposite sides of the circumplex when the pursuit of one value interferes with another. For example, most people find it relatively difficult to pursue cooperative efforts while focused on hedonistic pleasures (i.e., it is difficult to work with others when one only recognizes one's own pleasure-oriented wants).

Studies have found that the activating or 'priming' (i.e., psychological value priming) of a specific value causes changes throughout the whole system of a person's values; in particular, it has the effect of activating compatible values simultaneously and suppressing opposing values. Hence, the integrated nature of a value system (as an information system) entails that some behaviours will tend to occur together, and others will tend not to occur at the same time or in close temporal proximity.

A variety of studies offer support for the idea that the human value system is organized in this fashion by showing that thinking about one set of values has predictable ripple effects on others. Maio (et al., 2009) found that the "activation" of particular values will tend to promote behaviour associated with these and other compatible values, and suppress behaviour associated with opposing values. Thinking about one value both bleeds over into compatible values and squelches conflicting values. For example, if a person thinks about the importance of financial success, then self-image and popularity will usually rise in priority (as such pursuits are compatible with the desire for financial success), whereas volunteering will decline in importance (as that aim generally conflicts with the desire to make more money). Hence, 'priming' particular values leads to 'bleed over', such that other compatible values (and associated behaviours) are also promoted, whereas opposing values (those on the opposite side of the circumplex) are suppressed. This effect leads to associations between behaviours that at first observation may appear to be

unrelated.

In an authoritarian social system those individuals with values that conflict with the authority's values are unlikely to have their values fulfilled, and are likely to be punished for the expression of their conflicting values. It is also true to state that some values contradict the actual fulfillment of human needs, and their expression regeneratively 'primes' an unstable personal and social environment.

QUESTION: *What values does society accentuate, and consequently, squelch?*

2.1 Value system congruence and flow

When values are recognized and in alignment with one another humans are more capable of entering the state of experience known as 'flow'. Many people have conflicting values, leading to contradictory thought and behavioral patterns, which cause them difficulty in entering a state of flow in their life. The very nature of 'commonality' involves the sharing of values oriented toward common needs.

Congruent values do not negate each other. Hence, they do not negate the fullest expression of an organism's higher potential. Every limiting and "negative" self-concept, contradictory orientation, and falsehood hampers and blocks creative and cooperative states of flow.

2.2 Value exchange and value encoding

In a community, similar values are what is first offered in exchange for connecting in a harmonious interrelationship with another individual. After which, there may be no need for material object exchange if the community's socio-economic access system is functioning sufficiently (i.e., sufficiently fulfilling individual's material needs). Herein, the idea of a 'community' exists in conceptual contrast to that of a 'market' (or trade-based) socio-economic system, where object exchange (e.g., currency, money, goods, service, resources, or "gifts") is mandatory for participation. Object exchange is not mandatory for participation in community. Participation in a community arises through similarity in individuals' value orientation. In a community, exchange comes in the form of social values, and not in the form of economic objects. If real or abstract objects are to be exchanged for one another, and these objects hold significant 'need-fulfillment value', particularly if they hold the value of life and death [as is the case with money, food, natural resources, and scientific knowledge], then the concept of 'ownership' must exist. And hence, the idea of 'property' is rendered with a whole host of complicated consequences. Alternatively, when exchange becomes about values, then the opportunity opens for a "network of value exchangers" (i.e., a community of individuals) to access [as opposed to exchange] common resources for

everyone's fulfillment. This subject is covered in depth in the Decision System specification.

Cooperation is an inherent property of a community, and it could be said that, "communities are systems of cooperation", or that, "a community is a system of cooperation". In a community individuals cooperate through the recognition (and sharing) of commensurate (or resonant) values. Resonant values are an indication of a similar orientational direction. Wherein, all cooperation toward a similar direction becomes mutually fulfilling. Hence, a community may be figuratively referred to as a "win-win" situation; as opposed to a market-based (or competitive-based) organization that establishes a "win-lose" environment.

Some organizational structures of society are constituted to generate behavioral patterns in individuals that are inimical to human fulfillment. People who are a part of these organizations adopt the perceptions, behaviors, and values that are a natural outgrowth of that form of organization. And, within systems of competition and ownership their exist systemic forces of the status quo that limit the formation of other states of organization, particularly that of a cooperative value [system] exchange, which may be more fulfilling.

The forces and mechanisms inherent in the social structure of a society will encode themselves (or be encoded) into the economic structure of the society, and both systems reciprocally effect the behaviors of individuals in the society, and are re-encoded therein. In other words, a society will encode its value system into its economic system, and the economic system re-encodes the results of its behavioral characteristics on people back into the social system. Metaphorically speaking, human beings create social systems and put "DNA" (or mental concepts, thought forms) into those systems. That DNA goes on to effect the other systems that form within the society (e.g., the economic system, future versions of the social system, telecommunications systems, etc.), as well as affecting the individuals in the society themselves. Hence, it would be wise to think of what kind of social and economic "DNA" would be most fulfilling to all of humankind, and then put that DNA in the social system; different DNA can have very different effects.

It is essential to recognize that there exist some social structures that will inherently breed inequality and other forms of social corrosion. There are some social organizations that are not favourably designed to fulfill human beings and bring out the best of human behavior and of pro-social motivation. And, other social organizations are designed in alignment with nature and for the facilitation of healthy humane living conditions.

2.3 Information value tracing

QUESTION: *How do know until experience?*

If a value system is to maintain a community's forward alignment with an intended direction, then each value

must be traceable to the phenomenological world, and each encoding of the value into the conceptual and material systems of which the community is composed must be tracked. If an objective value system is said to exist, then there must exist an information trace from the selection of a value as a rational and need-fulfilling understanding on through to the value's application in the decision process, which leads to the modification of a community's system(s) and the encoding of the value into the conceptual-material structure of the community. In other words, a logical and verifiable trace must exist between the selection of a value [in its ability to generate a state of need fulfillment] and its application to the design (or re-design) of the community's systems.

Herein, the injection of "disconnects", such as assumptions, beliefs, dogmas, false premises, and opinions, into a value system are likely to break this information trace, and by consequence the value system will no longer be capable of accurately orienting a community (or an individual) toward reliable and verifiable states of fulfillment. When said information trace is broken, then individuals in a society may become unable to, idiomatically speaking, "see the forest for (or through) the trees". When values become untraceable, then the root (or systemic) source of a problem in a society is likely to be obscured, for the information that would otherwise reveal the source of the problem remains obscured. Without the accurate and informed tracing of values individuals are likely to become unable to rationally orient themselves and their society toward the creation of systematically fulfilling environments - problems are unlikely be solved systematically and the real problems may likely not even be seen as problems. Therein, even though individuals can see the trees, their minds are not capable of grasping the existence of the trees as part of a forest - there is no information trace relating the trees to a forest of trees.

2.4 Belief [systems]

NOTE: *In general, people who have beliefs think of their beliefs as truth; they don't actually see them as beliefs.*

A 'belief' is faith or acceptance in the accuracy or validity of something without sufficient evidence. A belief may or may not accord with the facts and discovered regularities of natural, existent reality. A belief is not based on evidence and may be based on myth, tradition, custom, and opinion. In other words, no complete factual 'reference trace' exists for what a belief is describing; hence, a 'belief'. The term is a "float", disconnected in some manner from the ability to accurately coordinate and orient decisions in alignment with a factually fulfilling, need-based direction. Facts close the gap between what someone believes and what someone knows.

Believing something is real is not the same as experiencing something as real. There is a wise aphorism that may be applied here: Don't think that you are on the

right track just because, it is a well-beaten path.

Beliefs are, by degree, out of alignment with verified reality. Therein, their misalignment from reality has the potential to generate an unpleasant emotional state (known as 'cognitive dissonance') in those who attach themselves to (or persist in maintaining) a belief in the face of new and conflicting information. In other words, by attaching oneself to a belief when presented with new information consciousness experiences [cognitive] dissonance. 'Cognitive dissonance' occurs when two opposing viewpoints are accepted (or acceptable at some level) at the same time. Instead of inquiring more deeply and integrating more accurately in the presence of new and more accurate information, conscious may choose not to process through the dissonance it experiences, and instead, it may (or is likely to) attach itself to the belief. All beliefs hold the potential for entrapping consciousness in a state of artificial limitation (as attachment) - they are beliefs; they are not inquiries. If someone buys into (or is tied into) a belief, then they have likely limited their potential. Many people are so entrained, so convinced, so totally oriented in what they believe that they refuse to see the information coming in that contradicts their beliefs, which prevents their growth and adaptation. Consciousness grows in this intense environment through verified experience, not through belief. And yet, the experience of belief provides an opportunity for growth. Beliefs need challenging if re-orientation toward a greater state of potential is intended.

More importantly, beliefs are claims about reality and about how human beings should live within it, and consequently they lead to behaviors, orientations, and organizations (e.g., laws and institutions) that affect the lives of all people, whether they share these beliefs or not. Beliefs, like values, become encoded into social and economic structures [when they are not filtered out]. Therein, a diversity of beliefs in a society will inherently generate conflict because such diversity inevitably leads to different approaches to life, and hence, different orientations of social and economic arrangement away from human fulfillment [with different behavioral/cultural characteristics as a consequence].

When a socio-economic decision is made based upon a belief (or belief system), then the decision may be said to have been made based upon an 'ideology' (i.e., the recycling of the internal logic of a mental construct, incapacitating the ability of consciousness to shift its orientation to one of greater fulfillment through open and active inquiry). A belief [system] is a divisional ideological trapping - ideologies divide the world into "You" and "Them". When someone steps into an ideology, the ideology erases the real, empirical world around them; and often, *they won't even notice it*. If "you" believe [in] something, then everything see will look like your belief due to the psychological tendency of what is known as 'confirmation bias' - the tendency of people to favor information [regardless of accuracy] that confirms their beliefs. Fundamentally, in every belief there is a presumption.

Beliefs form into systems known as 'belief systems'. In the English language, terms representing belief systems are usually labelled with the suffix "-ism". For example, racism is one of these -isms. Racism is a system of belief that race is a primary determinant of factors that cause the expression of particular behaviors and traits. Several other common -isms are: capitalism, socialism, communism, materialism, sexism, classism, objectivism, and etc. (Chrisomalis, 2020) An -ism is an idea set (or "ideology") thought up by someone else and not based in objective reality (i.e., without sufficient evidence and reference to the real, empirical world). Take note that any -ism is a potential way of exercising tyrannical control over the "-ists" (Read: the people who subscribe to the -ism). It is unwise to be an -ism's -ist. Also, be aware (and beware) that "-isms" follow agendas. Wherein, cultures subscribe to -isms.

As an acronym, the letters i.s.m. (ism) could stand for Individual Social Management. Individual social management systems are formed with greed and fear as their seed, and the fruit born into this world reflects humankind in its base animalistic state. It is the opposite of the use of reason and higher cognitive processes. To a degree, isms manage individuals at a social level by causing them to [emotionally] react to events and new information, rather than facilitate the space for integration and intelligent response.

"Your beliefs limit your experience to that which fits within your worldview. Beliefs eliminate possibilities at worst and they warp interpretations at best."

- Thomas Campbell (2020)

Holding a belief causes a loss of referential meaning, which makes it easier for individuals to feel that their private interpretations conform to a general social consensus. Private beliefs assimilate social beliefs and social beliefs assimilate private ones and all the while a subtle transformation takes place - a society-level decoupling from reality. There no longer exists a reference point for creating coherency and reducing the randomness of information, fulfillment de-structuring sets in at an individual and social level.

Beliefs are unconfirmed declarative statements about truth. Yet, to evolve, one must have their own experiences and verify existence for themselves. Every belief is either flawed or false, often picked and chosen for by others. Beliefs are unexamined weights and opinions that side-track consciousness away from greater knowledge, understanding, and wisdom, and ultimately, a higher potential of fulfillment. Beliefs are often given as "gifts" to be treasured and never opened or inspected. Instead of interpreting someone else's experiences, a self-directed individual might focus on having one's own experience and verifying existence for oneself - one might unwrap beliefs and check their veracity. There is no limit to understanding when consciousness inquires with an open and actively engaged mind.

People learn through their own experiences, not

through the adoption or acceptance of beliefs. Life is all about gaining the experiences need to become more evolved and wisely fulfilled human beings.

Beliefs inhibit the potential expression of consciousness. By believing put ourselves in a pre-structured box, are filtering source of awareness. And, one box is not better than another box. As a community have to let go of all boxes. *Let go of "your" boxes of belief.* Community is about having your own experiences and proving to yourself what is true and real, and the Community's design may facilitate or hinder that process.

Beliefs are also sometimes known as "memes" (or mental viruses). Some viruses are benign, and others, highly malignant. Principally, all values are not equal, and all beliefs are not equal [in the harm they cause or the disconnection they generate]. Ideas must be left in the form of working hypotheses open to critical inquiry and the approximation of truth found by the process of exploration and experimentation. Beliefs edit incoming perceptual awareness; they cut information out of [the integration of] awareness [through consciousness]. Sometimes what they cut is benign, other times it can cause great waves of dissonance and tragedy. Those who hold beliefs might be said to be "under a simulation" -- they are simulating the re-creation of a belief (as a limitation on potential), within a matrix of all potential [source]. In mixed words, beliefs are programs that initialize and run [by consciousness] to limit experience [of the identification of that which exists] for the apparent purpose of learning.

Does everyone have a "right" to believe, and therefore, act upon whatever they choose? Is everyone's personal interpretation of a situation or of information equal? Are all to respect everything others want to? If someone who maintains the belief that "you" should die for their cause were to put a gun to your head, is that acceptable to? Are a bigot for not allowing them to express their freedom of belief? Obviously, values and beliefs are not equal. Some values work [in aligning society with a state of fulfillment] and other values do not. Some beliefs cause more harm and others less. More specifically, some values and beliefs represent a closer approximation to reality and human flourishing, and others do not. And, the farther a value/belief system is from reality the more cluttered with belief it becomes, and the more destructive it often becomes, not just to the individual, but to all individuals in all societies on this planet. Therein rests a distinct social imperative that is often ignored and feared. The taboo associated with challenging what others think and believe under the still convenient notion that all values, beliefs, and interpretations are equal is simply not tenable. All beliefs are beliefs, but not all beliefs are equal in their probability of dis-aligning a community from growth toward a higher potential. There is nowhere to hide from belief systems that pervade the "collective consciousness" and decouple it from reality. The question is, "How de-coupled, how many beliefs, does one filter the source of one's awareness with?"

A belief system is a box in which consciousness is exploring, and fails to realize that there is an environment outside of the box; and yet, consciousness goes around the box thinking its "open minded". have to be on guard and examine ourselves all the time to make sure aren't just assuming another box. have to be able to ask the tough questions of ourselves, and ask them all the time. Hence, it must be considered that even the thinking processes described herein are flawed and are belief systems. don't have to throw out anchors [of belief] as explore. Ask yourself the tough questions. Don't accept anything anyone says, have your own experiences so can expand your own potential, and learning on this journey leads to a higher potential for ourselves and all others. People have a tendency to stay with what they are comfortable with, and this should be strongly avoided by designing a society that can adapt and re-orient as new experiential data becomes available to them.

There are conditioned beliefs that are operative at the level of "your" behavior and emotion, and about which "you" may have no recollection -- hypnosis is real. Beliefs inhibit the ability to make accurate evaluations based on what was known and what is now known. They are essentially, attachments (or "mental cages"). Hence, they inhibit all forms of social orientation in a whole ecologically navigable system, and their encoding into an economic system has a probably chaotic effect. In any given society a configuration of factors conspire to make people participate in a perpetually unfulfilling [belief] system. Some thought structures inhibit (vs. facilitate) development toward a higher potential at both the individual and social levels. Humans are going to explore and manipulate their environment, and community might exist to facilitate the integration of newly verified experience. Alternatively, tyrannical systems inhibit self-verification and seek to limit or otherwise prevent integration.

An informed value system might replace a belief system in how decisions are optimally arrived at. Belief systems limit someone's ability to self-actualize and to understand others views. Belief systems do not provide actual[ized] nourishment or orientational capacity (i.e., they are non-functional toward navigability in a world space). Instead, they reduce function and limit fulfillment by limiting the conversion and integration of neutral [source] information into wisdom. Beliefs disconnect consciousness from its innate ability to navigate toward higher states of fulfillment in a common material reality. Therein, beliefs infect personalities, and once integrated they often magnify and distort reactive instincts, ultimately preventing self-reorientation. They reduce understandings and spawn illusions to which attach ourselves and create layer upon layer of fictitious webbing [and "rationalization"] between common selves. And, once integrated within the individual, though particularly into a socio-economic structure, they become difficult to purge. All belief systems are seriously flawed to the point of being false. are undermined by beliefs (i.e., potential is limited by beliefs).

At a social level belief systems are always shifting, always changing; they are temporary boxes around the awareness of consciousness. How can "you" be an effective explorer when "you" are looking through "rose coloured" glasses of belief, wherein perception is slanted [out of synchronization with highest potential of experience]. have to examine beliefs, which is not necessarily easy for identify with beliefs—become that which identify with. You must face facts, and that takes courage.

It is only when people feel free to think for themselves [using at least reason as a guide] that they are best capable of developing values that succeed in fulfilling human needs and serving common human interests. can choose to bury minds in beliefs or to explore and discover the truth for ourselves. Beliefs reduce a personality to conditioning and to instinctual reaction as opposed to facilitating self-directed evolution [of one's total self].

"Belief is the wound that knowledge heals."

- *The Telling*, Ursula K. Le Guin

Beliefs often hinder personal evolution by misrepresenting the reality of true nature, capabilities, and aptitude (or fullest human potential). Most people are creatures of habit, not of exploration (i.e., they have lost the playful and exploratory mindset observed in non-drugged and healthy children), and remain attached to their physical self-concept and limits regardless of evidence before their very eyes. Few people stop to consider that their library of cherished beliefs are not their own. They live and die within the narrow confines of the established thoughts and conclusions created by the minds and patterning of others. Most take their lifetime of programming for granted as a normal part of their socialization process. Even the clothes they wear, the style of their hair, and the types of food they eat are created by others.

Fear and belief are both a form of bias. Someone who enters a situation or life experience with either will not end up with truth, but a biased perception of the experience. In order to experience the truth of reality, all of those things that would metaphorically "color your glasses" must be dismantled and stripped away - they lead to false interpretations of existence. It is therefore important to meet reality with no preconceived notions and no expectations (i.e., mindful openness and active observation) in order to remain in synchronization with reality. Many of the fears and beliefs that people have, they don't even realize as fears and beliefs, which makes them particularly tricky to overcome and to purge - they are just accepted as a part of the way things are. In many ways culture is the propagation of beliefs and fears about reality, about situations and behaviors that "should be feared because they are punishable".

Culture is often conditioned without any question or inquiry, without the accepting party ever knowing that they have accepted a [limited] conditioning program.

What worries "you", causes "you" anxiety, and causes "you" to wish for another experience? A "superficial" intellect covers (or masks) the fears for the self-protection of the belief-established identity (the "false[ly aligned] personality"); and although it appears to be providing a service toward continued functioning in an aberrant culture, it actually gets in the way and hinders the self-development of the individuated consciousness [in continuously integrating reality as it is and not as s/he would like it to be]. Most people in early 21st century society make most of their decisions and most of their choices based on their fears and beliefs, and often, that is what a culture expects - if don't behave in an approved manner, or maintain beliefs that are accepted in your culture, then there is something wrong with "you", and "you" might be outcast and shamed as a non-conformer [to the social beliefs].

"Belief means not wanting to know what is true."
- Friedrich Nietzsche

Every unconfirmed idea, opinionated limitation, and belief is a potential mind trap hindering personal and social development. From this moment take notice of the many external forces that are attempting to influence "your" state of consciousness. Any thought or idea that contains a form of limitation, fear-based manipulation, or imperative without evidence is a mind trap. Generation after generation of physical and psychological indoctrination has had an enormous impact; for many minds are filled and interwoven with thousands of assumptions that create limits, institutions, and the invisible (and sometimes very physical) walls experience in life. You carry beliefs with, and figuratively cloister and quite literally box ourselves in with them. The only way to "battle" beliefs is to make them obsolete in the realm of objective reality; whereby they can no longer be used as weapons against individuals. Only those who inquire are ready to learn their way forward, and only those with an actively open mind resonate with the potential of higher fulfillment.

One of the greatest fears that people in early 21st century society have is that of openness - not being absolute with everything. When people are in a situation where there is a state of flux, either in what is happening to them and around them, or in their perceptual awareness (e.g., new information or entheogenic loss of ego), they tend to get uneasy. And therein, they try to solidify the flux into an "absolute" in order to feel safe and comfortable. But, the solidification prevents connection with the emergent flow of information -- dropping out of synchronization with [the] unifying [iteration of] reality. In general, this de-synchronization [program] is a "schooled" idea. It is a viral program whose mechanism of replication is structural punishment and reward (i.e., authority; e.g., schooling). To overcome it one must step into more accurate alignment with their own power and have their own experiences initiated from their own conscious inquiry. Do not accept the beliefs

(and "baggage") of others. Every limiting and negative self-concept, every belief and falsehood, hampers and blocks out creative flow. And therein, cooperative flow is reduced or nullified.

"Rather than being your thoughts and emotions, be the awareness behind them[, which prevents absolute fixation]."
- Eckhart Tolle

A belief is a claim to knowledge that has not yet been openly examined by at least the individual or group making the claim. In a sense, beliefs are just misleading place-holders for wisdom and knowledge, which can quite easily become influential programs that run continuously in the background. In truth, can verify reality for ourselves. One could go so far as to say that beliefs have their own gravity that sucks self-development into a void of stagnation.

When someone has trust in a belief, they essentially have "hope and faith" that the claim they are making is true. Faith [or intrinsicism] is a belief in something without verifiable evidence; including a claimed way to knowledge without empirical reasoning, or a belief in something without reason and verifiable evidence. Faith is experienced as a need to belong with a counter-impulse based on cognitive dissonance. Faith, by definition, negates logic and negates the examination of evidence prior to the arrival at a conclusion. And, since faith is belief without evidence it is contradictory to the entire process of understanding itself. People have faith when they don't have knowledge, and people with faith are likely to lack understanding. Faith is a state of persistent disconnection. It is almost an admittance of disconnection, a sacrifice of reason. And yet, faith grounded in forgiveness is meaningful.

Most of what individuals in the early 21st century think they know about community is faith-based and not evidence-based; it is not based in evidence for human fulfillment, but based in "faith in the institution". And, there are many forms of institution. Flawed identities are likely to group themselves with other flawed identities (i.e., self-limiting concepts). Wherein, faith becomes worship and sacrifice, and doctrine becomes punishment and duty. Do not confuse the certainty of the messenger with the validity of the message. Sometimes beliefs are created to make feel better about anxiety at not knowing something. Hence, among community, live gracefully with uncertainty, with a recognition that are in a learning environment with feedback.

In some ways faith really operates as: the permission give another to believe things strongly without evidence. Beliefs eventually become operant in emotion and behavior. People think their beliefs are private, but the moment they inform (or are otherwise relevant to) a believer's behavior, then they can't help but impact the structuring of social interrelationships [through probability ripples]. And therein, they inform social behavior in so far as "you" believe in them. Yet, in community, there is no such entity to give permission

whether to believe or not to believe, which is not the state of community, but the State of fascism. Among fulfilled communities, ideas that exist without evidence are simply transparent as such, and they are withheld from integration into their community's decision system until they are verified to be otherwise. Faith would have them integrated and fully operant at a socio-economic level without sufficient evidence, which is a extremely dangerous position. Quite possibly it might be a good deal wiser to inquire, verify, and then encode. Things tend to become a little confused in the head when there is only faithful re-verification going on, and very little inquiry.

When the statement, "hope and faith" is considered at any deep intellectual level its superficiality is quickly uncovered and it is seen as has no meaning beyond the negation of the concepts of reason, evidence, evaluation, experience, validity, inquiry, feedback, and logical calculation. In other words, it is a nonsense mantra. To "trust a belief" is to have "hope and faith" in nothing of real value. They are sayings that have no actual meaning, and in fact, remove a degree of intelligence from the user of the saying. Authoritarian institutions, in particular, depend on being able to appeal to faith as a basis for knowledge of ultimate reality -- when in fact it conveys no such knowledge and only seeks to further disassociate the adopter from reality. The most unfulfilling of structures with the worst of intentions can be hidden in plain sight when buttressed by the emotional appeal of hope and the belief in the possibility of winning.

Those with hope or faith tend to become blind (or may already be blinded) to the realities around them. Hence, for those who feel that charity is the way to spiritual perfection and happiness it may be wise to reconsider all three supposed virtues - those of hope, faith, and charity. In some systems of belief, these "virtues" have fully usurped human needs, human fulfillment, and systematic solutions to real problems. They have become pacifiers - generators of passivity. In truth, it may be most wise to re-evaluate any term lumped in with "hope" or "faith", such as "Hope & Change". Hope and faith and change and similar de-contextualized or meaningless terms are empty rhetoric, useful for propaganda, seductive suggestion, hypnotic suggestion, power acquisition, and conversational hypnosis (or "sophisticated enchantment"). Such propaganda can confuses otherwise highly intelligent people. Propaganda is a tool, often employed by those in power, as an approach toward preserving their power or gaining power. And yet, hope can be a vehicle for a less "negative" perception-outlook, which is stress reducing and healthy.

When there are poor people there is a need to give charity to them. When society is depraved, then charity becomes important for: (1) needed generosity; (2) demonstrated generosity (as social perception/social manipulation); and (3) a tax credit; but, when society is fulfilling from the outset, then "what is the meaning of charity?" In some ways it could be said that the very

idea of "charity" has no meaning in a society designed around the common fulfillment of the individual. In the early 21st century, "charity" is either a tax break from authority or the expression of a systematic issue with society. If the system was truly working for humanity, why would there be [a need for] "charity"? A community-type society is designed to resolve issues with fulfillment so that "charity" is unnecessary. In a fully functioning society there would be no role for charity [which isn't to say that there wouldn't be contribution].

In a society that is broken and harms a social or economic "class" of individuals, then charity is important, but not sufficient [as a condition] for re-orienting the system of society toward one that is fulfilling and where charity is not just unnecessary, but without meaning. Often, in early 21st century society, those organizations that do the greatest harm are the ones that to their greatest extent publicize their own charity -- with their hand in the front they give, while the hand at the back takes. Let be clear, charity is not the redesign of the system toward strategic benefit and greater disambiguation. The end of poverty requires the end of violence-orienting (and structurally violent) beliefs.

The state of being "open mind" (or "actively open mind") solely means that "you" are open to all possibility. It doesn't mean "you" are going to believe everything or anything; instead, "you" question and inquire, "you" critically engage with new information and seek its most accurate integration, "you" do not simply dismiss with reflex action. If "you" can give a name to what "you" believe, then "you" are in a mental box. If "you" had a truly active and open mind, and were in full access of your innate intelligence [to remove contradiction and fulfill common needs], then would not have a name to give to what "you" believe for "you" do not believe anything. In community, thought might convey information, but it is never "stuck in a box" or "stuck in stone".

An "active brain/mind" is a brain that is making connections and relationships [between variables] (i.e., thinking systematically and integrating verified experience). An "inactive mind" could be said to be a "disconnecting mind".

A belief is certainty in the existence of something based on faith that may or may not accord with the facts of reality. Might there not always be more to know? Any form of faith, because it is a surrender of reason in favor of faith, is a tremendous intensifier of all things that are divisive, rather than inclusive. Rather than have a belief system, one might have an informed and verified sense of perception and conception, of how things are up until now. Truth is unsuppressed by belief and faith, which are habituating and irrational. And yet, belief in the limitless creative potential of the self is meaningful.

Sometimes people hold core beliefs that are highly integrated with and very strongly engaged in a person's personality. When these people are presented with logic and evidence against that which they believe they often cannot consider or accept it, and a feeling of great discomfort is experienced (Read: cognitive dissonance),

which engages and erects [irrational] defensiveness. Because it is so important to them to protect the core belief, they will rationalize, ignore, attack, and deny anything that doesn't fit in with the core belief. In defence, there is the potential of reacting with extreme emotional energy, with anger. And when become angry, then become indignant, become offended, want to ridicule the messenger, want to pathologize the messenger, want to censor the messenger, and possibly, may even want to hurt the messenger.

What is common to the experience of cognitive dissonance is the emotion of fear: people are afraid of being ostracised, alienated, and shunned; they are afraid of their lives being inconvenienced; they are afraid of being confused, of psychological deterioration; they are afraid of feeling helpless and vulnerable; they are afraid of making mistakes; and, most of all, they are afraid that they won't be able to handle the feelings that are coming up. None of want to feel helpless and vulnerable, but in truth, at some level, can all accept ourselves.

Specifically, cognitive dissonance is the mental conflict, experienced as discomfort and mental stress, that occurs when beliefs, ideals, values, or assumptions are contradicted by new information. In other words, information doesn't match up with a reality capable of being understood more accurately in another way (i.e., they don't inquire more deeply into new evidence that works against a held belief). The concept[ual theory] of 'cognitive dissonance' was defined and became widely distributed in the 1950s. As a concept, 'cognitive dissonance' is intended to describe the phenomena that when "most people" are confronted with new information they seek to preserve their current understanding of the world by rejecting, explaining away, avoiding the new information, or by convincing themselves that no conflict really exists. When the protection of a belief as [egoic] self-concept (or self-identification overlays inquiry into greater truth, then the ego is likely to rationalize (as in rationalization), ignore (as in ignorance), and even deny (as in denialism) anything that doesn't fit with that core belief—it clings to that which remains comfortable, yet contradictory. Cognitive dissonance is a possible factor in explanation for "defensive" attitude (and emotional) change [by psychologists] when confronted with new information. Further, when people are in a state of dissonance, when their beliefs or values don't match up with their behavior or experiences, there is a likelihood that they will adjust those beliefs or values, or even adjust their perception of reality in order to achieve consonance. Many people will actively avoid situations or information that might challenge their beliefs and values in order to avoid the feeling of dissonance. One of the ways can reduce the likelihood of cognitive dissonance is to never take inconsistencies personally, and to use them as a platform for further inquiry.

The more someone has invested emotionally or financially or in any other given sense in a belief the more cognitive dissonance s/he will likely try to bear before admitting in the face of evidence to the contrary that the

belief is not "sound" and doesn't accurately reflect what goes on in the world. People will try to defend their beliefs in the face of evidence until they can no longer do so, but it is stressful; the more cognitive dissonance builds

SENSORY GATING

Once a meme (or, mental virus software program) is absorbed, then it begins to alter an individual's 'sensory gating' and affects all subsequent behavior. Most people never think about their own mental software programs until something forces them to. Herein, 'sensory gating' [en.wikipedia.org] describes neurological processes of filtering out redundant or unnecessary stimuli in the brain from all possible environmental stimuli.^{[1][2]} A gate is a filter (i.e., an aperture that channels information). Once a mentally constructed limitation is accepted and integrated (i.e., once the mind has constructed and closed a "mental gate"), then that which can be perceived of the world around becomes artificially limited, until such time as an event occurs that opens the gating channel(s) or otherwise shifts the gating system, and the individual has an epiphany or insight.

Fundamentally, being confined to a single or limited viewpoint or other modality, habituated to it by school or an environment, is tremendously debilitating. Long-term training in one perspective creates a long-term template that automatically gates incoming sensory data; wherein, it becomes increasingly more difficult with age to alter the settings due to a bio-physiological reduction in neuroplasticity.

In truth, our perceptual capacities are flexible, fluid, and multi-dimensional; in other words, we can perceive multiple perspectives, and change our own perspective whenever it benefits us to do so. However, "gating parameters tend to set themselves as time progresses, and all organisms tend to habituate to certain ranges of sensory intake and response to environmental perturbations." This habituation can and does limit what and how we perceive, and how resilient and creative we are in the face of adversity.

In early 21st century society, people get a template that keeps them from orienting toward a more fulfilling set of common meanings (i.e., those that create community), and they often become focused instead on surface detail (and pseudo-satisfaction).

1. Cromwell, H. C. (2008). *Sensory gating: A translational effort from basic to clinical science*. Clinical EEG and Neuroscience.
2. Freedman, R., Adler, L.W., Gerhardt, G.A., Baker, N., Rose, G.M., Dreging, C., Nagamoto, H., Franks, R., et al. (1987). *Neurobiological studies of sensory gating in schizophrenia*. Schizophrenia Bulletin, 13(4), 669–676.

up and the more the world refuses to behave the way they believe it ought to behave the more psychological stress builds up and the more mental illness/emotional/psychological problems tend to arise out of that, which can give rise to psychotic behavior. In community, must always be open and able (i.e., have the space) to discuss the mismatch between belief and experience.

Having no beliefs is not a belief, it is a "fresh" and open mind; an empty cup; a mind not attached to a story, narrative, or past moments; a mind streaming consciousness. All belief limits the further acquisition of knowledge. Once someone is insulated in belief, and thus, isolated in awareness, they cannot orient accurately [by degree]; and since they are then out of alignment with their integral nature they are potentially a more supple victim for further programming.

How much nonsense are "you" comfortable with? How much nonsense have "you" cut through to see the truth (because there is a lot of nonsense in a competitive socio-economic system that generates "marketed" nonsense so that people can continue to "make a living"? One might say that a complex socio-competitive market on the scale of early 21st century society is almost complete nonsense, and without a comprehensive re-evaluation of one's understandings and thinking processes one is likely to be "filled to the brim", of their metaphorical cup, with nonsense.

"Never be diverted from the truth by what you believe to be true."

- adapted from Bertrand Russell

Herein, it is important to note that the usage of the term "open mind" is not meant to call either for perpetual skepticism or for letting one's brains drop out (i.e., for holding no firm convictions and granting plausibility to anything). A "closed mind" is usually taken to mean the attitude of someone impervious to ideas, arguments, facts, and logic—someone who clings stubbornly to some mixture of unwarranted assumptions, fashionable catch phrases, tribal prejudices, and emotional attachments. Yet, the term "closed" may not be an accurate description for such a mind. A "passive" mind might be a more accurate description. It is a "passive" mind that has dispensed with (or never acquired) the practice of inquiring and critically thinking, and feels threatened by any request to consider anything novel.

What objectivity and the study of philosophy require is an actively open mind - a mind open to possibility and eagerly willing to investigate ideas and examine them critically - an exploratory mind. An active mind does not grant equal status to truth and falsehood; it does not remain floating forever in a stagnant vacuum of disinterest, uncertainty, and ambiguity; by assuming the responsibility of becoming informed and experiencing that which is, it reaches firm, and yet, tentative understandings. Since it is able to verify its convictions, an active mind achieves certainty - a certainty untainted by spots of blind faith, evasion, and fear. In community, don't believe in anything, have "your" own experiences

(a.k.a. the "dis-belief principle").

Modern human beings rarely think for themselves; they find it too uncomfortable. For the most part, members of species simply repeat what they are told and become upset if they are exposed to any different view. Self-awareness is really the enemy of sanity in early 21st century society, for once hear the screaming, the echo never stops. The result of this ignorance and reinforced social conformity is the generation of rampant child abuse and global warfare. Other animals fight for territory or food; but, uniquely in the animal kingdom, human beings fight for their beliefs. fight for beliefs more than fight for food or water.

The reason for this is [in part] that thoughts guide behavior, which has evolutionary importance among human beings [toward the fulfillment of needs]. But, at a time when behaviors and actions may well lead to extinction there might be no reason to really assume humans assimilated into early 21st century society have any awareness of this at all. How all see nature, or don't see it, is perception of own reality that was given to by family, network, close friends and environment. Without self-awareness there is likely to co-exist self-destruction.

NOTE: If someone's sense of the possible has been suppressed or diluted, it means that anything that is actually happening outside of their sense of the possible is by reflex action dismissed as crazy or impossible.

2.5 Integrity

NOTE: Relying on "hope" is not a strategy. If there is no method for maintaining an oriented direction [in reality], then may always be struggling to remain in integrity with reality. The validity of values are increasingly quantifiable by an empirical benchmark, that of science, critical thought, and thinking in systems, which may be applied together to maintain an objective state of integrity.

'Integrity' is a concept of consistency [as a principal characteristic] of actions, values, methods, measures, principles, expectations, and outcomes. In morality, 'integrity' is regarded as the honesty and truthfulness (or accuracy) of one's actions [with verified reality and human flourishing]. 'Integrity' can be regarded as the opposite of hypocrisy in that integrity regards internal consistency as a useful quality, and suggests that parties holding apparently conflicting values should account for the discrepancy through scientific discovery and the removal of contradiction (e.g., critical thinking and philosophic argumentation).

The word 'integrity' stems from the Latin word 'integer', which meaning wholeness, soundness, or completeness (and it has a quantitative nuance to it). Therein, integrity is the inner sense of wholeness deriving from qualities such as honesty and the consistency of behavior with

unbiased [quantitative] evidence. As such, one may assess that others "have integrity" to the extent that they act according to the emergent values, understandings, and principles they claim to hold. Integrity does not involve loyalty to one's subjective whims, but of behaviors reflective of rational and emergent understanding (i.e., behavioral alignment with a claimed value or belief system).

Fundamentally, the results of differing value orientations can be compared and measured. The integrity of a value system is measurable [in part] by how well its [design] principles orient toward human fulfillment and align with [verifiably] discovered scientific causality/probability, based upon the integration of feedback and the self-initiated responses of individuals actualizing the specific value orientation.

In the context of *accountability*, integrity serves as a measure of willingness to adjust a value system to maintain or improve its consistency when an expected result appears incongruent with an observed outcome. Truly accountable individuals will evolve their understandings as more [accurate] information becomes available, and such individuals may be said to "have integrity". A value system's abstraction depth and range of applicable interactions may also function as significant factors in identifying the system's integrity through a congruence or lack of congruence with observed effects.

A value system may evolve over time while retaining integrity if those who espouse the values account for and resolve inconsistencies as more information is acquired.

QUESTIONS: *If humanity wants to create a community of fulfilled individuals progressing toward their highest potential, then what must be perceive and what must be valued? If individuals do not [at least] perceive their needs and maintain an integral value system composed of those orientations that lead to a liberated, higher potential life, then what are they actually perceiving? What orientation is likely to promote human well-being and flourishing?*

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The Value System of a Community-Type Society

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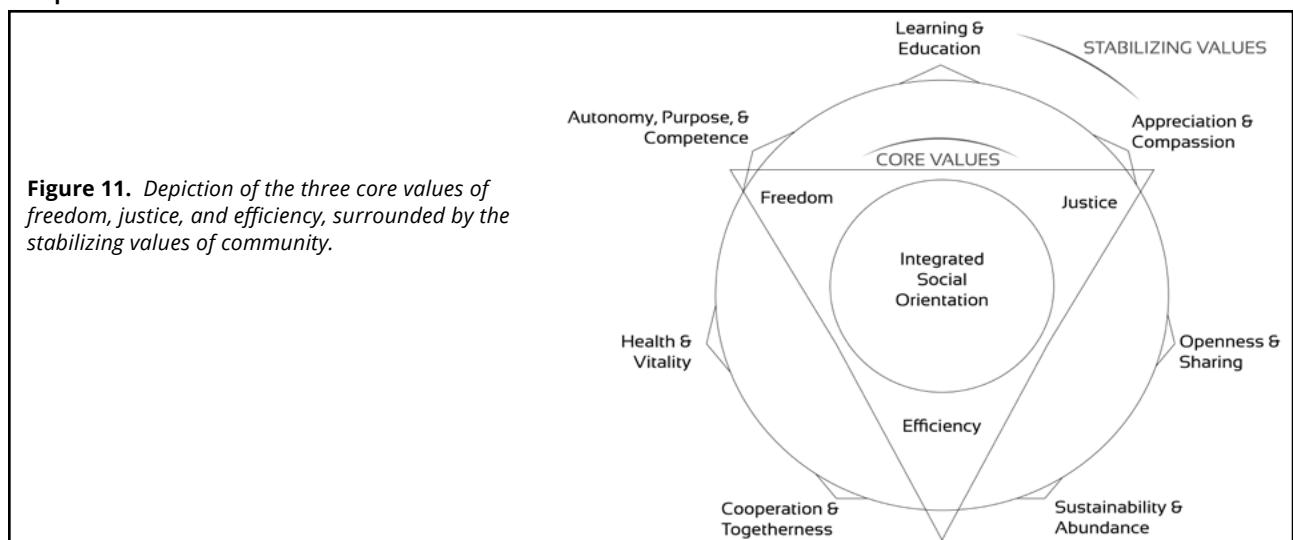
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Abstract

A value system is a conceptual reasoning system for translating a purpose [intended by consciousness] into action [through awareness] in a verifiable and a predictable/repeatable manner [as individual experience]. Every social organization has an orientation in an informational and spatial environment toward greater or lesser states of entropy. A social organization may use conceptions within its information system in order to stabilize its trajectory and orient intentionally toward a state goal/direction. A value system is the totality of that system which is orientationally useful at the conceptual level of society. The value system of a community type society has three core values that produce a stable platform for life, technical, and exploratory operations. It is upon this stable platform of three values (freedom, justice, and efficiency) that society may orient toward the its own evolved fulfillment. A set of stabilizing/compositional values ensure that the core remain a sustainable foundation for societal operation. Interrelated with the three

core values are a set of seven combinatorial stabilizing values. Together, this value set has the potential of scaling global human fulfillment without hurtful artifacts.

Graphical Abstract



1 Introduction

A value system is an important part of a social organization and society as a whole. It is a system shared by all individuals in the Community and inclusion into the Community is based, in part, on the value system that an individual maintains and embodies. A value system informs behaviors, relationships, and the intentionally organized systems of which a society is composed. The value system that each individual maintains is an essential factor in the coordinated orientation of decisions toward human fulfillment at both an individual and a societal level. A community-type society's values maintain an orientational alignment with its desired direction within a real world information system. Mental models and the values that encode them are at the foundation of how the world is viewed and acted upon to create the environment all individuals inhabit. Values significantly underlie actions taken toward goals.

A value system plays an important role in the human decision process, and actions taken in pursuit of values have personal, social, economic, and environmental consequences. Humans are [at least] social beings with instincts (as in, social instincts) for effective adaptation to changing social conditions. When social conditions are not aligned with human needs, then instability within individual human beings [the personality of] is naturally prone to arise. Therefore, "socialisation" without conflict depends upon the community's cultivation of a set of core human[e] values.

A set of formalized values enable a population to arrive at decisions together, while making actions transparent, consistent, and focused (i.e., "authentic"). Within a community-type society, the population realizes the importance of value system congruence between individuals and their general socio-economic environment. A congruently shared value system is necessary for progressive action toward a purpose at the individual level and the social level. Congruent environments reduce obstructions and hindrances, thus affording greater opportunity to express important values, to carry out plans, attain goals, and commonly shape the material world for everyone's fulfillment.

Social psychological researchers have noted the detrimental impact on well-being that arises when an individual's value system is incongruent with the system prevailing in their social environment. In other words, sometimes social values conflict with personal values to the psychological and physiological detriment of the person(s) with the socially conflicted values. (Sagiv et al., 2000)

Individuals are more likely to progress toward their highest potential when they can express and fulfill their values, and thus, achieve their goals - when they live in a society with a similar value system to their own, and in particular, an emergent value system that facilitates their adaptation to new potential states of fulfillment.

Generally, when most people in an environment share a set of value priorities, then normative behaviours

are more clearly communicated. In more fulfilled societies this appears as a general organization of similar concepts: mistakes occur and there is no need for punishment; explore the root cause(s) and allow for learning; follow through by designing another iteration [of the system] using more accurate information. In unfulfilled societies normative behaviors take the form of: established commands; interpretable principles, jurisdictional (territorial) laws, codified behavioral rules; and punishment.

In the context of a holistic social system with a similar means of arriving at decisions it becomes apparent that the distinction between what is "good" for one individual and what is "good" for other individuals has similarities. If two people really do share the same value system, direction, methodologies, and understandings, then of course what is good for one will tend to be good for another, since there is no longer any objective metaphysical distinction between the two individuals.

When individuals select a different set of core values, then they will have oriented themselves in different directions. Therein, it will be difficult to maintain a stable social environment under such conditions, which are themselves a reflection of some sort of miscommunication or corruption of information between individuals and within their "collected-/ive" social information system. When a community arrives at decisions, highly valuing incompatible sets of values is likely to provoke internal conflict - this is an undesirable "state of affairs". Conflicting values create offended people. And, offended people are not the least of societies worries when it is composed of individuals with conflicting values. Thus, a community-type society seeks the elaboration of a set of common congruent values that empirically align actions with purpose, and with human fulfillment, in an emergently discoverable universe.

If a population can sustain the condition of emergence in its social structures and general approach, then it is always ready to adapt to that which better supports the mutual fulfillment of all of humanity, when knowledge of it becomes available. Emergence is in everyone and all things -- it is a universal life quality. It could be described as the result of a dynamic process of unfolding; but really, when individuals are learning and applying new information they are being emergent. To adapt is to be emergent. To change ones way to that which works better for everyone, regardless of how comfortable one is doing it the way it had been previously done. Societies either emerge, or fade away. The integrated application of the idea of emergence becomes a societal adaptation to what is possible. Humanity must have (and maintain) an emergent social approach so that it can be ready to apply what is known and technically possible in the present, in order to fulfill humanity's universal life needs.

INSIGHT: *The values in a society are only as useful as the socio-economic system that generates and reinforces the values.*

1.1 A stable social environment

A stable social environment is composed of self-directed individuals who choose to cooperate at a social level for the fulfillment of everyone. It is characteristically an environment that involves individual cooperation to sufficiently fulfill common human needs such that socially corrosive behaviors are unlikely to develop within individuals. Hence, conflict between individuals is either significantly reduced [and easily resolved] or is null, and will not significantly impact individual and social fulfillment. Such an environment embraces a set of core congruent values and a form of socio-economic organization that does not innately generate conflict and other socially corrosive thoughts and behaviors [by its very structure], either between individuals or within the individual himself/herself. Essentially, a stable society is regeneratively created through stable individuals who organize and cooperate in an efficient and effective manner [through similarity] toward the fulfillment of common need at a social level.

At one level, social stability is a choice, but at another level it is an actualized cognitive understanding that fulfillment is a common direction, and that it can be commonly oriented toward through the selection of a similarly directed value set. Without a clear comprehension of why cooperation is necessary, the motivation to cooperate (and share) will itself remain intermittent and unstable. Where social cooperation and self-directed fulfillment are normative, and socially corrosive behaviors are not manifest, then a more stable social environment may be said to exist.

The drive toward a personal higher potential is a characteristic of a stable, adaptable individual. Therein, individuals who are not working toward the betterment of themselves, and others, might be considered by some to be "unstable". A supportive and harmonious value environment allows for the healthy mental and emotional development of an individual from which a stable society more likely to manifest.

INSIGHT: *In community, individuals share value with value; they do not trade value for value (Read: the market perspective on value).*

1.2 Maladaptation and feedback aversion generates instability

Clearly, a social environment that is not adaptable is not stable in any meaningful respect. In maladaptive societies decay often proceeds by positive feedback, for that which is causing the maladaptation, possibly structural violence [vs. integrated learning], breeds the continuation of the maladaptive behavior. And further, it inhibits adaptation to a higher potential [of creative fulfillment] through the 'priming' of maladaptive values. Fundamentally, nature is a self-regulating system, and to separate society too greatly from natural mechanisms,

particularly those that facilitate adaptation, is to separate the individual from his/her emergently fulfilled self, while generating a whole host of unintended and unpleasant consequences at the same time. It is a general principle of systems that systems change in response to feedback and that [human] systems maintain their stability, their very continuity, by making adjustments based on feedback (i.e., individuals and other systems correct the alignment of their orientation to life through feedback).

In part, the orientation of a community-type society is designed to maintain 'stability' in the fulfillment of the needs of the individual, so that, [in part] the individual does not manifest aggressive, violent, jealous, greedy, controlling, and other socially corrosive, and maladaptive behaviors. 'Stability' is simply a description of the state of a system when the system is effectively and efficiently fulfilling its purpose (i.e., human need fulfillment) and not generating persistent states of instability (e.g., structural violence is a form of instability to human fulfillment). When needs are not fulfilled, then individuals are likely to behave in an unstable manner toward getting their needs met [at any relative cost] wherein their thoughts and actions thwart fulfillment in themselves and others - this is what is being referred to here as an "unstable social environment" - an environment where corrosive behaviors and structural violence thwart individual need fulfillment, and by consequence, produce the regeneration of corrosive and maladaptive behaviors.

A stable society is composed of stable and presently mindful individuals. If the individual is "absent", as is the case in the humans portrayed in Aldous Huxley's "A Brave New World", then no true stability can exist. Without the full presence of the individual there will not exist coherent feedback - without the individuals fully intrinsic participation there remain an absence in fulfillment. In Huxley's book, "stability" is achieved as a product of conformity and anaesthetization. It is not a rational understanding from a place of open inquiry toward ever greater truth [through corrective feedback]. Instead, the characters in Huxley's work live in a society in which individual expression is retarded, and "stability" is achieved through artificial affluence and sense satiation devoid of meaningful fulfillment. The individuals in the society have become accustomed (conditioned, habituated, accepting, drugged) to their plight and abnegate any sense of personal or social responsibility to evolve themselves and the society. In Huxley's work, individual fulfillment is non-existent; instead, what is described is some abstracted authoritarian notion of "societal need", which arises out of another arbitrary abstraction, that of the claimed "need for stability". This "need for stability" is not an individual need, but a need of the State [to control the population]. In the real world, abstractions are verified [in their very existence and alignment with fulfillment] through feedback from the natural world. When the individual is absent, then conscious verification fades, and abstractions, which might otherwise be seen for their alignment away from that which is desirable, spawn mentally isolated (and

isolationist) realities of their own.

This quote from Huxley's work is a clear example of semantic confusion; the word "stability" in *A Brave New World* does not mean stability in the fulfillment of needs and a stable trajectory toward a higher potential state of life experience, but "stability" as in unchanging automatons (or static robots) who maintain an unquestioning belief in the authority of the State and are artificially satiated to reduce inquiry into truth. These persons are reduced in their conscious momentary presence with themselves; they are in a state of separation.

A stable society is a civilised society or "civilization". It is the case that one may believe that s/he exists within a "civilized society", but when needs are exploited, chronically pseudo-satisfied, or sated at exponentially insurmountable expense to oneself and the ecosystem, then one is not living in a civilization, but in a society on the brink of collapse or transition. The population of a community-type society transitions to new dynamics as required and/or intended.

"We don't want to change. Every change is a menace to stability..."

- Aldous Huxley, *A Brave New World*

1.3 Self-interest, self-maximization, and greed

MAXIM: *Greed, once engaged, sets its own limits.*

All individuals have an intrinsic interest (i.e., a self-interest) to maximize that which is desired, because maximization means that self-interest is preserved into the future. The ancestors of early 21st century society would naturally preserve both seed and food for times when there was less natural abundance. Hence, greed is not necessarily "negative"; everyone is "greedy" (i.e., self-maximizes) in context. Notably, if "you" want to live with a decent quality of life in the economic market system, then there is a level of greed that "you" have to maintain. Obviously, people can become obsessed with acquisition, and neurosis can develop such that they believe they need ever more stuff, and their whole value orientation and sense of self-worth becomes associated with accumulation and gain. To a great degree, however, the neurotic acquisition of stuff and association of objects with self-worth (e.g., "status symbols") exists because of the market and its punishment/incentivized reward structure. For discoverable reasons, greed, in its pejorative, becomes a part of the personality of some operators in the market. The design of some systems simply brings out the less fulfilling behaviors in people. Here, it must be asked, "Is it fair to judge and label someone as greedy when the life imposed rules of the socio-economic game for survival incentivize greedy behavior?"

At least to some significant degree, it is truthful to state that individuals act through their own self-interest, which

is aggregated through a time horizon that is generational (i.e., rather long). An objective for a society that realizes its generational nature may understand and apply a structure to society where everyone benefits without anyone benefiting at the expense of another (or others). However, it is significant to recognize that self-interest becomes tied to the social and economic systems of which any individual is a part, and so the societal system must be designed based on mutualism (*values and access*), and not, exclusionism (*rights and property*). Individuals in such a society are likely to recognize that each is self-interested, and so together, they design a non-violent society that is better for one and all around one (i.e., for oneself and everyone else). Individuals therein understand that in society self-interest is intrinsically tied to social interest, otherwise there is not this thing referred to as, society. This form of self-interest might otherwise be known as rational self-interest where individuals perceive their self-interests as connected to the self-interest of others among a common ecological environment and socio-technical organization.

1.4 Value system sub-divisioning

The value system of a community-type society is currently subdivided into two sets of values:

1. The core directionally coordinated value set; and
2. The orientationally stabilizing value set.

Together, these value sets provide the orientational probability of fostering a stable, adaptable learning community with self-directed individuals who arrive at informed decisions and create fulfilling relationships throughout all aspects of their life. Also, as a single unit, they represent the essential [prerequisite] value conditions for the fulfillment of individual human beings among a larger social and environmental ecology. In other words, their encoding into the structure of the community is intended to facilitate an [stable] individual-social movement toward a direction of higher potential fulfillment.

INSIGHT: *In order to change behavior, thinking and values must be changed.*

2 The three core directionally coordinated values

The three primary value coordinates for a socially stable community directed toward a higher potential of fulfillment are: self-directed freedom; justice; and efficiency [in the fulfillment of needs]. These values orient individuals and society most closely toward their common direction of purpose and the fulfillment of all human need. Together, the three values represent a three-dimensional model for [directly] structuring human fulfillment and social stability. Without a solid understanding and implementation of these conceptual moral coordinates the ultimate sacrifice might just be the fulfillment of individual human beings.

At the very least, a stable orientation toward common fulfillment involves a social allowance for self-directed freedom, justice, and efficiency. Herein, a population may come to realize that there is no intrinsic interest toward the well-being of everyone in unjust, unfree, and inefficient societies.

INSIGHT: *It is the ignorance of oneself that creates many, if not most, of the problems in the world.*

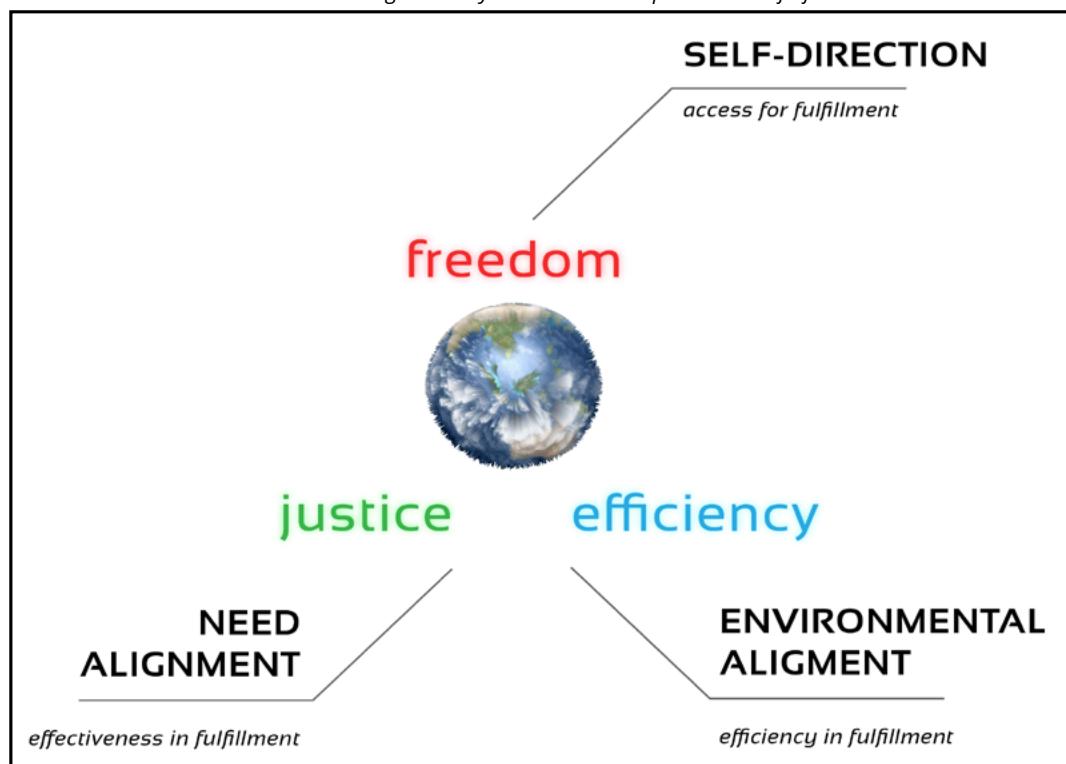
3 Freedom

"Between stimulus and response there is a space. In that space lies the power to inquire more deeply and to choose a thoughtful response. In that space lies the potential for growth and freedom."

- adapted from a quote by Victor Frankel

Between the states of stimulus and reaction lies the freedom of awareness and of conscious response. In a real and objective world a response to a stimulus has consequences. Hence, the power to choose freely opens a decision space where the stimulus and consequential alternatives may be considered, and a decision constructively selected in the awareness of consciousness. When a stimulus simply triggers a reaction without the presence of thought, then impulsivity and compulsion are likely to be found hindering the highest potential expression of an individual, of consciousness. Herein, freedom appears as the absence of the effect of impulsiveness and compulsion on an individual's behavior such that there is less reaction and more responsiveness (i.e., less reactivity and more proactivity). Hence, a choice is "free" when conscious reasoning has been allowed to occur (i.e., when individuals have the space to process and integrate their experience, and hence, to act with

Figure 12. The three core values of a community-type society are freedom, justice, and efficiency (which are themselves conceived of and configured for human fulfillment). A set of stabilizing values encompass these core three values, and together, all values ensure a stable societal navigational system toward adaptive human fulfillment.



conscience at a global level). When reasoning occurs, then there exists an expansion of choice through conscious thought, versus its careless contraction through reflex. Herein, learning must exist for the expansion of choice in the direction of progress. In effect, learning impacts the availability and probability of choice within an iterative decision space (i.e., decisions over time). Also, freedom stems from self-developed empowerment, and not allowing oneself to be manipulated and "de-energized" by external forces. Therefore, the ability to respond (i.e., response[ability]) is the opposite of the denial of responsibility and is not equivalent to obligation. The idea of freedom is bound up on the idea of doing anything in the world (i.e., having any ability to be active in some way in the world).

Since compulsion is a form of discrimination it follows that freedom is the absence of discrimination, characterized by independence of thought and the expansion of self-direction and meaningful inquiry. Discrimination sidetracks consciousness from the experience of an existential common relationship with itself; it thwarts the fulfillment of human need. Freedom involves the freedom of communication (speech, expression, and sharing) - censorship is interference with freedom. Freedom is experienced by in the ability to rise above predation and oppression, and ultimately, violence in relationships among one another. Freedom becomes the facilitation of access to the fulfillment of needs. Fundamentally, freedom is the ultimate realization of each human being's potential. A community-type society facilitates the freedom of everyone, except the freedom to act irresponsibly at a social level.

'Transcendence' is the unique human ability to rise above automatic reactions to external factors (i.e., "equanimity") and find causal desire (i.e., a source-system/environment) inside. Transcendence is the emancipated consciousness that has reached such a level of development that it can see itself as the cause and no longer serve as a simple relay to conditioning. What is often called "realisation" is the awareness of the freedom of causality/probability inside the nervous system, that it has its own causality/probability, not just serving as a relay to conditioned reactions like before. Herein lies the realisation of oneself as freed from the conditioned, unserving instinctual reactions, and cultural/traumatic maladaptive programming.

In any given society, there are two essential freedoms:

- 1. The first freedom (Freedom with-in):** Freedom is access to an internal state of integration.
- 2. The second freedom (Freedom with-out):** Freedom is access to those external elements that fulfill needs.
- 3. The third freedom (Freedom from without):** Freedom from coercion (i.e., from coercive influence).

Internally, freedom can be perceived in terms of,

1. Cognitive liberty and the power of thinking:

Stimulus followed by an awareness of thought, and the capacity for thought, prior to response. Wherein, freedom exists in the space and stillness between stimulus and response.

2. Mental slavery and weakness of fearing: The fusing of stimulus and response without thinking (i.e., without the space for integration; reaction).

Freedom is not the ability to act on any given impulse, it is the ability to choose [consciously] what to act on, and why. Here, freedom is not the absence of commitments, values, or discipline, it is the ability to choose them at will.

The state of freedom may exist in the context of perception, thought, choice, and action. It is the suspension of pre-conception, as "seeing through beginners eyes". Freedom arises when consciousness can acknowledge that existence is different than what it may have thought before, and thereafter, choose differently. Hence, freedom exists in a mind clear of draining contradictions and dissonant relationships. It may be observed as independent thought, and as an individual "taking responsibility" for the sovereignty of their perception, their cognition, their relationships, and ultimately, their decisions toward or thwarting fulfillment. In a cognitive sense, freedom begins with the ability to reason and the unbiased examination of [experiential] evidence through mindful awareness of that which is. Wherein, the body experiences data as the mind processes it. Among the population of a community-type society, each individual is self-responsible for meeting needs in life enriching and self-accepting ways.

Freedom exists through a reduction in [the desire to] control [others] as well as an engagement with inquiry, discovery, and thoughtful action. It is the result of rational reflection and discerned deliberation, and is not intrinsically related to omnipotence. Note that the lessening of control in a supportive environment helps an individuated consciousness to have more strategic (or "balanced") control later, once s/he has integrated those "split-off" parts of him/herself. Wherein, a critical aspect of freedom is the restoration of ones own thinking processes, of thinking for oneself, thinking as an individual (or individuated consciousness) with a 'critical factor' and the ability to experience and to verify in a common existence. Individuals must be critical of what they allow into their minds, so that they may form a coherent and integrated visual structure of the world from which to navigate together.

Freedom appears at the social level as the potential to fulfill one's deepest and meaningful desires [through integration and access]. Herein, freedom is facilitated by social cooperation and the coordination of systems to maintain access to those items that fulfill needs. In a value orientation toward a higher potential state of fulfillment it is incorrect to reduce freedom and to hinder

the fulfillment of others' human needs, which reveals an ignorance (or misunderstanding) of one's deepest and most meaningful desires; instead, it reveals self-limiting conditioning.

Freedom is founded upon the knowledge of the objective difference between actions (and behaviors) that lead to human fulfillment and those that lead away from it, and then choosing the correct[ly fulfilling] one - this is true moral conscience (con[with] + science). As the exercise of conscience increases, freedom increases; as morality and the exercise of conscience decreases, freedom decreases. Some refer to this as a "natural law" (i.e., a law that operates in creation and no one is capable of breaking). In nature, individuals have the freedom to fulfill themselves, or to destroy themselves through actions that align with a higher or lower entropic direction. Fundamentally, a population can facilitate access to its needs through which everyone may expand his/her state of freedom, or a population can thwart the fulfillment of its individuals' needs and consequently reduce everyone's freedom.

The world is an information space, and therein, freedom of choice in the exploration of the world is a universal aspiration and the single most important basis of human happiness and joy. Happiness must be contrasted here with the condition of narcissism, for freedom is not impulsive. Also, happiness among community involves the seeking of relationships and is not associated with exploitative relationships.

In the history of "correct action" there has always been a tension between the trend that emphasizes the rational dimensions of life on the one hand, and the tendency that underscores the striving for happiness on the other. The pursuit of happiness is sometimes considered to be an individualistic endeavour while rationality is supposed to promote the cause of the collectivity. Thus, the false dichotomy between reason and happiness. This dichotomy is itself founded on another groundless assumption, namely the incompatibility of the individual, nature, and his or her society. A moral philosophy organized toward the objective fulfillment of needs is free from this kind of dualism. This is the dualism of other philosophies. Herein, there are no moral commands; instead there are rational and fulfilled individuals with the freedom to think and to choose their own potential of fulfillment.

When reason exists at a social level then a meaningful social definition of freedom may become more clear. Freedom is present when individuals have the resources, probable opportunities, and cooperative organizations available to fulfill their individual and social needs in a self-directed, participative, and volitional manner. In other words, freedom is access. Freedom may be defined in terms of the possibilities offered to the individual (i.e., the potential learning, growth and self-development opportunities available to them) in a society without obligation (e.g., currency). In some sense, freedom is bound up with the idea of possibilities. For the very stability of a society individuals must be

free to experience and experiment with their world for themselves, to verify existence and participate in the evolution of the community, unhampered by the mere conventions of culture (or market obligation). Individuals must be free to inquire more deeply into themselves, their society, and the universe; and this requires access to [at least] a society's information resources and technologies at an equal level. Though most importantly and more fundamentally, it requires the fulfillment of a spectrum of common needs.

When socio-economic interrelationships become less impulsive, less controlling, and more rational, then a common perception of a higher potential state of [entropic] organization might begin to emerge. Therein, coherent organization at a social level is likely to lead to socio-economic increases in efficiency, and hence, allow for the potential creation of a progressively more free and more [verifiably] thought responsive environment. A more thought responsive environment requires a different set of [social] dynamics than are present in early 21st century society.

The development of intelligence necessitates freedom, and freedom necessitates intelligence. Within the Community there exists a pursuit of truth as well as a pursuit of fulfillment grounded in [at least] reason, knowledge, and social cooperation - in intelligence. In general, 'intelligence' is the ability to solve well specified problems in a particular domain. For a social organism, intelligence allows for the evolution of social cooperation, and behaviors are intelligent if they are conducive to social cooperation. Behaviors and communication that inherently create social conflict are a reflection of a lack of intelligence for they maintain social environments that are unlikely to fulfill human needs, and hence, are likely to reduce an individual's freedom. When someone behaves "unintelligently", they are essentially behaving in a manner that negates the fulfillment of [at least] their own, and therefore, other's needs (remember, needs are common). But, the ability to do well in one domain (i.e., to think critically and solve problems in one domain) doesn't necessarily translate into other domains. This is why all domains of life must be available for experiential learning by individuals in community.

In systems thinking, the cooperation between the components of a system is the system's 'intelligence'. The components in, and structure of, a system represent the system's 'potential intelligence'. Generally speaking, intelligence is the ability to solve problems in the service of some goal (Note: this is a general definition). And in nature, intelligence involves survival and replication, the recognition and knowledge of resilience.

The expression of a higher human potential rests upon, at least, the value of freedom. Herein, the concept of human potential is only meaningful in connection with normal psychological development, which leads to the individual's full functioning as a socially intelligent being. Essentially, fulfillment of human potential depends on provision of the right conditions for growth. A human's higher potential expression in the

material environment is akin to a seed, which may only develop if provided with the freedom for growth and all the nutrition that growth entails. The expression of a higher human potential requires a full and healthy personality development among individuals in society. A community-type society exists through fully self-directed and empowered individuals who effectively integrate their life experiences.

Freedom begins with the individual. It is the allowance of others to be free and the exercise of one's own freedom. It exists in the recognition of a symbiotic relationship between the well-being of oneself and the well-being of those others who exist in mutual relationship with oneself within a common context (i.e., reality, social, economic, and ecological). Freedom only exists at a social level when freedom is shared. If "you" want to champion freedom, then "you" have to champion the freedom of others. Herein, freedom appears as an allowance for, and acceptance of, those who seek an environment for the open expression of themselves, their feelings, and their ideas. Within a sufficiently rational and healthy individual there is a logical and emotive recognition that one exists within an evolving whole. Maybe, a population should ask, "How do we enjoy life, while meeting our own needs, other people's needs, and the needs of the environment (or lifeground) of which our life is a part?"

Furthermore, if other people are not free, they will be ordered to fight (or en-force) against "me", making any use of my freedom ultimately impossible. This may be summed up in the following statement, "If no one else is free, then I cannot be free." A deep respect for life seems to demand a deep purpose for life - a purpose that supports everyone in their freedom of development toward a higher potential.

Freedom is not synonymous with power, but means maintaining rational alignment of behavior with accurate information toward a meaningful direction. At a principle level, however, a population is only as free as it exists within the "laws of nature" (i.e., the phenomenologically natural world), which actually governs a common[ly] technical reality. When individuals violate these principles, then nature appears to dictate destabilization and eventual destructive transformation. The presence of nature cannot be ignored if individuals desire freedom.

Self-directed freedom and autonomy are characteristically related terms. Every form of oppression, particularly the expression of the coerced replication of belief (i.e., "schooling"), is a threat to the idea of a participatively free community (i.e., a community of equa[-lity + -nimity]). A higher potential exists in understanding the subtle difference between openly active inquiry and attachment [to any belief]. It is the difference in being open to the momentary flow of existence or utter attachment to a/the moment, which generates a spectrum of potential oppression.

Also, free expression and inquiry cannot involve the acceptance of definitions at "face value", as pre-packaged "gifts". Linguistics, language, semantics,

and definitions orient consciousness. When language and knowledge are accepted at "face value" without investigation they programmatically and subconsciously re-orient consciousness [without intentional and integral freedom in consciousness]. In other words, acceptance [of meaning] without inquiry (e.g., "authority") re-orients consciousness without consciousness realizing that it has been re-oriented.

Without a broader system that structures and supports autonomy, there is unlikely to be autonomy for a complex adaptive system. In other words, there is unlikely to be meaningful autonomy of a complex adaptive system (i.e., a human individual) without a broader system that structures and will support that autonomy (such as a community-type societal structure).

If someone were to live in a society that would not allow for them to make decisions, right or wrong, about their own body or consciousness, then there is something very wrong at the core of that society. For someone to tell "you" what "you" can and cannot do with "your" own body is essentially their assertion of ownership over "you". In fact, it says something deeply troubling about the type of society and people in it that would suppress such natural, primal expressions of oneself. Alternatively, a free society maximizes the range and depth of higher potential possibilities available to the individual while facilitating restoration of those who have disaligned from their continued development toward this direction. This implies a society where possibilities are not artificially and dogmatically limited by assuming control over sovereign consciousness and forcing consciousness to conform to the external will

COMMUNITY STATEMENT ON FREEDOM

We as individuals organized into a community with a set of common values seek the empowered self-direction of our own lives and learning, free of interference [by others] and free from contradiction (e.g., noise to signal ratio). More explicitly, we value freedom from oppression, force and coercion, which is not intended to mean freedom from responsibility of decisively conscious behavior. The only selfish interest herein is the desire for self-development and the fulfillment of our purpose, our desires and goals, including creative self-expression, which are not pursued at the cost or expense of others. Instead, they are pursued to the delight and benefit of others, for individuals that have chosen this direction and value system have necessarily developed an interest in the greatest care-taking and fulfillment of all life. A free society developing toward its higher potential is a society where individuals are not stuck in self-created and socially-manifested limitations of body, thought, relationship, ideology, and so on. A community remains a community when it re-generates structural systems that maintain a state of freedom from [limiting] conditioning.

of others. It also implies a society that facilitates the freedom-of-movement and freedom-of-expression within a common, real world decision space.

In community-type society, individuals have not only freedom of speech, but, even more important, freedom of thought. Therein, propaganda is repeated one-sided (biased) information that damages freedom of thought, and is unacceptable discrimination. Herein, it is important to be aware that some people desire freedom from the speech of others, which is a necessary design consideration.

Freedom of self-directed movement is the absence of subjective force and individual coercion. By degree, coercion negates both self-direction and freedom of choice through the application of subjective force in a direction neither initiated nor immediately intended by the receiver. Coercive force, whether subtle or outright vicious, is a form of [mental, emotional, and physical] violence; it is a form of violence that specifically generates a scarce state of need fulfillment, and when encoded into a society's socio-economic system it becomes 'structural violence'. One of the more common and subtle forms of coercion in early 21st century society is the statement, "If you don't do what we want, then we will cut your funding."

"If we are not sovereign over our own consciousness, then we cannot in any meaningful sense be sovereign over anything else either [and] cannot claim to be free in any way."

- Graham Hancock

3.1 Self-direction

QUESTION: *In society, are you only as free as your purchasing power, or are you only as free as your contributed solutions?*

Self-direction is a principal characteristic of freedom. Self-direction is an individual's ability to independently plan, learn, reason, problem solve, integrate & recall, regulate, initiate, integrate, organize & coordinate, and arrive at decisions. These regulatory processes [among many others] act in such a manner that someone may more accurately align their decisions with an intended direction, a 'self-direction'. Self-directed freedom allows individuals to act and to produce effects on their inward thoughts and feelings, within their own body, upon the course of their lives, and upon the environmental world in which they are in interrelationship.

Self-direction refers to the "self" directly acting toward a purposeful and meaningful direction. Herein, freedom could be characterized as a state in which an individual is pursuing those things that bring them joy, a state of flow, happiness, and higher potential opportunities; wherein they are pursuing their human abilities, pursuing knowledge and discovery, experience and novelty. And ultimately, they are pursuing their emergence into their

full potential as a human being (e.g., self-actualization and transcendence on Maslow's hierarchy of needs).

Self-direction involves the continuous emancipation and empowerment of the individual. There are certain mental processes that facilitate empowered and self-directed individuals, among which are self-directed learning and systematically logical integration. Wayward-directions not aligned with the idea of integrating reality for the purpose of need fulfillment might end up obfuscating true knowledge and conforming the individual into a state of perpetual dis-empowerment.

When self-direction is defined in the context of an individual who is still open to learning, then the term 'self-directed learning' arises. 'Self-directed learning' is learning that characteristically involves a focus on personal and self-growth. Therein, the learner takes responsibility for their own learning, their own curiosities and desired experiences.

If there were an innate intentional direction in humankind, then it might just be the drive for one's own self-directed freedom of thought and development,

LIVING ENTAILS FREEDOM

Freedom is appropriate and necessary for the ontological description of life's most elementary dynamics. The presence of freedom carries with it the burden of need and entails both an endangered material existence and a living continuum. Embodied existence depends upon an embodied system, a "primordial act of separation", detachment from the overall integration of things within the totality of [source] existence, positioning itself vis-a-vis the world, and thus, introducing an opposition between "being" and "nonbeing" into the indifferent assuredness of existence. Material-living substances accomplish this by assuming a relationship of precarious and continuous independence vis-a-vis that same matter which is indispensable for its existence (i.e., organisms have material needs such as shelter, water and food), and by distinguishing its own identity from that of its temporary material basis, which it shares with the entire physical world.

Being, thus suspended in possibility, is characterized through and through by polarity. Life always manifests this polarity in basic antitheses between which its existence is located: being and nonbeing, self and world, form and matter, freedom and necessity. Of all these polarities (manifested illusions), the one between being and nonbeing is the most fundamental. Identity is wrested from it in an extreme unceasing effort to postpone an end to the material that is inevitable - there is entropy. For, nonbeing has generality, or the sameness of all things, on its side. The defiance that the organism shows must ultimately end in compliance; selfhood eventually vanishes, never to return in the same form.

which is misdirected and stifled by the environmental structures imposed upon individuals by an aberrant society. This innate human desire toward thoughtful fulfillment may also be known as a self-direction "instinct". It is the instinct for betterment and for self-improvement, layered on top of self-interest, that all individuals innately have within them, but which is weeded out through trauma and conditions that limit. For individuals, the instinct for betterment can be overruled and damaged, but is not ever "broken".

Individuals cannot self-direct when they do not realize the presence of stimulus-response in their life patterning. 'Stimulus response' is a programmed (and programmable) autonomic response. The ability of an autonomic response to service the fulfillment-needs of an organism is contextual. When there is no memory of the program, then there is no "feedback" in the stimulus-response relationship. If there is no feedback information, then there is no ability to re-program the behavior to one of more thoughtful self-direction. Stimulus and response without conscious thought negates an individual's freedom of choice, it reduces their ability to strategically self-direct - if someone is not reflecting a philosophy that is reflective of the world, then they are going to be out of sync with the world, potentially in conflict with the world, potentially experiencing cognitive dissonance, and certainly, directed away from the fulfillment of their true self. That person's ability to self-direct will become [by degree] governed by their prevailing programming, and not by consciousness accounting for feedback from a decisive action in a common real world space.

Individuals cannot self-regulate when they lack the desire and ability to discover [new] information, and hence, explore reality while integrating that which they learn in a non-contradictory manner. Herein, it is unwise for the very stability of society, let alone the individual, to delegate one's observation and cognition skills to another or to a "leader". The very belief in authority leads to the non-resistance to authority and the eventual surrogation of one's own conscience to the authority itself (i.e., the negation of self-direction becomes "duty to authority"). All belief in authority is blind by consequence, inherently maladaptive, and obfuscating of the presence of stimulus-response.

It is important to clarify the term "leader" herein. The term "leader" has two meanings: the first is that of the authority as a "leader" who is directing others; and the second is that of the courageous "leader" who simply steps out to go first. In early 21st century society, individuals need more of the second type and less of the first. Regardless of the definition, it is wise not to put other humans on pedestals and make believe they are better than "you".

The belief in authority is a perpetual nightmare bereft of self-directed, self-empowered freedom, which is never attainable. The belief in authority is the belief that some person or persons have a special ability to determine what is true or false, and others must accept its dictates. The belief starts figuratively with "the seed of fear", and

this is why the belief in authority is a perpetual nightmare, for it always maintains (or "renders into consciousness") the experience of fear accompanied by the negation of the self-direction of consciousness. Wherein, fear can be used for purposes of social control. Instead of believing anything, it is possible to just leave it as an unknown (or, give it a lower confidence rating).

Freedom means not being beholden to anyone else, free to choose what one wants to do each day, free to move as best fits that day and ones intentions, free to use, adapt, and share information. It is possible for the population of a community-type society to live through cooperative organization [and the extension of its information processing function to automated technical calculation]. What is desired by all, if not, fulfilling lives and a society that each individual is proud of in the present, and proud to pass down to future generations.

NOTE: *Without self-awareness there is no awareness of one's needs found commonly among others, and hence, there is no real freedom, for one will not have recognized that the freedom to fulfill one's own needs depends on the freedom of others to have their own needs fulfilled in kind.*

3.2 Self-interest

INSIGHT: *Once morality leaves the people their freedom is soon to follow.*

In a community of needs, individuals tend to be self-interested in the sense that they seek to meet their needs, while expressing and honoring their feelings, and by doing so together, they can understand another human being and act together for their mutual fulfillment. Rational self-interest may be contrasted herein with selfish self-interest. Rational self-interest maintains a cooperative "let's all work together" mentality so that everyone lives a better life. It maintains the perspective that, "I am going to live better and you are going to live better". In contrast, selfish self-interest involves a lack of cooperation and consideration of others in one's actions; it is concerned chiefly with one's own personal profit or pleasure at the expense of another's needs. Selfishness involves the disregarding of others [needs] in action; it is "inconsiderate" behavior. Therein, "narcissism" is petty self-absorption and "hedonism" is petty self-pleasuring.

Self-interest can become, strangely and ironically, self-sabotaging, because at the end of the day all individuals directly, or indirectly, influence society, a society which influences them in turn. Hence, it is in everyone's self-interest to have a respect for the obvious reciprocal relationships that everyone has in society. The recognition that the self maintains a mutual relationship with the society, of which the self is a part, is likely to exist alongside a sense of responsibility toward both the self and the society. Herein, individuals are response able to their own fulfillment and to the fulfillment of others to be

inwardly free among society. Freedom of the individual is complementary with responsibility to society. The free and responsible individual is responsible to him/herself while also maintaining a responsible interrelationship with other individuals and the systems of which a given society is composed.

All human beings share the same ancestors and so they live in a 'human' family, within a larger 'earth' family. Race, class, and regional, national, and marketed-brand identities are a spurious and caustic abstraction. When individuals realize that are members of the human family and start to identify themselves correctly, then they conceptualize [and identify] to themselves that which is also common. "You" do not [generally] exploit those who "you" identify with, and healthy humans experience 'empathic distress' for the suffering of those with whom they identify. 'Empathic distress' is the emotive recognition of suffering in another being. Due to human neurophysiology, and its ability to feel and recognize patterns, individual humans are equipped to understand others perspectives (i.e., healthy individuals have the capability for empathy and sharing). And further, individuals have a reflective mind, such that one can ask oneself, "Is this the right thing to do as a comparison to doing another thing?"

Empathic distress may be observed through the acting out of elementary human solidarity. The human species would not have survived if individuals didn't have the need, often, for everyone's sake, to be of use to others. For instance, for humans to combine with one another, to take an interest in one another, and to feel worry when others are in pain. It is important to recognize that morality, as the ability to cooperatively evolve toward greater states of shared fulfillment, is innate in humanity and solidarity is part of one's self-interest in society. Humans can be of mutual service to themselves and others, together, given appropriate societal conditions.

A community-type society is designed to synergistically combine self-interest with social-interest into a regenerative state of freedom for all in the community. Every act of engagement with the Community is of benefit to everyone, and the beauty of that awareness is that it embodies a new incentive structure that facilitates true social and environmental sustainability. It is a value orientation that generates a steady-state/dynamic relationship between the individual and their total environment, while also eliminating the caustic and destabilizing inequalities perpetually reinforced under other social models.

INSIGHT: *The moment individuals don't have to worry about their survival, that is the moment they can actually use their intelligence to start something more deeply meaningful. In other words, humanity will have the freedom to start doing things that are more meaningful as soon as the variable of "how am I going to survive (today, tomorrow, a week, month, year from now)" is sufficiently dealt with.*

3.3 Money and freedom

Charging people for freedom [in access to the fulfillment of their needs] is an oxymoron. Work, as banal and repetitive labor in exchange for currency, and thus, survival, makes a mockery of freedom. There is psychological violence when one must do something that one thinks is senselessly aimless in order to meet their own needs and "provide for their family"; such an obligation for anyone reduces the potential fulfillment of everyone in society. Freedom requires work in one's relationships and in oneself.

NOTE: *People have a tendency to act with an increasing irrationality the closer they get to something they really want - the space between stimulus and response shortens and conscience decreases. In other words, people can easily become less free in their own thought and behavior the closer they get to something they are really wanting.*

3.4 Power relationships and coercion

"They tell you that it is freedom because if they were to tell you that it was slavery you would not have any of it."

- Anonymous

Compulsion can be fully expressed in a power relation, such as one between a parent and a child. It is a well-known fact that a person who is abused as a child is highly likely repeat the abuse on their own children (or other children), unless they never adopt or are able to overcome the compulsion. But surely this must be true of other power relations as well. The child bully, beaten at home, repeats the compulsion on weaker children. The boss, having some degree of power over others, uses that power to fulfill his compulsions in the form of lies, arbitrary orders, verbal abuse, and so on. The priest, having been molested by his "father" or another male family member, molests young boys in turn. The policeman, taught to humble himself to authority and accept punishment, craves to become authority, in turn, and punish others. And so on and so forth. Some people become more coldly controlling than others - their awareness becomes configured (or conditioned) differently. All social power relations [that involve social control] create the potential for the generational limitation of freedom.

One can be a slave and not know they are enslaved. Slavery is more than just a physical thing, it is also very much a mental thing. Slavery comes in many forms among which include: physical, cultural, generational, and psychological slavery. And, socio-economic systems can structurally reinforce slavery (e.g., wage slavery).

Anytime someone introduces coercion into the equation, anytime someone *threatens force or enforces a policy on another, or a group of people, then that individual is holding humanity back from its potential for getting*

along non-violently and cooperatively with decisions for individual autonomy and freedom. It is inevitable that a society requires some kind of organization and controls, but the organization and controls must originate from a place of intelligent, rational, objective, and responsible interrelationship; they must originate from a place of mutual human fulfillment.

Whenever coercion is discussed it must be discussed with the understanding that social conformity can be an exceptionally subtle and unconscious process - people can believe they are free when in fact they have become fully assimilated [and "conformed into"] a violent society. When someone is enculturated into a coercive society for many years in many forms, then coercion is the social norm, and any discussion of coercion will exist beyond the normative bounds of what the individual in the present society, and authority, defines as coercion. What the present authority does and supports is not coercive, but what the "evil" authority does is.

For instance, when individuals and organizations do not pay their required tax, then authoritarian pedestrians often say that they have "shirked their tax obligation". However, tax isn't really an obligation, it is a violent mandatory behavior. If someone does not pay his/her tax then s/he will have violence done to them; or if someone resists the payment of tax, then violence (often to death) is considered appropriate. If someone does not pay a taxation on life, under certain societal conditions, there is a possibility of loosing one's home and even, one's life. Therein, obligation is a euphemism for an actual monopolization on coercive force/violence.

Government is the ultimate embodiment of authority and of power over others. Government is based on the belief that humanity cannot be trusted with its own freedom. Governments show themselves [in part] by generating the existence of a national state security, protection, and enforcement apparatus - a governmental secrecy and [economic] security system, and a police force for forcing law upon the State's "citizens", the "public". The idea of "plausible deniability" (i.e., the idea of not being able to confirm or deny information) becoming the ultimate form of conceptualized and encoded State secrecy; wherein, freedom loses all meaning. The State is the creation of dominance opportunities. And physiologically, the triggering of individuals' desire to control others can be rigidly compulsive, if not destructive in character. Security is all about intrusion prevention (i.e., preventing intruders). Often, if the trigger/incentive is taken away, then the problem won't exist.

All governmental regimes [in part] control their populations through fear and subtle intimidation; therein, impulses become cultivated rather than consciously corrected.

In general, government exists to be the public's master. Often, "they" who see themselves as "government", in turn, see the "public" as helpless and ineffectual [in creating their own (or any) state of fulfillment] -- the public needs government to protect, and provide for, them -- the public are neither resilient nor self-reliant

without government. It is hard to break free from this diminutive paradigm of group thought. Group think freezes individual thought; it abates conscience and curbs the ability to organize a truly fulfilling environment in a cooperative manner. "Herd instinct" (or "consensus trance") keeps people oblivious longer than one might think they would remain oblivious. Groupthink freezes the individual's ability to critically examine a situation. When a society is carried along in collective groupthink, the population risks much.

When individuals stop defining themselves as "citizens" they become less vulnerable to being misled or cowed by the insular scams of a nation state. Herein it is wise to remember that wherever there is power over others there is abuse as a natural consequence. And in competition for survival someone will always want a taste of that power, to which even the kind-of-heart are likely to become seduced. In government, power is not the will of consciousness to move objects, but the hierarchical "force of arms" and "rule of law" to move objects. Social hierarchy subsumes individual power.

Integrated understanding does not come from coercion or force or violence, it does not come from schooling. Therein, authority brainwashes people away from self-reliance; wherein, personal responsibility is the essence of self-reliance. The methodology of some social systems is to remove individuals from the source of their wisdom and knowledge, their own body intuition, and their own restorative-healing and self-regulation/self-integration processes; instead, those with power want to be the purveyors of knowledge and medicines, and the "public" their supplicant, whom they can give to or withhold from.

Some of those who believe in authority go so far as to say things like, "Violence against you is good and right because you didn't respect the certification of my authority by the larger authority of the club, gang, or government". In general, authoritarian structures use a hierarchy of power over others to maintain control, and to influence. Yet, societal conflict doesn't have protagonists, certainly not heroes, mostly everyone is a victim -- Hollywood's TV and movie heroes are purely fantasy. The stories individuals are sold by commercial media and government propaganda are not capable of being coherently integrated and are highly conditioning. Commercial experiences are designed (and manufactured) by commercial and other industry interests for the perpetuation of commercial and Statist beliefs and values. Heros are commercial amusements; they generate revenue for commercial interests; they are de-contextualized and fantastical creations that subtly reinforce and normalize aberrations and unrealities; they are distortions; and they are often conditioned into children through fairy tale narratives. They are not the teachers or the idols of the intellectually liberated. They are the protagonist contestants in an amusing and visually dramatic game. They are the soldiers with PTSD. They are the gang members. They are the maimed and injured operatives. They are the traumatized and

unrestored. They are not leaders, they are victims; and, their integrated learnings will help everyone evolve.

What is the meaning of freedom in someone's life, when freedom means, "free under government"? Therein, choices are generally limited to 'exploiter' or 'exploited'. The adoption and the acceptance of exploitation leads to the impoverishment of the lives of all.

If "you" believe in government then "you" believe that "we" need violence and slavery to prevent violence and slavery. To believe that authority is necessary, and must continue, is the same belief that the State is necessary and must continue.

Herein, freedom (or liberty) is the absence of impositions from any exterior determinism, it is what some might call "negative rights," freedom from coercion. In a "free society", all organizations and objectives must be cooperatively determined by the individuals involved. There are many different ways to derive liberty: from the disproof of transferring exterior obligation (being impossible for an exterior determinism to impose any moral obligation), from the need for free will (in order to be able to act on one's values in a decision space), from the premise of equality (because coercion necessarily entails that one person's fulfillment is exploited for the sake of another's), and so on.

That which is being discussed here is not freedom of constant opting among infinite alternatives for self-gratification or the voting in of the next politician who professes [quite hypnotically] Hope & Change, but a freedom of a social evolutionary continuum in which persons have the freedom to cooperatively interrelate for the fulfillment of everyone's needs. When aberrant socio-economic conditioning dissipates, then intelligence may appear as the natural capacity to maintain environments where individuals exercise higher potential state-dynamics of free choice in all aspects of their personal and social lives. What is the meaning of the word "hope" when individuals realize that it is their intention and effortful action to improve their condition that actually has a positive effect on the world. In a sense, hope is for the entitled and disenfranchised, not for those with a sense of self-sufficiency and self-empowerment. Which is [in part] why it works so well as a slogan for the election of leaders in some States societies.

In between stimulus and response there is a space for processing and for questioning, for inquiry into higher potential states of existence. Who is not free, who does not have a processing space between input and response? Enforcers and other soldiers do not. Those people who give and receive and follow orders. Soldiers have to essentially arrest this natural thinking ability in order to fulfill their "duty". When this self-reflexive questioning process is removed, when conscience is removed, then individuals are turned into collective, programmed input to output machines for the purposes and agendas of "leaders" and other authority, power wielding figures.

Freedom represents a lack of authoritarian constraint, whether those constraints be the internalized policeman

generating neuroses or external policemen generating psychoses. Yet, fear is the ultimate constraint. A fulfilled individual lives a life without F.E.A.R. (False Evidence Appearing Real). It is ironic that some societies find it acceptable to express their love and desire for freedom when the individual surrenders theirs to join that society. The idea of "patriotism" is the epitomization of the surrendering of freedom to an [ideal] authority.

"It is dangerous to be right when the government is wrong."

- Voltaire. *The above quote could be redirected toward the market, "It is dangerous to have an abundance of solutions when business has an abundance of products."*

This is what social control is all about: giving people a stimulus or input and waiting for them to regurgitate an automatic or pre-conceived response, a memorized and patterned response, a strategically planned and conditioned response (e.g., problem-reaction-solution). The very purpose of school is to create a uniformed pattern of response to authority -- that is and was its intended design. What most people in early 21st century society don't have is that intermediate lifeground, the logical stage of figuring it out for oneself rather than taking the word of authority and responding through triggered attitudes and pre-determined narratives.

There is an implied agreement when individuals with conscience come together as a group that they will "not punch each other in the face" (i.e., not intentionally inflict suffering on one another); yet some societies codify that agreement and create a social/ethical obligation not to violate it: "I surrender my freedom to punch you in the face and create [authority as] a "rule of law" to punish you if you punch me in the face (as legalized consequence). I surrender my freedom out of *fear* of getting punched in the face."

The concept of "law" allows for the monopolization of conflict by a single entity, generally known as government, or the State. Government exists to assume power from individual consciousness ("farming individuals"), and it does so by monopolization of violence and conflict. In the State, everything exists only with the permission and the behest of the State. Many authoritarians (as those who believe in authority) then go on to claim that people are too stupid, broken, and violent to fulfill and care-take themselves -- they actually require authority, they have a need for authority ... because they are broken ... or because of the gang next door. Early 21st century society is structured in order to exploit the product of and to reinforce the "maladaptive fallacy". The maladaptive fallacy is the assumption that humankind is flawed, evil, and broken. In order to correct that "pathology", early 21st century society has socio-technical organizations such as, the military, the police, the government, the psychologists, the professors, the politicians, the priests, the charities, the businesses, and their ilk, whose purpose is [in part] to reinforce the belief that humanity is flawed.

One cannot ever be exercising conscience if they are following orders, which are always based on duty to authority. The two things are antithetical to each other. Following orders does not involve a wilfully active process of inquiry and participation, the self has been abdicated. An order follower becomes engaged in the monopoly of violence perpetrated by the belief in authority; s/he becomes engaged in re-generating the very structure that creates a state of un-/dis-satisfaction with life. This is why an order giver (or "controller"), desires to own the mind of the follower; s/he needs to have influence over the thoughts of another person and maintain that influence so that they reciprocally own their behavior. And, this is [in part] why some people could very easily come to the conclusion that the term "government" actually means "to govern the mind" (*govern ["to control"] + the Latin mente ["mind"] = to control the mind*); though the etymology of the word might indicate another conceptual understanding. Regardless of the word's recognized etymology, in its practice, the orders that are dutifully carried out by those who believe in authority and in government are done so through a form of mind control.

Some people appear to be looking for a master to give them permission to be free. These people are no closer to being free than a slave who has been purchased by a more gentle slave master, one who doesn't work him as hard and gives him more choice. The slave is literally no closer to being free, even if his / her daily life is more comfortable and s/he feels like s/he has more freedom. The underlying lie still exists - that s/he is the property of someone else. As long as the belief in authority remains, then an individual is no closer to being free. For example, someone who lives under the domination of a less violent State and believes in their State's form of governance may be more comfortable on an emotional and practical level, but they are no closer to being free. In a sense, they are farther away from the expressed manifestation of freedom because the more painful a forced and coerced experience becomes, the more likely someone is apt to consider that the whole system is a joke. The slave who understands that s/he is not the property of anyone else is more free than the slave who is owned by a nice master and has yet to recognize the truth of who they are.

INSIGHT: *Legal freedom does not equal freedom [in a community-type society]. In other words, a legal freedom is not a freedom; it is a privilege given from authority. The authority is the law, which gives the right of freedom that it will not use its monopoly on violence in a given situation.*

3.4.1 Security contradicts freedom

"They who can give up essential liberty to obtain a little temporary safety deserve neither liberty nor safety."

- Benjamin Franklin

It is relevant to note herein that 'security' [wherein secrecy is an inherent characteristic] is not equivalent to 'freedom'. The "state of security" does not equal the "state of freedom" - they are not congruent values. Security (and secrecy) is a force with the characteristics of restriction and constriction. Conversely, freedom is a force of expansion; particularly for the expansion of more informed and self-expressive choice. When a group of individuals focus on security, then freedom will likely become hard to maintain because of the advancing restriction of liberties (or "personal freedoms") to maintain the State (or condition) of security, of restriction. Hence, security and freedom are an example of conflicting values. To quote the assassinated U.S. of A. president John F. Kennedy,

"The very word secrecy is repugnant in a free and open society."

It is a linguistic trick to refer to a society as "stable" when change and adaptation are prevented from occurring through secrecy and security. Such a society is a parody of a truly stable society where identification, connection, reason, mutual relationships, and morality are the fostered norm. The choice between fulfillment and security is no choice at all. The engineering of a loss of individuality for the existence of security, and hence, a divergence from nature, will not produce a society where people live "happily ever after"; instead, it is likely to produce disassociated persons who believe in and are conditioned by fairy tales. When change becomes a menace to a supposed "stability", then there was no real stability to begin with. Dis-continuity and dis-integration are what shape a secretly secure environment.

People don't know how much they don't know about something when the socio-economic system as a whole is structured to be a secret, or the incentives are structured around secrecy. The perception that secrecy and security create value leads to the organization of systems and the selection of decisions that are not aligned with a dynamically informed environment - they shut off the feedback mechanism and prevent adaptive evolution. Even implying the existence of a secret can cause problems among society.

Secrecy is opposed to transparency by its nature. Essentially, "to secret" means to (Read: one of its principal characteristic is) limit the number of people with information or people with the ability to impact something. It is a form of restriction that propagates authoritarian rules about the nature of reality without free thought, it conditions a belief about the optimal way of operating within reality while reducing the ability to affect and participate with ones' environment.

Secrecy eventually becomes surveillance, the panopticon (an architectural design by Jeremy Bentham). The term, panopticon, is a noun, *pan* "all" + *optikon* "of or for sight" - a circular prison with cells so constructed that the prisoners can be observed at all times, both by

the guards and by other prisoners. In Greek, panoptos means "seen by all". The center guard-observation tower could be darkened inside so that the prisoners never knew when they were being watched by the guards. The whole point of the panopticon is that "you" never know when "you" are being watched so that "you" internalize the policeman. In a panopticon the prisoners can see each other, and so, they begin "watching" themselves [to see who misbehaves]. It is a pathway to eternal self-destabilization -- "carry your own inquisitor with you at all times".

"The only way you can have perfect security is to have total surveillance."

- George Orwell, [the book]. 1984

In "Discipline & Punish: The Birth of the Prison" (1979: 203), Michel Foucault notes that the structure of the Panopticon reflects the optimization of homogeneous power through surveillance. The principle which Foucault is trying to illustrate therein is that the architecture may become an apparatus for creating and sustaining a power relationship independent of the person who operates it. In other words, it is the architectural form of the panopticon which helps to engender a form of social control (Leach 1999:120), and this confinement structure can help to fulfill this social control by a coercive power. Therein, when the guard tower is dark, then surveillance is always possible, but never verifiable. The guard(s) can always see the prisoners, but the prisoners cannot see the guard. On a value-neutral sense a panopticon prison is a tremendously useful setup for the guards of a prison. But, it is not only a way to design a prison. Foucault asks rhetorically, "Is it surprising that prisons resemble factories, schools, barracks, hospitals, which all resemble prisons?" (Foucault, 1979, 228) For Foucault and Bentham, social control through architecture can be generalized to different areas of society.

Here are few examples where normalization is applied into confined places:

Table 1. Table showing the relationship between market-State institutions and control of behavior and of life in general.

Institution	Biopolitic/Biopower
Hospital	Control of health
Prison	Control of behavior
School	Control of ideology
Factory	Control of work

A security State may prefer the ease of governing a population that polices itself (i.e., adopts an authoritarian conscience). Early 21st century society is engineered to have people internalize the control on their own. Compulsory schooling facilitates the conditioning and then there are prisons to lock people away and make money off of those who still don't internalize the control. Herein one might come to realize that the statement,

"I'm always on duty" is a symptomatic reflection of having full internalized authority in place of freedom. Human freedom is not found in duty to authority, but in duty to oneself and all of humanity.

INSIGHT: Victory and sacrifice are two sides of the same ruinous coin.

It is the height of naiveté to think that once collected, useful information for competitive advantage won't be used. That is the nature of secret government organizations. By "hook or crook", or so the saying goes. It must be asked, if technology can be an engine of surveillance, then who has the privilege of turning on and off monitoring devices in society? And then, one might have to admit that at least, in part, 'security infrastructures' are a [marketable] hedge against human conscience and represent a reduction in freedom in-kind. Secrecy allows those who would abuse power to secretly influence outcomes.

Can it not be said that people are more free when they have more accurate information? Individuals are more free if they know what their devices are doing, and that they are not betraying them to an authority. Individuals are more free if they know the truth of the [real] world. Individuals are more free if they can access the science already funded, which would be accessible and evolvable/adaptable by the social population if the materialization of an abstraction, [ownership + authority] no longer ruled society.

Fundamentally, one can't predict among a significantly large population who will have the idea that benefits everyone. All must have access to humanity's understandings of the world and all must have access to a system designed to facilitate their participation in the evolution of societal understandings and systems. Anybody and everybody has genius in them; everybody has potential that deserves nourishment. In early 21st century society, however, information sharing is antagonistic to profit, to "rights" of ownership, and to security and secrecy services in general.

"None are more hopelessly enslaved than those who believe they are free." Or, "Those most helplessly enslaved are those who believe they are free."

- Goethe

The only thing information wants is for humans to stop anthropomorphizing it. Information is neutral. Information wants nothing, but people want to be free. And, for people to be truly free they need access to accurate information about themselves and the systems that they use. A society rates low on the fulfillment scale when channels of information are "closed", controlled, or manipulable by only a few people, and also, when "citizens" have to accept what they are told [by the authority].

Humanity can choose to create and use technology that makes it more free, or technology that takes away

freedom. Humanity can choose to create and use systems that are more open, or it can choose to use systems that serve a few at others expense.

Humanity uses technology to organize, but it has to organize to keep the technology "free" in a larger system that values security. When John Gilmore said that the Internet interprets censorship and routes around it he didn't mean that it had a magical anti-censorship component, he meant that intelligent people who use the internet will take affirmative steps to make it harder to censor. Any system can go wrong, and a population needs a way to either reform it or disconnect from it and generate a new system. Security removes that freedom for adaptation and action by concealing information and thwarting actions that may be used for the free, self-directed evolution of individuals. And yet, [open cryptographic] security is necessary for freedom within the State of security represented by an authority.

Freedom is eroded without trust in the system that maintains the coordinated organization of one's freedom in a social environment. And what greater disintegrator of trust is there than that of secrecy. Secrecy rapidly erodes trust. Is there a circle of suspicion or is there a cooperative system of trust in "your" society? A climate of fear breeds a state of silence; and, a state of silence feeds denouncers. A denouncer is someone who will report (i.e., denounce) "you" to an authority.

Occulting knowledge can quite easily create a power differential. Therein, when knowledge can be "gained and owned" it establishes a mechanism for power acquisition. Systems that divide the concept of 'power' [from the individual] will maintain the characteristic of competition over resources, and of persistence in scarcity [for competitive advantage]. In competition it is useful to dis-advantage a competitor. Competition over resources leads to uncertainty and results in impulsive and irrational behaviours that further fragment an individual's self-directed power to affect and change their environment. When self-direction is derailed then learning is de-railed, and hence, adaptation is artificially limited (i.e., freedom is reduced). Herein, it is important to recognize that malicious intent at a social level often requires *secrecy, deceit, and social power*.

One of the larger problems facing human civilization, it might seem, is, 'impulsiveness' - a focus on short-term goals, at the expense of what might be best for in the long run (i.e., strategically). This is another evolutionarily widespread trait—many animals appear to show impulsive behaviour [given a set of environmental dynamics]. Impulsiveness is not necessarily 'irrational' from an individual's point of view, but often, it can create problems for future generations - there are a probable pattern of consequences to decisions; and in competition, those consequences risk a species future fulfillment.

How anyone in their right mind could ever rationalize that a balanced, peaceful, aesthetic, sustainable, and meaningful world could ever come out of open competition, and hence open warfare—from individuals

competing against each other for work, to businesses battling each other for market share, to governments competing against each other for economic dominance (which is the unstated purpose of every intelligence service), has quite an odd view. Such a society will manifest as protectionist and warlike, and appear to any objective observer to maintain a security-based orientation. A competition-based socio-economic system is a paralysing and detachment promoting system of selfish-serving agendas which generates parasites and prostitutes.

When individuals are little kids, they might first learn about secrets through, say, keeping a birthday present as a surprise; and it might feel fun and exhilarating; but as individuals develop complexity, and their lives become more complicated, so to do their secrets, and secrets become not quite as fun. Secrets wiggle their way into psyches and socio-economic systems. They dissolve trust in oneself and in ones social relationships.

What might science have to tell humanity about big, damaging secrets that might be held on to, and that eat individuals from the inside out, maybe for years? A study published in the *International Journal of Behavioral Development* by Anita Kelly found that young adults who admitted to keeping a secret had lower levels of self-control, prior levels of loneliness and depression, and their personal relationships were compromised. The researchers checked back in with them six months later and those who had revealed their secrets showed a dramatic improvement in "symptoms". The study found that the women were more likely than the men to have secrets, and that they were also less likely to share them. (Kelly et al., 1999)

Also, a study published in the *Journal of Social Psychology and Personality Science* found that secrets actually feel physically burdensome; such as when people talk about "having baggage" or "feeling heavy". People who were given the opportunity to tell their secret felt no such burden. Also, people in the study who were told to focus on a personal secret judged the hills of a landscape to be steeper and distances to be longer than they actually were. (Slepian, 2013)

One way or another human brains usually find ways to purge themselves of distressing secrets, which could be, for some, through the manifestation of physical maladies. It is cognitively difficult to suppress secrets due to a mental process known as 'ironic monitoring', which promotes sensitivity to unwanted thought. The process of 'ironic monitoring' subconsciously surveys for unwanted thoughts (mental energy drains, open loops, and contradictions), eventually bringing them bubbling to the surface where they become a part of the intentional operating process, which is conscious awareness. (Wegner, 1994) In other words, secrets will continuously "haunt" someone until the dissonance they create is resolved. Keeping secrets feels like crap and it creates a crap society.

Not having cognitive closure makes some people very uncomfortable. It is destabilizing to people to different

degrees and over time.

NOTE: Under the state of authority someone's dissent is likely to be pathologized. Consider "drapetomania". Drapetomania was a conjectural mental illness that, in 1851, an American physician hypothesized as the cause of enslaved Africans fleeing captivity. [en.wikipedia.org].

3.5 Information-technological user freedom

At the societal level, there are three forms of information-technological freedom for a user:

1. Freedom - freedom to use, distribute and modify knowledge in universally available common pools.
2. Libre (free) - free for access without money, not as in 'gratis'; trade free means that nothing is asked from another human in return for that which is provided/contributed.
3. Open - the ability of anyone to access, contribute to and use common resources.

The sustainability of these freedoms at increasingly large population scales means that users have access to information and resources (more generally, resource compositions) through some coordinated societal system.

3.6 Freedom from disease

INSIGHT: Dis-ease is likely to manifest when freedom dissipates.

Beings who are unwell and have an awareness of such generally have a deep desire to be dis-ease free, to have physical well-being. Disease might be understood as a deviation from the optimal functioning of an organism's systems as pertaining to a given species. Therefore, health is freedom from (or the absence of) disease. For instance, "freedom from malnutrition" and "being free from malaria" need not be taken as sophistic rhetoric; there is a very real sense in which the freedom to live the way one would like is enhanced by [or even exists because of] organization that usefully transcends epidemiological and economic environments to support in maintaining healthy human organisms. Sophistry is the presentation of an invalid argument in an emotionally compelling manner. Sophistry might involve unconscious biases and irrational preferences, or it might be intentional.

When an interaction involves a relationship with that which factually exists, then an individual simply does not have absolute freedom or infinite want. Phenomenological, material nature is a "hard" and truthful restraining force. Wherein, nature can be discovered and individuals can use their discoveries of it to create the life they desire -- a life of freedom from

unwanted dis-ease (and suffering) within the emergently known bounds of [technical] reality. Fundamentally, there is no such thing as "being free from nature" - to be free from nature is to be free from that which creates (or allows) existence. To maintain a value orientation of 'freedom' that is out of alignment with nature, and then apply that orientation to the operation of a global economy has become increasingly catastrophic to human health and dangerous to sustainability on planet Earth. The integrity of any social and economic model is best measured by how well aligned it is with the known, "governing" laws of nature [and not the external social "governing" by others].

"In any point of this grand enterprise called society if it is not about nourishing human freedom in the most fundamental and meaningful sense [then it is not aligned with any meaningful direction]."

THE MECHANISTIC PERSPECTIVE

Under the mechanistic perspective, once "objective" data have been collected, theory becomes the process of offering a plausible and testable explanation for the observed behaviors. Mechanistic theoretical interpretations take two forms. In one case, they link one or more primary qualities of behavior to specific antecedent conditions. For example, the child behaves in a certain way because of the way the parent behaves (i.e., conditioning), and the adult works harder because the company rewards productivity with salary increases (i.e., extrinsic motivation). In the other case, internal mechanisms are hypothesized as a mediating link in the chain between antecedent cause and subsequent behavior. These internal, mediating events are not seen as causing the behavior in the same way as above (the efficient cause), but rather, they are the physiological, neurological, or genetic factors that make the behavior possible (Read: a material cause). In either case, a direct link is made between the cause and the effect.

To the simplistic mechanistic perspective, "secondary qualities" (e.g., emotions, motives, aspirations, etc.), are often of little interest to mechanists, because they are less easily observed or reliably inferred, measured, and located. Mechanists would not argue that people do not experience these things. However, they argue that secondary qualities are best studied and understood by focusing on behavioral change and the efficient and material causes of this change.

This issue is only noted here because the systematic reduction of human behaviors to antecedent causes has been attempted by all social sciences in the twentieth century and has produced their dominant paradigms (Skinnerian behaviorism and Prussian schooling, as just two examples).

- Graham Hancock in documentary "Freedom" by
Pieter-Jan Ardie

Organisms that exist in a state of chronic stress are not healthy, and systems that innately generate chronic states of dis-ease are not freedom facilitating (or "free living") environments. Hierarchical social power arrangements (i.e., social governance) are an example of an environment that innately generates states of dis-ease in a given population. Biologists Robert Sapolsky and Lisa Share followed a troop of wild baboons in Kenya (the KeeKorok baboon troop) for over 20 years, starting in 1978. Their initial research found that the aggressive hierarchical social arrangement of the baboons lead to the appearance of stress markers, such as increased heart rate and higher blood pressure, and eventually, stress related diseases in those baboons of a lower rank in the social order. Therein, high status males would violently lash out at females and lower status males. The initial results of the research indicated that in the baboons' society, ranking played a determinant role in the level of stress hormones in a baboon's biological system - the higher the rank, the less indication of stress and related disease. Robert Sapolsky states,

"Primates are super smart and organized just enough to devote their free time to being miserable to each other and stressing each other out. But if you get chronically, psychosocially stressed, you're going to compromise your health. So, essentially, we've evolved to be smart enough to make ourselves sick."

The oppression from hierarchy has a direct bio-physiological effect on the body. One of the scientifically studied effects of the experience of oppression (i.e., social rule by another) is the suppression of the immune system. And, the immune system is an organism's greatest protection against the biggest dis-ease killers, whether they be heart disease and cancer in the developed world or infectious diseases in the developing world. The immune system quickly becomes suppressed through psycho-social [structural] stress, through the suppression of the self within a dominance hierarchy -- how someone feels with regards to their life, their boss', the economy, the social environment, and in the nuclear family all have a direct effect on one's health and one's probable lifespan.

In his book "A Primate's Memoir", Sapolsky (2012) details his study of the activities and lifestyle of the KeeKorok troop of baboons in Kenya where explores the relationship between stress and disease. The book describes how in typical baboon fashion, the males behaved badly, angling either to assume or maintain dominance with higher ranking males, or engaging in bloody battles with lower ranking males, which often tried to overthrow the top baboon by striking tentative alliances with fellow underlings. Females were often harassed and attacked. Internecine feuds were routine.

Through an unexpected twist of fate while Sapolsky

was studying the group, most of the aggressively hierarchical males (i.e., alpha males) were wiped out due to the consumption of pathogenically contaminated trash (contaminated with TB). The death of the males drastically changed the gender composition of the troop, more than doubling the ratio of females to males (Read: a reduction in the scarcity of sexual partners). The death of the "enforcers" (i.e., alpha males) also led to a change in the social-orientation of the remaining males. And, by 1986 the troop's behavior had changed considerably - males had become significantly less aggressive; and, a latter analysis of their blood work in 1993 found that males lacked the distinctive physiological markers of stress, such as elevated levels of stress-induced hormones [which were present in the control group]. Also, Sapolsky et al., found that when males came in from neighbouring troops they were "taught" and adopted the new "chilled out" lifestyle. Essentially, they adapted to the lack of enforcers with a more cooperative culture that has persisted years later.

As a final note on the subject of freedom from disease, it is important to recognize that some deficiencies in fulfillment (e.g., sufficient nutrition) coupled with pseudo-satisfaction (e.g., food additives) create cravings and addictions that are extremely difficult to deny. And, when these cravings and addictions are coupled with a socially competitive hierarchy it is no wonder that greed and ignorance and perversion are rampant in early 21st century society.

Yet, how terrible would it be if the body didn't give consciousness signals (cues) as to what is needed to acquire, and, when to acquire it. When individuals truly free themselves, then they may find that they also free themselves from the cravings that control them.

3.7 Self-organization

Freedom at the conceptual level of understanding represents the essential property of life itself, which is at least consciousness embodied within biological self-causation. The ability to self-organize is the strongest form of system resilience. When identity is applied to action there becomes causality and probability. Since biological action is a self-initiated goal orientated response (SIGOR) to environmental stimulus and challenge, such action ought not to be predetermined by any extrinsic cause. Any extrinsic cause, such as force, coercion, (e.g., extrinsic motivation) and even structural violence, would be [experienced as] a violation of self-generated action and could only be detrimental to healthy living processes. Fundamentally, motility is a self-initiated effort (e.g., volition), and the motility of a living organism is a self-initiated goal orientated action (SIGA); wherein, volition starts with self-causation, a violation of which starts with the fear of authority. Motility is the end result, not the cause. Only a living entity can have goals or can originate them. And it is only a living organism that has the capacity for self-generated, goal-directed action. On the physical level, the functions of all living

organisms, from the simplest to the most complex—from the nutritive function in the single cell of an amoeba to the blood circulation in the body of a man—are actions generated by the organism itself and directed to a single goal: the maintenance of the organism's life.

Consciousness, as well as biology ("as within, so without") is observed as a sequence of discrete self-initiated goal-oriented system responses (SIGOR) to events. Therein, consciousness is the experience of a dynamic state of existence in a common reality system through its own self-instrumentation. A crucial difference between a cell (including but not limited to a neuron) and a transistor on a silicon chip is that the former arrangement of matter can autonomously and adaptively modify itself in response to its circumstances, whereas the latter cannot. An everyday example of this biological capacity is provided by the healing response: a damaged organism can often stem the loss of precious bodily fluids, stitch itself up, and (with some scar perhaps) continue living. All individuals witness this capacity regularly in their own bodies.

Freedom [within a decision space] is a property of

conscious life. Life is an emergent phenomenon and as such it possesses new properties (notably, a decision space) that its precursors do not have.

Being responsible for one's choices is the first cause of those choices, where first cause means that there is no antecedent cause of that cause. The argument, then, is that if consciousness is free [by degree] (i.e., has free will), then consciousness is the ultimate cause of its actions. If determinism (as a paradigm) is true, then all of the choices of consciousness are caused by events and facts outside its control (i.e., there is no decision space for consciousness). So, if everything consciousness does is caused by events and facts outside its control, then it cannot be the ultimate cause of its actions. Therefore, it cannot have free will; it does not have a decision space, and hence, there is no integration, and essentially, no learning.

In their book "Biological Self-organization" Camazine et al., (2003: 8) define self-organization as:

"A process in which pattern at the global level

FREEDOM ISN'T FREE

One of the slogans of "Big Brother" in George Orwell's novel entitled Nineteen Eighty-Four was "Freedom is slavery". People in early 21st century society really need to examine what they think "freedom" means, because it might not mean what they think it means. Take the slogan "Freedom isn't Free", for example. It is used as war propaganda in early 21st century society. War propaganda has been around as long as wars themselves and those in power use slogans to invoke a sense of duty and bravery in soldiers. Such slogans appeal to a sense of pride and patriotism, signaling them that it is their time to step up and become part of something bigger. In plain words, they are used to convince "citizens" to obey orders without questioning. In truth, freedom was always free. Only warmongers have put a deadly price on it. The "Freedom isn't Free" meme is classic and tragic Orwellian language. It is effectively saying, "Freedom requires you to give up freedoms." Is there a more classic "Newspeak" than that? George Orwell once said, "But if thought corrupts language, language can also corrupt thought." In some cultures warring against a supposed menace gives people purpose in an otherwise purposeless society. Many people [in a socio-economic state of perpetual competition] don't know what to do with their lives when they aren't fighting an "enemy". They need to desperately believe that the others continue to be a threat to them for it gives them purpose and a "spirit of community" cohesion. In reality, war is about resources and the defense of power-based ideologies and it revolves around the belief that "there isn't enough to go around". Often, war is a geopolitical strategy power-play for industry. Therein, the 'state of war' is the 'state of terror' [against human fulfillment]. Herein, we must ask of those warring against "terrorism", are you having a war on the consequences of the actions you are engaged in? Is it fulfilling to have a war on an abstraction; one that will be eternal and pointless? The marketing campaign around "terrorism" is designed to bring out your instincts of protection and reciprocal social obligation. Here, terrorism is the act of scaring a populace into making a favorable political choice. Terrorism is seeking to change political power (Read: a jurisdictional monopoly on violence, through violence. If terrorism is defined as someone who uses the threat of violence to manipulate others with fear. In other words, terrorism is the use of violence to induce fear in people in order to get them to conform. Yet, a strict definition of terrorism includes the characteristic that it is applied to influence government (policy). Now, consider how government uses the threat of violence [as law] to "organize" society. Yet, the authority will always claim that terrorism is what the enemy does; when "we" do it, it is "heroic action". If terrorism is a political action, then what about a society that doesn't have a political/governmental system? The moment we start thinking of other humans as the enemy is the moment we start tearing each other apart and doing the terrorists work for them. One could use a dog with fleas analogy here. The fleas on the dog do damage, there is no question. But often it is the dog itself scratching and biting to try and get rid of the flea infestation that does the real damage.

Terrorism is the war of the poor, and war is the terrorism of the rich.

- Peter Ustinov

of a system emerges solely from numerous interactions among the lower level components of the system. Moreover the rules specifying interactions among the system's components are executed using only local information, without reference to the global pattern. In short pattern is an emergent property of the system rather than being imposed on the system by an external ordering influence. ... The system has properties that are emergent, if they are not intrinsically found within any of the parts, and exist only at a higher level of description ..."

From this definition it follows that:

1. A process of self-organization may have probabilistic antecedent events (or "causes"), but cannot be absolutely determined by antecedent cause. Life is a self-sustained and self-organized process, and it does not have an efficient cause; life is self-causation. Any interaction of a living entity with its environment is a self-initiated, goal-orientated response (SIGOR). Note: This explains [in part] why 'conditioning' versus facilitation of intrinsic motivation and access to knowledge and tools can be so harmful to an individual.
2. The emergent properties of a system are different from the properties of its components, and therefore, cannot be explained by means of reductionism (Read: principles of lower-level organization are not sufficient as explanations for higher-level [systems] structures).

In other words, the properties of a system may be probabilistically described by prior events in the system, which can be calculated; and, an understanding of the properties of the system comes from exploration of the system as a whole. Antecedent practice lays down physical neural pathways fostering later habitual actions (as probabilistic affects). However, the final and perpetuating properties can only be understood by looking at the emergence of the system as a whole. Antecedent events (or causality) have a probabilistic effect on the next iterative decision [space] of an embodied consciousness - they may be said to play a principal role in determining a decision space, but they do not determine a final decision.

Emergent properties cannot be reduced to the properties of parts, by definition. Take for example two halves of a rubber bouncy ball. None of them can roll. But if you put them together you will get an emergent property of rolling. No inanimate object appears to have a property of self-initiated goal orientated action (SIGA), let alone consciousness and or an effector (Read: something which initiates an effect on the environment around it). This applies, as well, to the very complex macromolecules which are the building blocks of living organisms. However, the process of their self-organization created a living organisms with such

emergent properties. It would be a useless exercise to try and explain SIGA at a molecular level for material embodied life [appears to] start at the level of cell. Living organisms "act" and are not usefully "acted upon". In the words of Robert Rosen, they are systems which are closed to antecedent cause. Unlike inanimate objects they are driven by self-causation.

Living systems are open self-organizing living things that interact with their environment. These systems are maintained by flows of information, energy, and matter. Life is self-organizing, self-regulated material structure, which is able to produce self-generated goal orientated action (SIGA) when the goal is preservation and betterment of itself. This emergent identity, which is applied to biotic action and conscious decisioning, defines a type of causation known as 'self-causation'. Note herein, the self is the cause, the self is not property (Read: "self-ownership" is social construct). All levels of living action, from a cell's protein-synthesis to a scientist's investigations, are goal-directed. In vegetative action, past instances of the "final cause" act as "efficient cause".

This is the mechanism of self-causation. Now, it is clear why any action imposed on the organism and driven by antecedent cause (the claim of an absolute decision without space [as in, authority]) could only be detrimental - it inevitably would interfere with the self-generated action of the organism. Each and every organism is its own "primary mover". In the low organisms the degree of freedom of action (or "decision space") is limited by their genetic set up. However, even low organisms like fungi, for example, have been shown to be capable of overcoming this genetic determinism. Rand (1964) observed,

Note here that an embodied organism has to initiate goal-orientated action in order to obtain energy for its self-sustainment: plants turn their leaves toward the sun to optimize photosynthesis, lions hunt prey, and humans use their minds in the creation of tools. In other words, in order to get energy an organism has to spend energy first. Fundamentally, we must have a means as life to continue on as life. Life through means of life to more life.

SIGOR is limited by an organism's perceptual ability and capacity to process (or compute) sensory input, and hence, inform and otherwise structure its decision space. The process of evolution is a process of development of these qualities, since an organism's survival principally depends on them. More freedom of action means a better chance of survival. The consequence of the evolutionary process is self-awareness and free will within the embodied form. Free will is an expression of self-causation at a conceptual level.

SIGOR exists at every level of lifeform organization, from viruses to humans. Its essential "featured" manifestation is the ability to project goals into the future and to act to achieve them. This is a mechanism of conscious-biological self-causation. At the "preconscious" level, organisms use pre-programmed codes (DNA and others) for this purpose, but at a conceptual level, the 'mind' is the tool. At

the conceptual level, self-initiated, goal-orientated action becomes volitional - that is, by using concepts the mind is able to arrive at decisions about goals (or rather, purposes). Desire is a goal, projected into the future which is chosen according to the needs of the embodied consciousness. Freedom (or free will) is an attribute of consciousness, which is developed from the very basic property of a living being - the ability to project goals and to initiate an action to achieve them. A living entity is not a mechanism, nor is mind a computer. Fitch (2008) observed,

It is not difficult to see that Fitch's nano-intentionality is what is more commonly called SIGOR, and that is what is perceived as a living organism. Mind and consciousness is a self-regulated, self-organized, and self-caused entity. It is an attribute of the living entity-human being, and as such it doesn't have any efficient cause. The ethical consequence of this biological fact and philosophical principle is the principle of the non-initiation of coercive force (i.e., there is no such thing as authority over another; there is no such thing a "governance" beyond the governance of nature). Consciousness is the essence of life's existence and cannot be separated from it, as one cannot separate from a plant its ability to turn its leaves to the light. Any attempt of application of antecedent cause, a force of external control (Read: the negation of autonomy), on mind will be a hindrance, will impede its functions or stop it altogether. The initiation of force, therefore, is an act that prevents humankind from living in alignment with nature, living freely, or living at all.

INSIGHT: *Morality is composed, in part, of a social allowance for others to choose goals for themselves.*

4 Justice

A.k.a., Effective fulfillment.

Words have significance beyond their literal meaning and use in native speech. Perhaps there are words whose meaning have a greater influence on the arrangement and interrelationships of persons within a society than other words. Perhaps the word 'justice' is one of them. It would seem that throughout history the meaning ascribed to the word 'justice' has always been an organizing and coordinating concept of societies.

NOTE: *If the language used produces precisely the kinds of culture and behaviors that are not desired, then possibly, a re-orientation to life is necessary. To "staying on track" with fulfillment, a re-working of the meaning of the term 'justice' may be necessary.*

One might hope that a term so crucial to the orientation of society would have some association to the empirical well-being of individuals among a more encompassing ecology, as well as providing alignment with a meaningfully fulfilled life direction. One would hope that it would have some objective physical referent, and was not abstracted from the socio-economic and lifeground context from which it derives its meaning.

As a society develops, so too will the idea of "justice" eventually grow to become an essential factor in the well-being of each individual and in their chosen orientation to all others. Before elucidating upon the term 'justice', it is important to note that the intention herein is that justice be applied toward the well-being and fulfillment of the individual within a larger community of individuals. It is not applied toward the behavioral management of individuals or the ownership of conflict by either authority or the structuring of competitive advantage. Herein, well-being refers to [at least] the state of sensation where the total spectrum of an individual's human needs are sufficiently fulfilled such that the individual is curiously engaged in their life, freely expressing themselves, and is participating in an intentional and fulfilling way in the lives of others on this finite planet. Well-being, therefore, is directly linked to freedom, for when someone is fulfilled and responding in integrity and through focus, then they are less likely to react instinctually and maladaptive toward the inhibition of their own and others' freedom. A society designed to foster and nurture human well-being will have a well-defined conceptual understanding of the meaning of 'justice', which by consequence will be traceably encoded within its socio-economic system, wherein it fulfills (and does not thwart) human need by measurable degree.

Fundamentally, for an individual to have well-being, s/he must have access to those things that support him or her in maintaining healthy functioning and optimizing self-development, especially physically and mentally. Justice cannot be abstracted from these needs, these lifeground associations, which maintain an overall state

of well-being; nor can it be removed from its socio-economic context, which involves the organized and coordinated fulfillment of these needs on a social scale.

This section is divided into several subsections. First, an overview of justice is provided. Then, justice is discussed in its relation to fairness and equality. And finally, justice is comprehensively defined via its three applied, sub-characterized forms: restorative justice; distributive justice; and participative justice.

INSIGHT: *There are real, objective measures of human well-being.*

4.1 An overview of justice

INSIGHT: *The question of how one human should treat another is often posed. The answer may lie in how each one of us has the potential to participate with others toward a mutually fulfilling higher potential of common existence.*

A society is [in part] composed of a group of people in a persistent and chosen interrelationship with one another, divided by choice and defined by organization. Common societal interrelationships include, but are not limited to: personal relations (one-to-one or one-to-several); social relations (a network of personal relations); economic & ecological relations; and self-relation. When there exists a sense of fulfillment in the coordination and qualities of these interrelationships, then a subtle sense of justice might be said to have emerged.

When societal relationships enter into a state of harmony with the fulfillment of human needs, then there exists a return to a state of synchrony with our common nature. And, therein, lies freedom from compulsion and subjection at a societal level. Subjection lies at the opposite end to autonomy on the "freedom of choice spectrum": as autonomy <---> subjection & subjugation. Humans have needs that are [in part] met by social and economic systems. Wherein, for the idea of justice to remain functionally useful in a community its encoding must directly orient and intelligently organize the community's systems toward the transparent and common fulfillment of human need amongst a set of chosen and persistent interrelationships. In particular, the encoding of justice into an socio-economic system must recognize needs and facilitate their fulfillment. Herein, the ideal would be to arrive at decisions at a systems level that [at the very least] ensure that each individual's real needs are sufficiently and "justly" fulfilled.

The idea of justice buds into existence at the social level, for the concept requires [at least] some degree of human interrelationship. And, for justice to be said to exist among society, it must begin among personal relationships. In personal relationships the idea of justice might be expressed as an authentic respect for the essential sameness in another human being, compassion for the [needs of the] other and support in

the fulfillment of their real needs. At a socio-economic scale this becomes the participative re-generation of structures that further facilitate the fulfillment of all of common needs; for fundamentally, in society, every individual makes choices that impact both themselves as well as the community. By consequence, in order for there to be harmony among individuals, there must also exist harmony within the individual.

For this reason justice is not so much the "proper" (or optimal) distribution of material things [although this is important] as it is the proper valuing and interpretation (or meaning) of existent relationships. Such a "state of justice" is not something necessarily received with human existence; instead, it is the result of informed intellectual freedom exercised as responsibility in relation to one another and to human need.

Justice cannot be removed from its socioeconomic context, from the community context of social problems, from human feelings and fears about life and death, and also from the fulfillment of human needs. To disassociate the idea from its context would be to disassociate it entirely from any useful or existent reality. Hence, in a social system justice appears to concern itself with the effective recognition of needs and issues, and their fulfillment through the harmonious and participative arrangement of individuals, and their conceptual organizations. Similarly, in an economic system, justice appears to reflect how effectively needs and issues are fulfilled through the effective coordination of economic decision-distribution activities. Within a community, the voluntary (or "free") association of individuals as well as the coordination of resources, activities, and systems is essential for the existence of justice in any meaningful form.

Without free association (and self-verification), discrimination and duress will render conflict as an inherent property of the system, decreasing the effectiveness of coordination toward the fulfillment of needs, and eventually leading to various political factions redefining the term 'justice' to suite their own personal motives and agendas. In other words, conflict will always exist in an non-voluntary system [regardless of patchwork] for it is an innate behavioral characteristic to the design of such a system. The very idea of [synergy through] voluntary participation and cooperation might be enough to warn against imposing unfair sacrifices on individuals for the supposed greater good of a greater [or lesser] number. When the idea of fulfillment and human need are recognized synergistically, then slaves and sacrifice appear as what they are, unnecessary and corrosive states that lead to the deterioration of everyone's fulfillment.

Also, when a sense of autonomy is high in healthy individuals, then less compulsive behaviours manifest, and when autonomy is low more compulsive behaviours manifest. When more of an individual's energy is taken up by compulsion, then less energy can be put toward constructive action and intelligent coordination. Herein, justice is not about ending the oppression inherent in

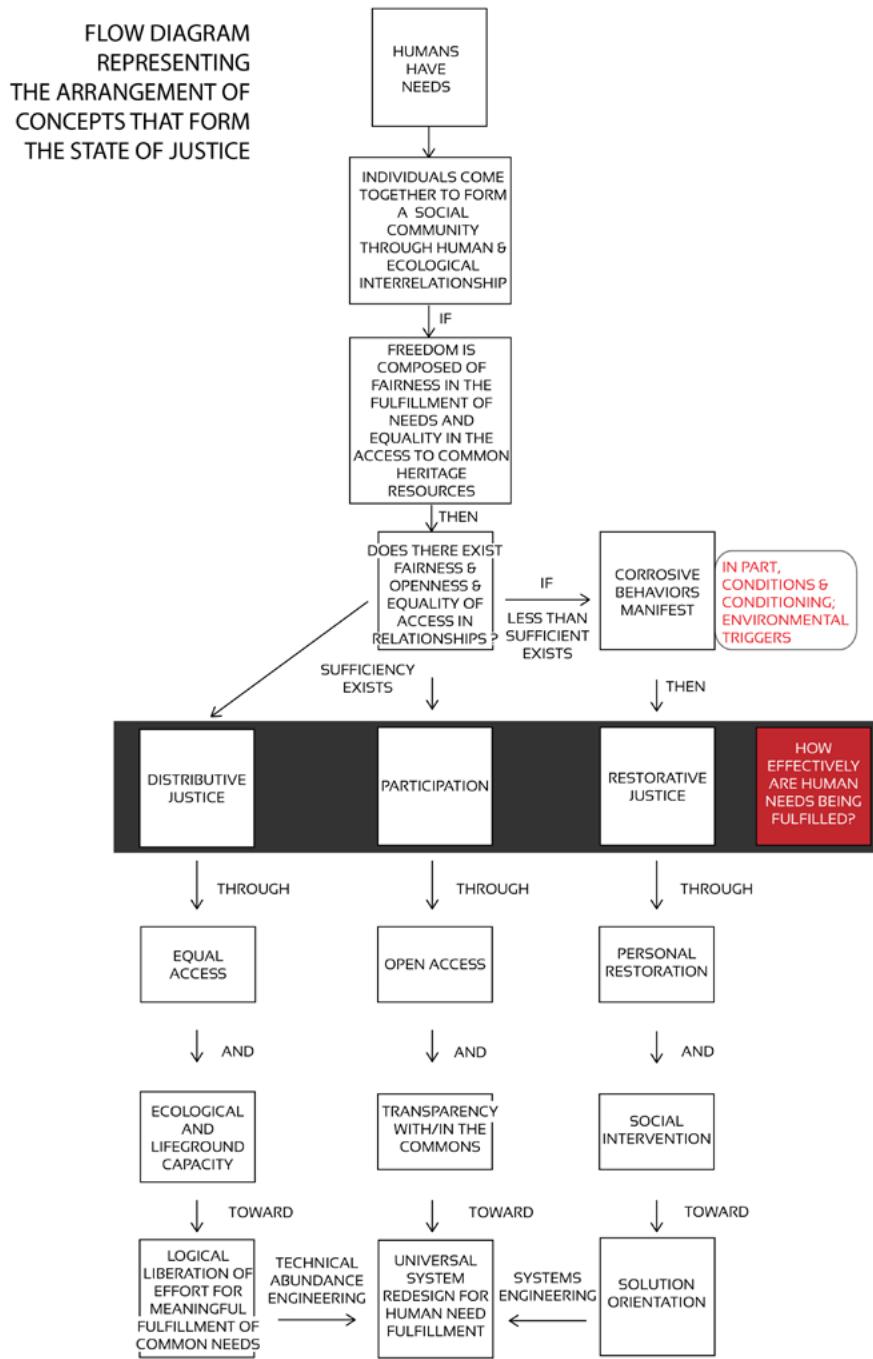
a system, but it is about designing a system where oppression and exploitation are not an inherent property of the system.

A human society will inquire into the idea of justice for its very survival. After all, the demands of human need cannot be avoided by any community of human beings. And herein, uniting together in the structure of a community enables individuals to explore and learn about the world together while evolving [equitable and restorative] systems that increase the effectiveness and efficiency by which their needs are fulfilled.

Justice could be considered a measure through which a society supports in fulfilling the needs of those who are least physically and mentally capable of having their own needs realized, the "least fortunate". Here, justice equates to the measure by which the old, sick, poor, handicapped and young feel a sense of dignity and sufficiency in the fulfillment of their needs. Such a standard might be used as an indicator of collective unselfishness. It must also be noted here, with no eugenics or similar agenda anywhere in consideration, that wherein justice exists to support the least physically and mentally capable it also involves the safe use of technologies so that increasing numbers of physically and mentally incapable individuals are a less probable creation. In other words, a society that values justice would not poison people with genotoxic substances (e.g., agent orange and depleted uranium which harm the germline) that lead to birth defects, nor

would it damage the cognition of individuals through food that lacks nutrition and water polluted with industrial waste (e.g., sodium fluoride). For a society to consciously or unconsciously create physically regressed individuals (for whatever reason) says something fairly

Figure 13. A conceptual flow diagram representing the arrangement of concepts that form the state of 'justice'.



awful about that society. Fundamentally, when a brain become damaged (or develops poorly) our capacity to have a civilized society goes down with it.

It is wise and well-reasoned to treat others as ends and never as means, to respect them, and to promote their personal development. This is the lifeground of justice. Herein, it would seem moral to recognize that each human being is driven by a set of common needs. If the term 'ethics' were to be used, then it would concern the degree to which individuals act together toward the fulfillment of their needs, which are common to all (note that in other philosophies the term 'ethics' is defined as the "governing of behavior by some outside other").

Within the individual, justice is the effective coordination between each of the components and systems that form a human being, coming together harmoniously and in "balance". Each element making its cooperative contribution to an individual's total sense of self, maintaining a viable foundation for the self-expression of a higher potential. Every individual is either a cosmos or a chaos of needs, desires, emotions and ideas within a bio-physiological organism at home within a social and economic context. When these are in harmony with real world needs, then the individual has the greatest possibility for realizing and expressing their full potential, the individual "succeeds". But when they lose their proper place and function, then disintegration of capacity and personality begins, and corrosive social behaviours manifest - failure advances like the inevitable darkness of a collapsing civilization.

A system without conflict is a system without the realization (or "rendering") of the concepts of authority and power hierarchy. Everywhere we see imposed harm, we see this form of protective hierarchy agitating and directing that harm, and creating poverty and crime and war and starvation. It would seem best that the socio-economic system (or "apparatus") should not serve the interests of an elite few, or even the ignorant many, but rather the real and common needs of every individual.

When the following ideas are accepted into the organizational structure of a community, then they represent a vision of society where humans are "justly" fulfilled without repression or conflict:

1. That human needs exist;
2. That technical needs can be met systematically and synergistically by coordinated activities with a real world, verifiable referent; and
3. That we can come to [f]actually know the world around and within us, and that we can use this discovered knowledge to arrive at more fulfilling decisions.

Justice is not the right of the stronger or the presence of a claimed "authority", but appears as the effective harmony of the whole. All moral conceptions [at some level] revolve about "the good of the whole", or more accurately, decisive action toward greater fulfillment for the higher potential expression of the whole. Herein, there is

a recognition of larger shared ecology, a social and environmental (i.e., lifeground) ecology, for which there are social and environmental responsibilities, and through which a coherent organization can facilitate the effective fulfillment of human need. The total ecology must be a consideration if a society is to maintain a useful orientation through its definition, and eventual encoding, of justice.

A state of harmony is maintained by the whole through association, interdependence, and organization of coherent interrelationships. And ultimately, the norm of conduct (i.e., normalization) in each relationship becomes the welfare of the whole group. When normalized relationships are based upon forced association, then conflict has a greater likelihood of being produced each time an association or organization forms, and justice cannot benefit or uplift the whole. Therein, society may be seen to be tearing itself apart - nature will have it so and its judgment is the only judgment, and it is always final.

Ecological systems in nature have carrying capacities. A complete application of justice that is not based on the fulfillment of human needs in conjunction with ecological limits, with real world limits, is unrealistic and unproductive. Accounting for ecological limits is important for many reasons, not the least of which is that it safeguards the fulfillment of future generations (i.e., the justice of future generations).

It is salient to note that 'justice' also relates to future generations. We are here on this planet for a temporary period of time, whereupon another lot of humans join the planet, and there should be consideration toward protecting the planet and its resources for them [as we become them]. "I" am going to die and "you" are going to die and without an accurate definition of 'justice' the real problems will just be pushed back until in the end there may be no truly viable solution. Therein, a future generation will look to us and say, "well if those people in [the year you are reading this] weren't such morons, and understood themselves more clearly, we wouldn't be in this predicament."

To comprehend human nature is to comprehend that human behavior is at least partially a product of the environment and of language, of condition and conditioning, of consciousness and its ability to integrate its existence. It is necessary to recognize the strong influence these factors have on individual's values and behaviours. When it is understood that values, methods, and actions are developed and derived from experiences, then the root (or source) of behavioral patterns that are socially offensive, corrosive and abusive may be perceivable and a solution orientation may be used to redesign the community's life/social system so that it more effectively fulfills individuals' needs, with a reduction in the likelihood of producing corrosive behavior [systematically]. It is only after individuals are informed that a individuals [within the context of a society] can arrive at informed solutions. Human behavior must be examined with the environment and the culture that

surrounds it. There exist conceptual realities that are very problematic for peoples psychological well-being, for which the social sciences is increasingly illuminating.

A healthy society cannot ignore the causality between people's behavior and their life conditions. In particular, a society disregards to its own detriment the data showing the existent causal relationship behind economic wealth imbalance and violence. Numerous studies clearly show that the larger the economic inequality gap (also described as the gap between rich and poor, income inequality, wealth disparity, or wealth and income differences) the more likely a society is to experience violence and "crime". The poor [in fulfillment] might not "inherit the world", but they might freak out and stab or shoot a dear friend. We are in this together and the sooner we realize that the better off we will be. Those who do "terrible things" almost always have a history of being the victim of "terrible things" as well. Scientifically speaking, psychological abuse does physical abuse, damage, to a brain. Restorative systems view the whole when they view the individual.

In a monetary system, economic inequality refers to the difference in a person's financial wealth or income as related through social status (or class). These differences in income are a measure through which a society has an economic hierarchy. At a fundamental level, economic inequality manifests as a difference in access to lifeground needs (and their qualities) such as food (and its nutritional quality), clean air, water (and its qualities), shelter, education, and so on.

It is a scientific fact that the [economic] market is a socially unequal form of socio-economic structuring. Therein, market inequality generates and perpetuates gaming behaviors, organized competitive advantage, and violent crime, among many other resulting characteristics that put plenty of holes in any "free markets are 100% voluntary" argument -- if "you" are obliged to participate, then you are not [intrinsically] participating. How can a free market truly be voluntary when no one born into it volunteered to be there? In part, actions in the market system are coerced upon individuals for their survival. Object exchange is mandatory for participation in the market. In the market individuals are "looking out for their own" interests and needs without the comprehension that there exist the potential for common and cooperative human fulfillment without the host of consequences that come from the organized application of competition (as business) in a market. The bad practices in the market translate into bad practices in thinking and in behavior. Being more mindful in what we are collecting, thinking and cultivating translates into better behaviors and better socio-economic systems.

Any objective view of justice must account for, or at least seek to observe, the social psychological and environmental components of violence and aggression, and their potential [re]-generation by societal structures. And yet, it must also seek to reflect the highest motivation of people in reality. An elucidated description of justice that fails to deal with the problem of power,

violence, and aggression [and coercion in general], so fundamental to that which is known as 'injustice', is either no definition at all, or a completely ideological one, serving to mask and hide from view the realities of power of a particular society, entity or ideology; for power does not imply justice or even correctness. There is no debate, as complex as it is, that the human psyche has basic predictable, instinctual reactions pertaining to environmental stressors. Reactions of violence, depression, cyclical abuse, and other detrimental psychological and behavioral states are the regular result and manifestation of these stressors, which chronically inhibit the fulfillment of human need.

A useful definition of 'justice' must seek to orient society in such a way that power differentials and corrosive behaviours are recognized (or identified) and reduced, and appreciative and mutually valued interrelationships are supported (i.e., cooperation). It must encode cooperation and mutual value into the structure by which decisions generate solutions to issues of individual and social corrosion.

Injustice is most easily seen in the disharmony between humankind and nature or between the individual and the social or between an individual and himself or herself. Every injustice (as the lack of real, effective fulfillment) reduces the freedom of individuals in a community.

If the environment is to any extent a determinant [factor] in behavior as has been shown via many studies, most notably, the Milgrams Study and Stanford Prison Experiment, then the environment and the concept of authority must be addressed in the emergent design of a community's systems. A society where people are fully informed, intelligently socializing, and aware of themselves and of the systems that provide for their needs, is more likely to be a society closer to justice, fulfillment and prosperity [for all].

If justice does not orient a society toward a reduction of those behaviours that are individually and socially corrosive, and toward the fulfillment of every individual's needs, then what value does it actually serve, who is it actually serving? Bad ideas, held for bad reasons, lead to bad behavior. And while not all ideas about the nature of reality are mistaken to the same degree, the logical and behavioral consequences of some beliefs and some ideas are observably more damaging than others.

When a socio-economic system is unfair everybody loses. Human beings are built to focus on their tribe and community, and their psyches have a very difficult time taking in and comprehending all the suffering that is occurring on our planet every moment of every day. Some people ignore it because they cannot handle it and others cannot handle it and so they become good at ignoring it. It becomes completely overwhelming to them, quite paralysing, for some people. Many simply cannot "believe it" for the magnitude of suffering is so truly awful. Others have found a place of equanimity with the suffering and instead of calling discussions of it "negative", they use their knowledge and awareness

to drive themselves and inform novel solutions; they maintain a critical orientation toward information. Regardless of how someone emotionally handles reality, it is important to cognitively realize that "negative" information is often craved because in the past and still today it was innately associated with survival; this is known in the literature as "negativity bias".

Yet, to not maintain an awareness of the true nature of what is occurring means to not acknowledge reality and the depth of a situation, and thus, a view that ignores the "negative" creates an inability to take avoidance action when necessary. Have "your" survival instincts been conditioned out of "you" such that "you" call neutral information "negative" as a means of disregarding and ignoring it (or not "energizing" it)? When in fact, historically, information about that which is harmful or could cause harm or is causing harm (to others like ourself) would have been eminently useful and applied toward surthrival (Read: surviving and thriving). Even in the midst of great suffering we have the potential of recognizing the source of [our own] suffering. And yet, if "you" don't recognize a problem, then "you" can't correct it.

For some people there is nothing more exciting than finding out that the wool has been pulled over their eyes. For those who are healthy and sane, they hurt, and that hurt propels them to change that which is causing the pain. Learning about the "negative" has the potential of setting us on a journey about doing something about "it". And further, it helps us to become aware of our participation in what are otherwise the real problems.

There are some people who selectively choose to ignore the "negative" out of a belief that "you" will give power to something that is [information about that which is] harmful simply by putting your attention upon it and becoming aware of its existence, discussing its existence, or critically analyzing why it exists (the source of its existence); therefore they claim, "you" should never pay attention to or talk about something that is "negative". Many people are deceptively convinced into believing that more "negativity" will be generated by talking and thinking about the things that are wrong and need correcting in the world. (Tremblay, 2013) This belief is often exposed when someone states, "I don't want to hear your negativity." Unfortunately, it is a deception [like most beliefs are] to "ignore the negative" and not observe or critically explore that which is wrong with society and causing hurt. Without critical exploration and questioning, how is there any discovery or progress, how will a system be redesigned? Specifically, the deception involves the belief that someone will bring about more negativity by paying attention to, talking about, and challenging things that are causing dissonance in the world. The opposite may in fact be more accurate. More "negative stuff" is likely to occur by refusing to maintain an awareness of and to critically challenge the "negative stuff". It takes courage to shine a light on fear. Progress in truth is inhibited when the labelling of something as "negative" cuts its further philosophic argumentation

(i.e., further inquiry and learning into the subject that is labelled as "negative" is impeded through "negative" labelling). Some conversations end with one of the participants saying, "don't disagree with me because that is negative", or "if you don't agree with me you are being negative and I don't want to hear it." It is wise to avoid trapping oneself in such a conversation. In community, if someone is critical, then they must have a platform to express their criticism, and it would be wise to listen to them.

If tyranny wants anything, it wants "your" complacency; it wants you happy and content under its miserable conditions; it doesn't want you to feel the motive pain

NEGATIVITY

Humans are capable of experiencing "negative thoughts" as thoughts of inflicting suffering on oneself or others, which arise from the presence of [at least] psychological and physiological "inflammation" (e.g., abuse and brain inflammation). To shut down someone (or halt a conversation) by labeling them (or it) as "negative" is to essentially ignore the inflammation that is causing the misery behind the thoughts. It is akin to say, "Just be happy in your miserable situation" or "I can't hear what is causing your suffering"; which, in early 21st century society becomes, "Just take this pill and go back to work." That aggression someone feels in an unhappy situation is important for them to feel, for it represents the "aggressive" spark of energy that is likely to move him/her to change or otherwise improve the situation, and most importantly, to facilitate in changing their environment.

How is a systems-based solution and overall social re-orientation supposed to take place if no one will identify or otherwise look at the unpleasantries going on in the world in order to ensure that their root causing factors are not present in the next iterative state of the societal system? Unpleasantries will not magically go away by ignoring them. Many people in early 21st century society have bought the erroneous notion that by paying attention to something, and becoming aware of its existence, they are somehow magically giving it power. To design a better next iteration of society than the past, it may not be wise to entrain to unpleasantries, but still necessary to identify and understand them. Until the conditions and conditioning are accurately, root causes will likely be hidden from view. The rhetorical question must be asked, How can someone get out of the conditions if someone doesn't acknowledge them?

QUESTION: Under what circumstances, what conditions and conditioning, what arrangement of objects and systems, are human needs most effectively fulfilled.

and suffering which might cause you to [systematically] root it out. Thinking is a very easy thing to outsource. And doing so certainly opens the doors for those who would like to take advantage and control of other individuals, of groups, or even the entire planet. If 'prosperity' really is the creation of solutions to human problems then every economic act becomes an explicitly moral act. Because the degree to which prosperity is created among a social population really is the degree to which it is possible to solve societal problems (legitimate and important problems). Understanding that prosperity is the solution to human economic problems merges the economic and the moral world in a very important way, and it ought not to surprise us that it brings the economic world back into alignment with nature. If prosperity is solutions and growth is the rate at which you solve them, then the role of community becomes ensuring the maximization of the number of people who are out there with the potential of solving problems (i.e., anyone), inclusion.

Suffering spreads through *ignorance* - by ignoring that which is actually occurring. When someone ignores or otherwise refuses to acknowledge something that is clearly happening, then s/he is refusing to acknowledge reality, and in doing so will miss the causal factors that led to the "negative" condition(s), structure(s), and behavior, which are interconnected. In other words, the belief that looking at that which is dissonant will cause dissonance is a maladaptive belief and can supersede an individual's natural desire to learn more about the things in his or her environment that are presenting opportunities for growth. Reality does not become less of a reality if "you" ignore it. If a pathogenic virus is ignored and not exposed [by the immune system], then it will replicate. In general, you will get more of it if you don't expose it.

In early 21st century society, most people spend most of their lives producing and consuming goods that are completely irrelevant to their needs. They are likely to see justice through the eye of authority and happily exchange in the "free and voluntary" market. In a materialist society the control, possession, and consumption of material good is of a higher value than the effective fulfillment of human need. In an authoritarian society the control and monopolization of exchange and conflict is of a higher value than the effective fulfillment of human need. And, the definition of 'justice' will reflect the higher [priority] value. Therein, people are valued to the extent that they can produce or consume or possess or monopolize, and the "successful" ones are the ones that can control and produce the most. Once people lose their capacity to produce and consume (or they never had it in the first place), then they are considered useless, failures, and ultimately, "unsuccessful". Whereas in factuality, humans commonly need to be accepted for who they are and to express who they are as conscious, developing human beings. Such expression is frustrated in an unjust society. And, many people compensate for the frustration of their needs by working more, by buying more, and by internalizing even more of their own suffering.

"Injustice anywhere is a threat to justice everywhere. We are caught in an inescapable network of mutuality tied in a single garment of destiny. Whatever affects one directly affects all indirectly." [In other words, no value of a higher potential can be maintained as long as injustice and oppression exist.]

- Martin Luther King, Jr.

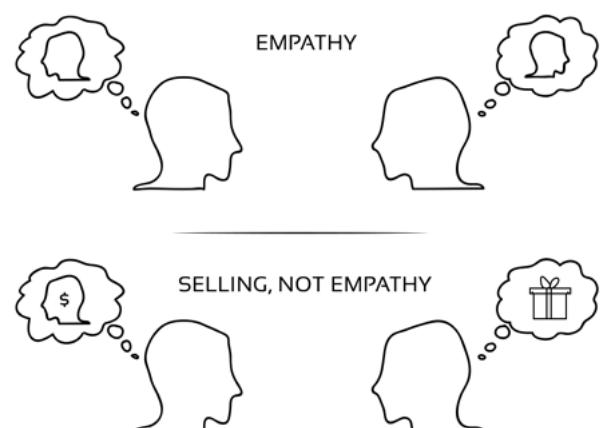
4.2 Fairness and equality

INSIGHT: *Inequality is a social pollutant. What is 'healthy' is ensuring that people have what they need through optimized design, not the forcing of "fairness" on people.*

Justice can only exist within the coordinates of equality - for without equality, all forms of justice will be applied differently to those of different [social] status. In other words, those of different status will have their needs fulfilled dissimilarly in an unjust environment. Justice is an equally unifying concept - if it isn't applied uniformly (or its effects are not common) it cannot be said to have been applied. Consider a situation where houses play a part in showing a difference in the status between people, then the fair and equitable fulfillment of needs (i.e., distributive justice) does not exist and systematic efficiency becomes impossible under conditions of competition and behavioral pathologies induced by social status. Competition at the social, and hence economic level, will induce social and class warfare, and generate an unsustainable cultural environment [that exploits its natural environment].

Fairness concerns [at least] how individuals relate to and treat one another in society, as society progresses. A society based upon competition is out of alignment with

Figure 14. When 'selling', empathy becomes being able to understand the prospect better than they understand themselves, so that the seller knows what is likely to make the potential consumer buy the product (or, the ideology that keeps the seller in power).



the natural "order" of human beings in that 'fairness' is an innate concept, wired into the brains of humankind. It is part of our natural makeup. Herein, it can be said that people who don't respect equality have really been conditioned not to respect equality. We not only long to be treated fairly; we also long to be fair to others (i.e., we have a conscience and empathy). It seems wise then to build on our better nature - to persistently reinforce our innate sense of equality, to build a society where the equal participation of all can be facilitated and applied - where no one's needs are left alone. Essentially, empathy is important for all economic functions in a community; we don't get along well and cooperate if we don't have empathy.

Other animals have been shown to exercise altruism and to appreciate fairness. A sense of fairness may be innate to other animals, but among humans alone it is aspirational, a measure of how we might judge ourselves. Wascher et al., (2013) found that even "the feathers of crows" are ruffled by the observation of what they do not consider fair behavior.

When people do not have sufficient fulfillment, or do not get equal reward, then they might start asking why questions: "Why did they get that, and not me? Why didn't I get what they have? Why don't I have as much?" Remember from the prior value section on freedom that a potential state of free inquiry exists between stimulus and response. However, when the state of free inquiry has not been allowed to develop naturally within someone, and they solely flip between stimulus and response (input to output), then the unequal and unfair distribution of things becomes dangerous; for instead of inquiring into the unequal distribution [and resolving it with systematic social intelligence] they will lash out (often violently) in the face of inequality for their own satisfaction, or perceived survival.

Tabibnia and Lieberman (2007) indicate that reactions to fairness are "wired" into the brain and that fairness [in part] activates the same area of the brain that responds to reward. This is consistent with the notion that being treated fairly satisfies a basic need. Research conducted in 2003 at Yerkes National Primate Research Center with Emory University in Georgia, USA involving capuchin monkeys (non-human primates) demonstrated that other cooperative animals also possess such a sense for equality and that "inequity aversion may not be uniquely human". (Brosnan, 2003) In the capuchin monkey experiment the monkey receiving unequal "pay" rejected the pay. The researchers who conducted the experiment found that capuchin monkeys have a "sense of fairness" and will reject inequitable rewards, much as humans are known to do. The researchers stated that the response to the unequal treatment was astonishing: Capuchins who witnessed unfair treatment and failed to benefit from it often refused to conduct future exchanges with human researchers, would not eat the cucumbers they received for their labor, and in some cases, hurled food rewards at human researchers ... along with shaking their cages aggressively. This same fairness experiment

has now been done with many other mammals including dogs, birds, and chimpanzees with similar resulting observations, indicating that ideas of fairness may be instinctual in nature. Primates react with displeasure when researchers create inequality between them.

Treating people as ends in themselves is a good way to safeguard human well-being. Fairness is not merely an abstract principle — it is a felt experience. It is an empathetic pathway to another human being. We all know this from the inside, of course, but neuro-imaging has also shown that fairness drives reward-related activity in the brain, while accepting unfair proposals requires the regulation of "negative" (or reactive) emotional characteristics. The moment we conceive of justice as being fully separable from human well-being, we are faced with the prospect of there being "morally right" actions and social systems that are detrimental to the well-being of everyone touched by them (and their structure).

Inequality [in access] is divisive and socially corrosive. Societies can now be compared and studies clearly show the damage caused by the inequality of socio-economic status. Indeed, the quality of a society radically depends upon the existence of fairness (or equity) between persons, upon its inclusion or exclusion in the definition of justice [in a society]. Here, equity is simply the fulfillment of all human need. Equity means that all humans have their needs met and can share in mutually coordinated fulfillment.

In "The Spirit Level", Wilkinson and Pickett (2011) publish clear data on the following economic and social indicators involving social equality and issues of common concern - almost every social indicator gets worse as countries become more unequal. For instance, child well-being is better in more equal countries; drug use is more common in more unequal countries; educational scores are higher in more equal countries; health is better in more equal countries; homicide rates are worse in more unequal countries; levels-of-trust are higher in more equal societies (i.e., people are more likely to feel they can trust one another in more equal societies); rates of imprisonment are higher in more unequal countries; infant mortality is higher in more unequal countries. Although cancers are more common in high-income societies, diarrhoeal diseases, which are the second leading cause of death in children under five years old worldwide (*Diarrhoeal disease*, 2013), are more common in low-income societies. Living in an affluent region is simply likely to expose someone to other disease risks. There is a common myth that the gradient of health in industrialized societies is simply a matter of poor health for the disadvantaged and good health for everyone else. However, the findings of Wilkinson and Picket reveal that a society that is stratified in access to fulfillment is going to have concomitant health and social issues. In appreciation of "The Spirit Level", Sargent (2009) states:

"In their new book, epidemiologists Richard

Wilkinson and Kate Pickett extend this idea" (of the harm caused by status differences) "with a far-reaching analysis of the social consequences of income inequality. Using statistics from reputable independent sources, they compare indices of health and social development in 23 of the world's richest nations and in the individual US states. Their striking conclusion is that the societies that do best for their citizens are those with the narrowest income differentials—such as Japan and the Nordic countries and the US state of New Hampshire. The most unequal—the United States as a whole, the United Kingdom and Portugal—do worst."

Note here that Mills (2012) published a critique to the works of Wilkinson and Pickett.

Social and economic practices can deteriorate our well-being, particularly in regards to stress, mental illness, mortality risk, and rates of disease. Modern social structures, values, and practices have deviated away from or are ignorant of what true societal health means. In early 21st century society, most measures of prosperity and social integrity are equated through economic baselines (e.g., GDP and employment figures), which tell us very little about true human well-being and prosperity -- they are decoupled from the actual life support system, the Earth, our resources, our environment, our physiology, our mental health, and the lifeground needs that we all share. In truth, the analysis of the health of a society cannot be based on an aberrant and decoupled economic system. Instead, we want to examine things that have an actual physical referent [through scientific research]. Unfortunately, in early 21st century society, it is more common to focus on the by-products of income inequality as isolated problems in-and-of themselves.

In the market, there is often very little feeling of trust in social relationships, because in every relationship "you" always feel like there is an ulterior motive (other than knowledge, human fulfillment, someone's well-being, etc.).

Social inequality generates psychosocial stress for everyone. There is a relationship between stressors, everyone's health, and the inequality that exists around us. What has been found scientifically (and statistically) is that the more income inequality, the more problems for everyone in society. Even those at the top of the income hierarchy would benefit from a systematic redesign of society toward more equal access (i.e., they too would have better health and higher levels of well-being). Take, for example, the fact that researchers have long known about the phenomenon that stress is "contagious" and is a form of sympathetic communication passed through simple observation of [at least] another's facial expressions, tone of voice, and touch. Simply watching a stressful situation is likely to impart "second-hand stress" onto another, as if it were contagious. Partly, it's a function of our brains being wired to mirror (or, repeat) the actions and emotions of others.

Empathy is an essential characteristic of resilience. Strong relationships with others can "bail you out" in times of need; they are a form of resilience. Understanding another's situation, and what they need, is what connects you with others, which in turn bolsters your ability to weather life's rough patches.

The contrast between material success and social failure in more affluent countries is an indicator that it's time for early 21st century society to reorient its worldview. In a system where monetary gain is a priority over (or even equivalent to) human well-being, then we are unlikely to see any real, systematic change [while such a system runs its course]. Rather, we more likely suffer from increases in environmental and psychosocial stress as we all struggle among great suffering.

Do we not all desire at some fundamental level a social system that at its core is concerned with human well-being and fulfillment, and the sustainable regeneration of environmental resources. Environmental resources are a common basis of survival. All social systems regardless of political philosophy, beliefs, traditions or customs, ultimately depend upon natural resources, and it is why this fundamental point needs the attention it demands. Resources are a common basis for survival.

Herein, the method by which social or economic equality is structured may be described as efficient if there is no possible restructuring which could be performed to make this structuring more advantageous to any particular individual without simultaneously making it less advantageous to another individual. Wherein, effectiveness always lies in knowledgeably resolving reality for the highest fulfillment of all concerned. It is important to note that what is being discussed by the meaning of justice represents is an entirely different socio-economic design, one that removes the encoded existence of socio-economic stratification by those "rich in access/property/capital" and those "poor in access/property/capital", which is not in any way equivalent to [forced] wealth redistribution. In other words, the idea of "rich" or "poor" among society is removed altogether [by removal of the market, and hence, the State]. Redistribution toward equality with a fixed capital pot (i.e., the market) implies taking away income (and property) from those with more of it and giving it to those with less. Or, in the context of growth, reducing the increase in those with greater income to below what it otherwise would be. However, redistribution (in any form) is not what is advocated here, or more accurately, "designed into" this community model. The Community represents a complete and systematic redesign of the modern socio-economic environment, of which force is not a structural element; and hence, the Community will only arise when people voluntarily and cooperatively decide to participate in its emergence (i.e., the Community is not equivalent to, nor does it advocate, a system of [forced] wealth redistribution).

Fundamentally, individuals need to ask whether or not fairness can even exist in a system that is not designed at its foundation to meet the individuals' need for fairness?

Some systems are inherently unfair. For example, it isn't fair that some people can't pay their bills, afford nutritious food and healthcare, or not be overwork by their employer, but it also isn't fair to apply coercive force to another person to pay for the person who can't afford the monetary expense required to fulfill their basic needs. Some systems are inherently unfair and are not structured for fairness; they maintain a chronic state of social, economic, and environmental disequilibrium. Although nothing is "fair" in nature, a socio-economic system could be designed to equitably fulfill human needs and facilitate, where necessary, reciprocity.

Take a moment to ask yourself, why does society need a "justice system"? The answer on the tip of your tongue might just be, "because there are injustices". But, that begs the question, why are there injustices? Maybe injustices exist in part when a system is designed in a unjust way - when its conditions and conditioning (i.e., the structural environment) create injustice. Maybe a solution-orientation and not a criminal justice system would be a more valuable orientation. Inaccurate and imprecise understandings are unlikely to resolve into systematic solutions for they do not [accurately] account for the whole system.

Of crucial importance in the idea of fairness is the quality of social relationships. Because members of the same species have the same needs, they can, all too easily, be each other's worst rivals -- fighting for food, nesting sites, territories, sexual partners and so on. But human beings, as well as having the potential to be each other's most feared rivals and competitors, also have the opposite potential: We can be each other's best sources of cooperation, assistance, support, learning, and love. Our relationships could align with a value system that supports in an orientational evolution toward everyone's higher potential. Herein, fairness becomes the equal fulfillment of needs through designed access to common heritage resources as an "equalitarian" sharing structure.

Wisdom has a difficult time affecting change in world where nationalistic, monopolistic, commercial, and "family" demands cloak the common heritage of humankind and prevent the advent of justice on a global scale. Are we not all equal "shareholders" (or potential caretakers) in the Earth?

Instead of seeking a state of equality in access to outputs of natural services in the fulfillment of common need, authority endows people with righteousness. And, righteousness combined with rationalization leads to individuals justifying their horrific behaviors by saying, "I am doing the right thing when I kill you, the authority wants me to kill you". Authoritarian righteousness is the trait of individuals who are completely out of touch with the natural world and any sense of human fulfillment. When justice primes a sense of righteousness, then the structuring of society is soon to become unfair.

Many people in early 21st century society simply cannot imagine not having a final authority. They cannot imagine a system without authority telling them what to do and punishing them (though primarily "others")

for what they ought not to have done; it is anathema to them. They cannot imagine the cooperative organization of systems at a social level, systems that biomimic nature in the production of services that meet our common needs. And yet, a portion of these people even agree that the initiation of force is morally wrong, which is a contradiction, for a monopolistic authority invariably ends up initiating force.

There seems to be a peculiar form of rhetoric where "equality" is professed and "fairness" is claimed, but where in practice, all sorts of hierarchies and authorities are implied -- the ideas of democracy and the "free" market are two such examples. This is the rhetoric of the highfalutin, "noble" sort, making lofty-sounding and not-systematically-thought-out statements about the inherent "dignity of man" and so on and so forth. People give a lot of credit to such pronouncements even though they are not worth the paper they are printed on, for their systems are still socially hierarchical (e.g., State constitutions).

Equality can be pursued to no good end in a system that is not designed for equality. Thus, those who pursue equality in "rights", "treaties", "negotiations", and "instruments" might fail to recognize the continuous generation of inequality innate within the system in which they pursue façades of equality [given to them as pre-packaged "gifts" by other authority figures].

Fundamentally, an unequal society is not a structural organization designed to fulfill needs, and it is very likely to have a "private force" to defend the privileged through exclusive "rights" to ownership (i.e., property rights). Alternatively, if there is privilege in community, then the perspective is that we are the privileged inheritors of the Earth.

It's also very hard to see the equality and the community in a system where your guilt or innocence heavily depends on your ability to pay a special group of people who can navigate an extremely complex formalized system determined by a corrupt confrontational process that seeks to own the confrontation, and can lead you to be tortured, kidnapped, caged or even killed on the basis of rules no one ever living agreed to (or at least "you" never agreed to) -- a "social contract" is socially constructed nonsense.

Equality and freedom are two sides of the same coin. In a state-of-freedom persons are able to express and to remain their intrinsically motivated selves. When inequality of participation and access exist, then power differentials exist, and when power differentials exist then coercion manifests and gaming strategies (e.g., deny, disrupt, degrade, and deceive) are engaged. The power of coercion is neurochemically habituating - poetically speaking, "the self corrupts the self of others". In a social system, coercion is the state of an elimination of freedom. Freedom is not present when coercion exists, and therein, equality and fairness are nowhere to be found.

Whatever maximizes "your" freedom must maximize everyone else's freedom, or your freedom is necessarily

not maximized. In society, the individual crucially depends on other human beings for the maintenance and sustenance of his or her own freedom, and this can be effectively organized once there is a recognition of commonality (and mutuality) in the existence of a persistent interrelationship. When the existence of a persistent interrelationship is recognized, then equality and fairness can be worked toward. Yet, there are some structures of society that inhibit the recognition of said existent interrelationships.

INSIGHT: *If rules are to be broken, then rights are to be violated. The logic is the same until new premises are introduced.*

4.3 The definition of justice

QUESTIONS: *Can we make justice into a science, as something we can repeat and test (and use to continuously add to and improve our well-being and our fulfillment)? How can we facilitate participation in fulfillment? How can we restore a sense of self-direction and trust among relationships that have become fractured? How can we optimize the effective fulfillment of need for all individuals and ecological systems within society?*

Justice is the state in which the needs of all forms of consciousness (i.e., "parties") in an interrelationship are effectively [and ecologically] fulfilled. In humanity, justice becomes the effective coordination of these relationships to structurally facilitate and maintain a state of participative fairness and equality in access to common resources, for without these conditions behavioral pathologies are highly likely to manifest. Herein, justice involves equality in access to the socio-economic system as well as the restoration of the fulfilled self-directed individual in cases trauma and harm. Justice may be reciprocally defined as the state in which every individual in the community has their needs regeneratively, sufficiently, and participatively fulfilled such that their highest potential life direction is known and available to them in all moments. Herein, justice refers to the effective coordination of participative social and economic relationships among individuals, technologies, and ecological systems that lead to the restoration and equitable fulfillment of human need. This definition maintains three conceptual understandings:

1. Justice is participative. It is a chosen state of volition (as in, voluntary), and not forced or coerced. This orientation to justice is known as **participative justice**.
2. Justice involves social and economic interrelationships that restore states of self-empowered fulfillment within an individual and between individuals. This is known as **restorative justice**. In general, restorative justice [practices] exist to facilitate prevention, intervention, and

restoration [of universally preferable dynamics, states, and behaviors].

3. Justice involves social and economic relationships that coordinate the equitable fulfillment of human needs through access to common [heritage] resources while continuously seeking an overall improvement of the system to reduce fulfillment inequality, unfairness, and the variety of forms of structural violence. This is known as **distributive justice**.

Who would not like to live in a society where their physical, mental, and social needs are fulfilled; otherwise there would be little point in living in society at all. It only seems natural to seek a socio-economic organization that effectively facilitates fulfillment of these needs (i.e. if there are a number of social forms that fulfill our needs, we should seek out the one, given what is known now, which does so the most adequately). Individuals are essentially interested in being at full health instead of partial health, shelter which shelters us completely and aesthetically instead of partially, enough leisure time to enjoy our lives instead of less, friendships that fulfill our social needs completely instead of only partially, the ability to explore our world and verify our ideas, and so on [all qualified by hormesis and that which self-development entails]. Together humanity is capable of rendering a reality of the highest potential and exploring a higher potential of experience in reality when its needs are effectively fulfilled.

INSIGHT: *Justice isn't served, justice is designed.*

4.3.1 Restorative justice

NOTE: *In many cultures, including the British system in the years prior to the Norman invasion, a 'crime' was something to be resolved between the "offender" and the "victim" (and their families and community), with the goal of restoring wholeness and a sense of a rightful relationship. Therein, how individuals express anger is dependent upon what they know and the tools available to them.*

Individuals' sense of interconnectedness may be undermined by their societies approach to justice. Herein, restorative justice (also sometimes called 'reparative justice') seeks, where possible, to restore "victims" and "aggressors" to whole, wherein they are once again making fulfilling [life] choices and maintaining "right relationships" with both themselves and with others. It is a process that supports all concerned in returning to a state-dynamic where needs are sufficiently fulfilled, and self-efficacy is engaged, such that individuals are once again pursuing their highest potential direction. Herein, the idea of restoration is applied to repair discordance and dissonance rather than simply to inflict equivalent harm. It rebuilds connections (i.e., it reconnects one

to the path of fulfillment). It is an approach to justice [as the effective fulfillment of needs] that focuses on needs as opposed to satisfying abstract legal principles or punishing the "offender" [of authority]. The practice of restorative justice maintains the understanding that there is no singular action of violence, there is a process of violence.

Restorative justice is not concerned with retribution and punishment; instead, it is concerned with (a) making the victim whole and (b) seeking to restore and reintegrate the individual(s) who initiated (or pursued) harm and violence back into a fulfillment-oriented society [where possible]. Fundamentally, the question must be asked, what is more effective than restoring the health and functioning of natural living systems?

Hence, restorative justice emphasizes the importance of both the restorative process and the desired directional outcome (i.e., a re-connection with the state of 'flow' in human fulfillment). It involves repairing the harm caused by aggression and violence and traumatized behaviour. For which, there are a wide-variety of verifiable restoration processes and strategies. Certainly, justice does not involve the propagation or "equalization" of harm.

In contrast to *restorative justice*, *retributive justice* and *punitive justice* are reflexive in that they are [primarily] about equalizing the harm suffered by someone by causing suffering to the [targeted] other or by punishing them into contemplation. Even the notion of reparations is associated with the retributive form of justice; it is essentially the desire to force a change in ownership status. In many modern societies this "equalization of harm" takes the form of property usurpation, social isolation, economic monopolization, and forced mentation (and sometimes, accidental or pre-determined death). At the individual level it often includes a complete elimination of social freedom through structurally violent isolation (i.e., kidnapping, caging, jailing, and imprisoning). A retributive/punitive justice system may also be called: incarceration justice, criminal justice, legal justice, or State justice, all of which could be said to be the opposite of socially restorative justice (or "social justice").

There are two primary types of criminal justice system (a.k.a., punitive/retributive) in early 21st century society:

1. Adversarial system - a State (government/jurisdictional) prosecutor indicts someone, a defense lawyer defends that person, and a judge is supposed to ensure "fair play". An adversarial "court" [of justice] system will go after a defendant to seek a guilty plea regardless of if someone was hurt or they are guilty, because it is adversarial.
2. Inquisitorial system - the judge and the prosecutor are essentially the same person.

The inquisitorial process can be described as an official inquiry to ascertain the "truth", whereas the adversarial

system uses a competitive process between prosecution and defence to determine the "facts". However, in either case, neither the truth nor the facts of the underlying societal issues that are the cause of "criminality" are never (or, almost never) revealed or called into question; because, in part, those "professionals" that are participating in the process would have to question their own professional existence and the very idea of a criminal justice system.

The circular argument of retributive justice is:

"If you do this bad thing, I can do bad things to you, because only bad people do this bad thing, and bad people are "fair game" for good people (i.e. "me") to do bad things to."

Further, and worst of all, early 21st century society's system of justice interjects the State as the paramount victim. As a result, aggressors are labelled "offenders" and they no longer have to face the personal pain or damage caused by their acts. Instead of being held accountable to their victims, they face representatives of the State, who have not experienced real pain as a result of the event, and who are financially profiting off of the situation. There is little opportunity or support for the "offender" to seek forgiveness from the victim or seek reintegration into the community.

Meanwhile, with the State taking on the role of "victim", the real victims of a violation are left out. In early 21st century society, many express a sense of having been re-victimized by the justice system, which rarely gives the victim any say in the outcome of a case, seeks collectable restitution for the victim, or even informs the victim as to when the perpetrator might be released and again be a threat.

When violations of person occur within a community, the community needs to do everything it can to rebuild the ties of accountability, trust, and mutual respect between those whose trustful relationships have been violated. And, in order to do this, there must exist a sympathetic understanding and compassion (or "sympathy") for why everyone behaved in the way in which they behaved. Therein, empathy allows for the establishment of a connection with someone who may be "lost in their suffering" prior to supporting them in forgiveness, self-sufficient restoration, and a re-directing of their 'locus of control'.

The concept of restorative justice maintains the recognition that an expression of behaviours are in part derived from conditions and conditioning - there exists a relationship between the individual and their environment. Hence, to reduce socially corrosive behaviours, the environment, which includes the conditions and conditioning that individuals experience, particularly the young and the soon-to-be-born, must be accounted for at every knowable level from the neurophysiological to the structurally economic.

Sometimes living systems need support and facilitation to restore themselves to their natural state

of balance and harmony, of equilibrium, and of justice. Two generalized examples of this include the Earth's ecosystems and the healing mechanisms of the human psyche and body in cases of illness or injury.

In truth, violence is a process and not a singular act. Violence is not about "that guy", that "bad guy", the "perp", that "criminal", or the "villain", although the mainstream media would like you to believe that to be the case. Instead, repulsive acts of behavior are a product of a society that ignores human needs and maintains a chronic, structural state of violence.

Every violent and aggressive act can be explored within an individual, as well as at the larger social level. It would be disingenuous not to state that this exploration may take the form of an 'intervention' when someone poses a danger to others (Read: community safety), which doesn't mean "writing off" the individual. Intervention can be applied incrementally as much as physics and our decision system will allow (through informed response and not impulsive reaction). With skill and verified experience we can act with greater transparency, coherency, and accuracy in our formalized socio-economic, safety response to situations of conflict and violation. When dealing with someone who is a potential danger to others, then there has to exist some form of containment or restriction from sensitive positions, which is not equivalent to imprisonment. Even within containment there will still be cooperation and restorative communication with others outside -- finding ways of healing old wounds, which in many cases, were a factor in the hurtful behavior. Herein, there is an empathic causality which might be wise for us to recognize.

Also, it is important to recognize the concepts of 'mental capacity' and 'competence' as elements of restorative justice. A person with brain damage may, for example, not have the [functional] mental capacity to understand a situation of which s/he has become a personal part due to a decision s/he has taken.

Herein, the notion of a 'social intervention' also involves [in part] looking at a social problem as a whole instead of independently (i.e., thinking systematically), which brings a needed simplicity and unity to our actions during a state of conflict and the transforming of systems.

Certainly, those who have become or who may see themselves as "victims" are not tools to be used in a political, or other, agenda. Instead, victims deserve as rational an analysis of the incident as individuals in society are capable of providing as an orientation toward the prevention of its re-occurrence.

Government, per se, does not exist at the systems-level of a community - there exists organization and coordination, but not "government" or authority. A community is [in part] a set of common interrelationships, a "living" dynamic [of fulfillment]; it is not something to control. Whereas government seeks to control relationships, a community of individuals seek to recognize, understand, and re-structure [toward

fulfillment] the complexity in existent interrelationships. Therein, when problems are understood as systemic, then a new mindset emerges, which replaces retributive justice with restorative justice and an inquiry into the systemic causative factors of socially symptomatic problems. Then, in the re-arrangement of any society, there must always exist two synchronous paths, the individual and the system(s) of which the individual is a part. Accordingly, to solve a social problem there must exist an examination of the causal system relationships themselves.

Simply, there are two ways to facilitate the improvement of human life:

1. Improve the life of an individual through [f]actual fulfillment while facilitating a refined moral orientation toward living consciously, purposefully, and in, self-stable integrity.
2. Re-design the community's dynamics and systems to more effectively and efficiently facilitate the freedom of individual fulfillment in community. This is an orientation toward the improvement of the life conditions of all individuals.

At an individual level, justice may involve the process of "rehabilitation", as restoring someone's full well-being and self-directed fulfillment. And, it may involve improving the [geometric] architecture of our language and our thought so that we communicate our essential[ly similar] selves more clearly. Herein, societal interventions might include: research studies into contributing factors a behavior; transparency in the community of ongoing findings, developments, and modifications; and participatively redesigning systems so that the dissonance (possibly expressed as violence) is less likely to appear in the future due to a more fulfilling overall structure. Fundamentally, better behavior should not be expected when the structure of the system in question does not encourage better behavior.

Restoration and punishment are incompatible concepts - one does harm whereas the other restores from harm. One is not even an alternative. Restoration is the reduction of suffering through the reconnection and integration of relationships that sufficiently fulfill an organism's needs. Punishment exponentiates the inflammation and suffering that is already present. That said, it is true that an aggressor might experience certain phases of the process of restorative justice as painful and burdensome, so they would view the claim that they are not being punished when they are subject to restorative justice interventions as disingenuous and hypocritical. Therein, it is all about the biases present in the perspective, warping someone's perception that their needs are being fulfilled when they are clearly not and they have harmed others.

Theoretically, trauma can cause individuals to dissociate (that is, mentally compartmentalize) their

painful experiences, and restorative justice is [in part] is the application of modalities that facilitate the re-engagement someone's self-esteem, their self-directed and empowered nature.

Before overcoming their own self-limitations most people stop and deny, because piercing through the conditioning can be very painful and vulnerable; some experiences hold painful and vulnerable feelings and their release requires the processing of these feelings in a restoratively safe set and setting. It is not necessarily "easy work". And in time, all fulfillment inhibiting programs and self-limitations start to break down under the light of truthful experience, method verification, and self-work (as willful self-engagement).

Guilt is one emotion that sometimes arises with the conceptualization of justice. Guilt is a damaging emotion, and it is a tool used to turn obedience into a compulsion. Religious guilt, for instance, is based on sin, which is defined as disobedience to an outside authority. It becomes an addiction, a compulsion, which is meant to stay with you for the rest of your life. The concept, its thought structure, is designed to control consciousness and keep consciousness "in the fold". Taking responsibility for one's behaviors should not lead someone to remain in a state of guilt [as a healthy state of processing], but rather to a more conscientious and rationale approach towards one's thoughts, words, and actions, which can only be healthy. The desire to live a healthy, fulfilled, and pleasurable life is innate in us; to not allow it is to fight nature. Herein, it must be asked, what does terror do to people's consciousness? It allows for greater [external] control over the mind. Who is the greatest terrorist in a given society?

QUESTIONS: *What are the environmental pressures that emerge around an individual to create a behavioral act that humans commonly find repulsive?*

4.3.2 Distributive justice

INSIGHT: *No person earned having the Earth here. Nobody earned the resources under the ground and in societal technologies. Matter and information are not something that naturally should belong to anyone. This is a mentality that has been lost to many for quite some time, and to which many are reawakening.*

All social systems, regardless of philosophy, beliefs, or social customs, ultimately depend upon natural resources and a consideration of their distributed allocation to maintain a standard-of-living, quality-of-life, and ultimately, human well-being. Humans have needs that are met, in part, by economic systems - systems that [at least] transform and re-transform resources into functional goods and services.

Distributive justice involves the application of the ideas of equality and fairness to a 'socio-economic reference factor'. Distributive justice is also sometimes known as

equity justice, economic equity justice, or access justice. This reference could be human well-being, it could be a standard-of-living, or the quality of goods. It might also be equal access, or personal profit and property acquisition. Herein, distributive justice refers to the condition of access equality in the fulfillment of common human needs through the cooperative and organized sharing of our ecological resources and our intentionally architected 'habitat service system' (this system is described at length in the Decision System specification) without an administrative class of governors or the encoding of competition.

Distributive justice (i.e., economic equality) does not involve the concepts of entitlement, reward, or duty, but is instead founded upon a common empirical understanding that if fairness and cooperation aren't accounted for in the design of the systems that fulfill the needs, wants, and preferences of individuals, then socially corrosive behaviours are highly likely to develop, and as the gap widens, conflict becomes an increasingly likely outcome.

Distributive justice asks the question,

How do we reduce inequality in access to fulfillment among the global population?

Distributive justice exists in contrast to that which is known as 'corrective justice'. Corrective justice involves the idea of liability in rectifying the "injustice" inflicted by one person on another. This concept of justice focuses on whether one party has committed and the other suffered a "transactional injustice" or "negotiated injustice". Although corrective justice claims to feature the maintenance and restoration of justice between the parties in a transaction (or negotiation), it is in fact a "blind" form of justice. Principally, it is blind to the reality that there are ecological and other [persistent] systems dynamics at play. Second, it is blind to the systems-level view of the social and economic context in which the transactional injustice is said to have occurred (i.e., it is blind to the persistence and ongoing of social and economic interrelationship) -- in community there is an ongoing dynamic of relationship, whereas in the market [abstraction], every transaction is claimed as a finite thing with no persistence of relation. It is further blind to the probability of usurpation of the entire process of 'corrective justice' itself by any party with greater power. It is also blind to the fact there no such thing in nature as property, only access exists (this is discussed at great length in the Decision System specification). And lastly, it is blind to the empirical lifeground and to the nature of human need.

Descriptions of corrective justice sometimes go on to state that the "law" is the wisest correcting force. The "law" re-establishes the initial equality present before the "injustice" by depriving one party of any unjust transactional gain and "restoring" it to the other party, which may be the government on behalf of its

"public". Here, it is possible to see the similarity between retributive justice and corrective justice in that neither form of justice actually perceives human needs as a factor, and they are both forced-based equalization strategies.

Aristotle likened the parties partaking in corrective justice as two equal lines (Aristotle, 350 BCE). In "Nicomachean Ethics", Aristotle then goes on to state that injustice upsets that equality by adding to one line segment a line detached from the other. The "correction" removes that line segment from the lengthened line and returns it to the shortened one. The result he said is a restoration of the original equality of two lines. Clearly, humans are not lines and his rationalization (or rationalized analogy) for the application of corrective justice is invalid for multiple reasons. Not the least is that its premise assumes that force is a valid means to justice and that two parties enter into transaction in some mathematically perfected and unequivocally

"equal" state. Essentially, Aristotle is himself committing the fallacy of equivocation in his metaphorical analogy of a line representing a human.

The question of entitlement, reward, and duty and other possessive and extrinsically motivating language involves an entirely different contextual paradigm of thought than the one present in an empirically life-grounded community. It represents a thought paradigm that does not maintain a systematic solution-orientation, and often originates from a place of force and authority. This rival and more common definition of justice [in early 21st century society] as "giving to everyone their due" (or "equal proportion") is largely derived from the notion of the human being as a [singular objective] possessor, eventually leading to hierarchies and institutional establishments of possession.

Therein, justice loses the sense of being the harmonious coordination of individuals' interrelationships over time to fulfill human needs, and is re-defined as the "morality

POWER CHANGES HOW THE BRAIN RESPONDS TO OTHERS

Researchers, Hoggeveen et al., (2013) randomly put participants in the mindset of feeling either powerful or powerless. They asked the powerless group to write a diary entry about a time they depended on others for help. The powerful group wrote entries about times they were calling the shots. Then, everybody watched a simple video. In it, an anonymous hand squeezes a rubber ball a handful of times — sort of monotonously. While the video ran, the researchers tracked the participants' brains, looking at a special region called the mirror system. During observation, 'motor resonance' was determined with transcranial magnetic stimulation (TMS) via measures of motor cortical output.

The mirror system is important because it contains neurons that [in part] become active both when you perform an action and when you watch someone else perform a motor action (e.g., squeezing a ball or changing a facial expression. Whether you do it or someone else does, the mirror system activates. In this small way, the mirror system could be figuratively said to "place the observer inside a stranger's head". Former findings suggest that the mirror neuron system plays a key role in our ability to empathize and socialize with others - they help us to learn and to understand the intentions of others.

The researchers wanted to see if bestowing a person with a feeling of power or powerlessness would change how the mirror system responds to someone else performing a simple action. It turns out, feeling powerless boosted the mirror system — people empathized highly. However, Obhi says, "when people were feeling powerful, the signal wasn't very high at all." When people felt power, they really did have more trouble getting inside another person's head.

High-power participants demonstrated lower levels of resonance than low-power participants, suggesting reduced mirroring of other people in those with power. These differences suggest that decreased motor resonance to others' actions might be one of the neural mechanisms underlying power-induced asymmetries in processing our social interaction partners.

"What we're finding is power diminishes all varieties of empathy," says Dacher Keltner, a social psychologist at University of California, Berkeley, not involved in the new study. He says these results fit a trend within psychological research. "Whether you're with a team at work [or] your family dinner, all of that hinges on how we adapt our behaviors to the behaviors of other people," he says. "And power takes a bite out of that ability, which is too bad." At a fundamental level, power [over others] changes how the brain operates.

Often, people who hold power over other become less capable of discernment over time, they loose more and more compassion, they increasingly see problems where there are no problems, they increasingly create conflict where there would otherwise be no conflict. Holding power over others changes the brain, and the change can be fast (e.g., Stanford prison experiments) or slow (e.g. an officer or warden who losses compassion and moral discernment over time).

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of aggression" over the defense of property abstracted from environmental and systemic factors, including human need. Property becomes identity, a division of unity, and potentially even, State "personhood" - division of the awareness of universal relationships (i.e., separation from unity).

The term 'individual' in Latin means "not divided" or "in-divisible" (in- ["not, opposite of"] + dividuus ["divisible"] from dividere "divide" one with all aspects of the self). The 'individual' is the experience of the self, which is indivisible (as in, not separated). Whereas, 'personhood' may be defined as the continuation and continuity of identity over time (i.e., this is me, this is me again, this is me, this is me again). But, when a person defines themselves by their property, then they have broken the connection with their true identity. Property defines their identity and justice becomes the "just" use of force in defense of property, in defense of the "abstracted self". This was an early notion of justice suggested to Socrates who rejected it as a universal principle, since it would necessitate one's returning to individual violence as a solution to social ills with potentially disastrous consequences for everyone. The codification of property naturally threatens force while it defines the individual in the defensive.

Plato modified this common view of justice in "The Republic" to mean that each person should perform their own function in the State so that the proper functioning of each part - the commercial, the military, the administrative - would result in justice. This view of justice regards human beings as "complete" only in relation to their work, not in relation to objective reality or even to one another. It does not understand the authentic human person to be essentially related to others in a verifiable sense. It is the natural perception of the biologically & psychologically immature, that there is no existence outside of one's own perceptual identity.

Once society delineates property it is delineating the defensive use of force with that property. Also, a society that delineates property may eventually begin to see everything in existence as property, leading to the defensible commodification of [the information system of] reality itself (e.g., intellectual property) - it feeds on itself - it is a principal destabilizing concept. The repetition of some conceptual patterns of thought produce a destabilization in the fullest expression of embodied consciousness. With property comes the reinforced opportunity for power and reward, which are habituating experiences (i.e., they replicate in a reflexive manner without human conscience). Although property may have some initial benefits as an incentive system, it is destabilizing in its nature and will eventually lead to its own collapse. Property is just a social agreement, a form of social organization. It is not something that is written into the laws of the universe.

In a property-based society, ownership is protected by violent armed force, which is advantageously monopolized [by entities in the larger interrelated socio-economic system]. Key resources needed to

fulfill humanity are actually under armed guard. This is where early 21st century society is now, this is early 21st century society, and it is neither a joking nor a happy matter. It is a very real and serious reality. This true reality, the real world, is harder to see in the information chaos and confusion of early 21st century society, but is more clearly visible in the types of relationships that exist between multinational commercial industries and tribal, native, and shamanistic societies.

In order for force to remain effective at a social level it must appear to have the potential of being applied to the maximum, to death. For example, if taxes are not paid, then kidnapping occurs, and if you are caught trying to escape the cage you might be killed, or at least your life will be made much harder.

There is generally a weapon wherever you are talking about property. There is a "right to force" in maintaining one's property as well as a legitimate gateway for the use of force to death in the self-defense of property. Of course, this logic is actually valid within a property-based paradigm. Unfortunately, a property-based paradigm is out-of-touch with the accessible real world, and hence, so is its logic. In reality there is not property, there is only access.

When access to life supporting resources and technologies can be controlled, then a power disparity is created that is globally problematic for the distributed fulfillment of human need. Such an environment naturally generates behaviors that cause suffering [as a lack of fulfillment] and limitation [as a lack of information] in society.

Ownership of a resource creates a "bottleneck" to common access. Others have to "go through the owner" in order to gain access to the resource they may need for their very health and survival, or for the organization of a more fulfilling life and community system. Such a socio-economic organization transfers (or gives) power to the owner at the expense of others. With power comes great potential for the acquisition of hierarchical control over the fulfillment of other's needs.

Ownership requires obligatory exchange and force to maintain the [scribed] obligation. Therein, entries into the ownership market (i.e., commercial entities) define the boundaries of choice, and today, they do so through what is commonly known as 'purchasing power'. Essentially, an entity in modern day's ownership-market is only as free as its purchasing power. Choice and power are no longer free under nature and participative social cooperation, but under an abstraction - that of money, profit (more money), and power. Therein, choice is made available [into the socio-economic system] by profit driven entities in the market (Read: a place for "marketing ownership", the producing and purchasing of goods and services by capitalists and laborers).

Free market philosophers like to talk about dispute resolution organizations (DROs), which become the "correcting force" in their [abstracted] market-based paradigm of thought. To them, DROs represent [the force of] corrective justice.

Profit is a harm inducing orientation through its incentivization of deceptive behaviors. If "you" damage something and "your" profit (or livelihood) is at stake, then you have an incentive to conceal the harm. The very structure of some incentive systems (or "some systems of incentive") cause otherwise good people to behave quite badly [environmentally, socially, individually - wherever they might be causing and hiding the harm]. Incentives can be perverse. "Your" natural desire to survive can be channelled by established institutions and Statist agencies into having "you" collaborate in a harm-producing system and not even be aware of it.

In particular, coercive forces want individuals to own themselves, for it is only thereafter that they can coerce the individual into selling himself or herself (and his/her labor) in the marketplace. The idea that objects can have intrinsic value, or even the existence of subjective value, leads very quickly to the idea that the ownership of person, land, resources, and even knowledge is a "right", a "property right". Such a "right" either comes from authority or it comes from nowhere. If it is believed to come from authority, then there will exist monopolization. A "right" (i.e., positive right) is [in practice] a privilege from authority. And, since authority doesn't actually exist, rights do not come from anywhere, they do not actually exist. There is no authority [in the real world] to give a "right". And fundamentally, the belief in authority involves [in part] the surrendering of one's own mind to some higher power (or "authority"). The notion of "rights" are discussed at length in the Decision System specification.

When force-based institutions are seen for that which they are, then the possibility for non-coercive social cooperation and human flourishing become probable. Therein, the individual and the social are fully realized in a larger societal context defined not by "rights" and "liberties", but by the socio-economic system (or life-system) functioning as a distributed network of participation and cooperation toward a commonly meaningful purpose.

What is the purpose of property? The commonly stated purpose of property is to provide instant access or use of something to the owner at any particularly desired time. Therein, "property rights" answer the question of who controls what: who has controlled and instant access to a thing when they want access to the thing? However, is it necessary to "own" something to have access to it? No, it is not necessary to apply the concept of ownership when the concept of access already exists. The application of ownership is highly dependent upon a societies chosen socio-economic organization and orientation, which may engineer scarcity or thwart scarcity [through the application of biomimiced ecological principles reinforcing ecological pathways that influence abundance and population surthrival (Read: survival and thriving)].

Under conditions of scarcity, property is more likely to exist, and so is authority. And yet, instead of looking at the world as scarce, one might look at it as

if it were an artwork that required participation and appreciation to continue fulfilling its experiencer. In place of the perception of scarcity one might recognize the potential for common ecological principles (i.e., accurate information), which when are applied are likely to generate states of abundance in fulfillment.

Ownership is not a systematically efficient means of access at a community level. Property entails a whole host of unfortunate, and some might say tragic, consequences. In a community, property will always generate problems in the flow of what are truly persistent interrelationships. What is actually needed, and actually exists, is access. If "you" have access to abundantly comfortable transportation, do "you" need to own a car? Can "you" rent a car or checkout a car from something akin to a car library and still access it whenever you need. Certainly, human intelligence can efficiently organize resources to meet common access needs. That said, there are some basic necessities that make sense to "own", or more accurately, have exclusive access to (e.g., personal hygiene items and a personal living space). Yet, if someone has the freedom to travel and move whenever or wherever he or she wants, then is there any reason to claim a home as property? These issues are articulated in full in the Decision System specification.

Distributive justice might be considered a form of fairness: an impartial and non-opinionated economic distribution. It involves the distributed access of resources, goods and services in a "humane", person independent and effective manner for the entire population of the community - it is a process that generates a state of persistence in equal access. Herein, there is no separation between what one person can access and another can access [qualified by safety & localization protocols discussed in the Decision System specification].

The statement that "all people are equal" is entirely meaningless without a context and an objective physical referent. All humans are not equal in their abilities, their qualities, their passions and interests, or their personalities; the word "equal" does not make sense in this context. Yet at another level, to say that all humans are equal is to say that they are all alike in some manner. The manner in which they are most alike, are most similar, is their common needs and states of expressed being (and the highest common direction that all actualized humans desire). And, if we all have similar human needs and we can realize a similar common direction, then the idea of 'equality' as applied to a social system refers to equality in access to the community; wherein, all contributors contribute to the whole of the community.

Equality as it concerns the distribution of resources might be valued by a community that recognizes that the unequal distribution of these things by individually desired quality, such as status, prior wealth, knowledge & skill, labor capability & past work history, resume check list, birth, power, possession, etc., is likely to manifest

a divisional system in a population that generates de-structuring behaviors leading to seriously destabilizing social and environmental costs.

Justice does not involve an "obligation" to bring about equality (i.e., the term "obligation" interjects the notion of authority), but it is about a empirical and rational recognition that equality of access leads to a higher likelihood that every individual will be better off. And, by exchanging and participating through that value orientation, and by encoding it into our decision system, we maintain an emergent and intentionally fulfilled community.

Having empathy and compassion for others is the root of all forms of justice. Yet, justice isn't a "required" value; it is a value arrived at through observation and reason, through the integration of experience, and through the re-structuring of a truly just society. It is an objective value related to how effectively individual needs are fulfilled in both a local and a societal context. Wherever justice is "required", then it is not aligned with fulfillment.

Massive injustice lies at the root of much of the contemporary distribution of wealth. The possession of land is the most obvious example. But other kinds of force and violence—the internal passport system implemented in eighteenth-century England, for instance, or the engrossment of unowned land by State fiat—have also served to deprive humans of the ability to participate in the sharing of access through what is commonly known as a "commons". The beneficiaries of this kind of material aggression have varied to some extent, but they have consistently belonged to politically and commercially favoured groups—they've been either members of the power elite, their families, or their associates.

Is it not desirable to design systems that ensure freedom of access to those goods and services that individuals need to be fulfilled and feel satisfied? Is this not a desirable state? And yet, the idea of 'property' negates the state of distributed access. In a community setting, self-directed freedom is most likely to arise when the following two conditions are met:

1. When everyone's baseline material needs are sated such that material acquisition is no longer of paramount importance and competition over resources becomes irrelevant (i.e., scarcity of life-need is sufficiently reduced to reveal a higher potential direction). In other words, 'social justice' exists when everyone has achieved a state of strategically designed certainty in the fulfillment of their needs that would otherwise cause primal and anxiety driven behaviours to appear, derailing everyone's highest fulfillment.
2. When everyone in the community either owns the same or no one owns anything, but has equal access to everything (i.e., distributive justice). The latter being the most efficient form (i.e., no one owning anything). If equal access to the fulfillment

of needs does not exist then consequently envy will exist, which leads to (or "breeds") contempt, resentment and jealousy as the emotional resultants of envy. Actions and behaviours derived from these emotions reduce the stability and freedom of a community by injecting into it an increase in the probability of reactively corrosive social behaviors. Relationships built upon these emotions cannot sustain a functioning community.

That which is essentially sought by a community is a conditional [dynamic] state where no individual has coercive power or advantage over other individuals in the continuous and systematically re-creation of society and the fulfillment of common human need. It is a system of cooperative access, not a system of market ownership.

It is important to clarify here that the desirable value state of "distributive justice" described herein is not equivalent to the governmental, administrative class process [state] of "wealth redistribution" - wherein the government takes by force and re-distributes that which is considered wealth (e.g., currency). It is inaccurate to equivocate the two concepts. If the term 'distributive justice' is in any way defined as authority's role in redistributing "wealth" and providing services, then it is not equivalent to the definition of 'distributive justice' described herein.

Commodification, which is [at least] the exchange of some form of property in the market, destroys the fundamental premise or relationship between a service [from nature] and the human need it is intended to fulfill. And further, commodification generates artificial scarcity by making things increasingly inaccessible as prices increase, inflate, and are "hiked". Maybe, instead of looking at entrepreneurs as heros, we should be offended at the idea of taking a natural lifegrounded service [that may not have previously been commodified] and charging for it. To perceive matter and information as property is unfortunate, for property, itself, is not a sufficient concept for orienting a society toward human fulfillment.

There is a question sometimes asked of those who maintain that there exists value in the commodification of anything which can be commodified - that the "voluntary" market should penetrate all crevices of one's life. That question is, "Would you charge your daughter for protection?" This is quite a poignant question and when answered fairly as "no sane and healthy person would ever charge their daughter for protection," it reveals the degree to which someone sees their responsibility and relationship to (or importance of) another organism of our species on Earth. A father would not even consider the safety of his daughter as a product in the marketplace, nor any other beloved member of his family. A 'family' consists of those individuals to whom someone has a degree of responsibility to and is in a persistently supportive interrelationship with (at least, ideally), who

are important to someone, and to whom someone is in turn important too. When this understood relationship is more deeply considered, then the question arises: "Who is your family, who are the people you share and cooperate openly with? Who are those people you exist in a persistent, participatively voluntary and supportive, caring (or care-taking) relationship with? Who are the people you desire to support and protect? Who are the people whose needs you view in common with your own? Who would you organize cooperation with in the mutual fulfillment of need? Who would you not compete with at a socio-economic level?"

MAXIM: *To live with dignity there has to be a baseline.*

These are useful questions because they present an opportunity to those who believe in [the] commodification [of existence] to perceive their true "level of care" in the world:

- Are you **ego-centric** and care only for yourself;
- Are you **kin-centric** and care only of blood relatives (some maybe more than others);
- Are you **ethno-centric** and care about the tribe, race, village or nation;
- Are you **world-centric** and care about all humans;
- Are you **earth-centric** and care about all living beings on the Earth;
- Are you **truth-centric** and care about what it means to actually "care about" something;
- Are you **openly-centric** such that you ask questions about the truth of consciousness and the fulfillment of all known beings in the universe?

The very notion of "commodification" is tied up with someone's level-of-care of others in the world as well as their understanding of the persistent dynamics on this planet. If you wouldn't charge your daughter for protection, but you would charge your neighbour, then you have superficially limited your empathy to and care for others in the world.

Prejudices rise and fall as people preach to promote them or teach against them, as doctrine is interpreted toward peaceful interaction or toward force and retaliation -- [from a systems perspective] doctrine is always a form of dichotomy and duality [for it is based upon interpretation]. In the interpretation of doctrine, an individual may begin to inquiry more deeply into real existence and develop and appreciation for verifiable experience, or they may dip more deeply into belief and fear.

Prejudice is nurtured; it is often the product of environments of interpretation and fear, which is easily stoked up and often takes years to quench. One manifestation of prejudice is that when great numbers are seen as less deserving, as slaves, paupers, as another class, as outsiders, or just "average" or "other", then a minority can describe their own behavior, not as greed,

egoic-projection and violent, but as simply receiving higher rewards because they are a different kind of human being, who deserve to be "put on a pedestal" above those they view with a prejudice. It is unwise to become pejorative of any people, for we are all walking the same path and we all exist in common.

We are of our highest potential when we recognize that we are of one human family among a universally cosmic family. Technology has helped us realize that we are [at least] one global family, that we can drop all the territories (e.g., clans, nations, states, and other landmass distinctions and artificial distinctions) and become humanity, Earthlings, our unified, consciously sourced, selves. Our communication networks are global. Our astronauts and engineers show us photographs of Earth in minute detail. Technology can help show us more of who we really are. And, the exploration of consciousness may show us our timeless cosmic nature. Technology and consciousness exploration enable a recognition that we are all one. However, technology does not drive change or create greater equality; instead, accurate [scientific] information enables change toward a more orientationally fulfilling direction. The intention of a conscious identity, an individual, drives change toward technologies that allow for greater states of freedom, or technologies applied toward greater states of self-enslavement. When technologies work for us they empower us and when they work against us they enfeeble us.

NOTE: *If someone or some organization owns an idea, then they can stop that idea from progressing. Who owns the idea of justice in society? Is it some form of the State? Is it the market? Is it someone on a stage with a box in front of them? Is it someone in front of others in a classroom?*

4.3.3 Participatory justice

INSIGHT: *In the state of social equality exists the state of equal opportunity in participation.*

A digital, technological economic system allows for the massive self-aggregation of individual effort around the expression of common value (i.e., a commonly valued [system of] orientation). Therein, highly complex social artefacts, such as an open source transportation system, a universal encyclopedia, and a universal computer + operating system, are entirely possible through the process of open and free contribution to a common project (or economic demand/inquiry). Herein, society becomes an emergent "project" with which anyone can participate and everyone benefits. This process is sometimes referred to as 'peer participation' or 'peer-to-peer participation' (P2P). The peer participation process may be extended to include the iterative and cooperative redesign of the social and economic decisioning systems themselves. In a true "state of justice", contribution to society is not based on the narrow selfish pursuit of

personal gain at the expense of others. Community benefits only when everyone has the opportunity and the incentive to benefit.

It is important to note here that notion of life being voluntary has limits; it is important to recognize that it is not voluntary to live within the bounds of one's ecological environment.

In a participatory process the expression of value originates from and remains within the community, in a 'commons' of ongoing interrelationships. Participation is a platform and a process that maintains a commons-oriented approach where input, processes, and output are free from private appropriation through [claim of exclusive and defensibly rightful ownership to] property. Herein, individuals in the community contribute open data, knowledge, open code, open design, and open effort to a common pool of information resources for coordinated and value-oriented fulfillment. Participation is an organizational process that exists to maintain an operational platform (or structural dynamic) for the benefit of everyone in the community.

A peer participation system is designed so that individual and "collective" benefits coincide. Herein, a contribution, for whatever reason, creates something universal, something potentially useful to everyone as it is open to use and modification by anyone [qualified by safety protocols]. Within such a system the universal benefit exists regardless of motivation -- even selfish motivation remains universally beneficial. If someone were to fix a bug in Linux (an open source operating system), because they were using the system and desired resolution of the bug for their own selfish wants, then it automatically creates a better operating system that everybody can use for free on any computer.

Herein, peer-to-peer is a open and relational dynamic, a particular organization in which people relate to each other by contributing to a whole. For example, the Internet is a cooperative peer-to-peer construction of organization for the benefit of everyone based upon formalized [standard] protocols. In the Community, peer-to-peer is applied toward the sharing of a common lifeground and distributed re-structuring of information toward a similar direction of purpose: toward the cooperative re-creation of systems that meet the needs of individuals in the community. It is a form of free, volitional, and truly voluntary association without external reward or punishment, without erroneous incentives, and therefore, it has the potential to engage intrinsic motivation toward the purposeful fulfillment of individual need. In community, we create because of who we are, we don't need to make money or any other abstraction to create; principally, in community we become our intrinsically motivated selves.

Peer participation is based on the distribution of tasks [and constructors] across the community. (Deutsch et al., 2014) Unlike an industrial system, it is not based upon a division of the individual through ownership-labor (i.e., the market economic "division of labor"), but on an intentionally designed information organization

that enables systems-level transparency such that participants know what needs to be done (i.e., tasks) and what the most efficient and effective allocation of effort and resource (i.e., constructors) is toward the fulfillment of those needs. It is an open system of organization, communication, and construction (or "production and recycling") that allows people and technological (i.e., applied knowledge) systems to aggregate their skills and resources toward the fulfillment of the needs of the community organized by open tasks and projects (i.e., sets of tasks). Instead of a society based upon industrial growth, a redefinition of 'justice' as participation facilitates a movement toward a life affirming and life sustaining society.

Herein, a distributed peer-to-peer system manifests as a technical system of collaboration that enables the sharing of information and equality in access, which maintains a highly abundant, stable and sustainable community. Collaboration means working together cooperatively; it means applying energies, effort, and personal power in a common direction through a similar value orientation. When someone is living in a fluidly interdependent group (i.e., a distributed community) the best way to mitigate risk is through sharing; herein, sharing promotes resilience.

The peer participation process is significantly different from socially-hierarchical (or "socially vertical") processes, which are based on 'panopticism'. Whereas the panopticon is the model for external surveillance, panopticism is a term introduced by French philosopher Michel Foucault to indicate a kind of internal surveillance. In panopticism, the watcher ceases to be external to the watched. Panopticism exists in contrast to holism (or "holarchy") where everyone in the society, regardless of [active] participation, knows (or, can easily access) what is occurring with and within the socio-economic system. In other words, the system that organizes fulfillment is transparent to all in the society regardless of active participation.

Peer participation involves communication and effort on a horizontal scale without the need to ask permission of an authority to contribute. Hence, its very design allows for the global scaling of small group dynamics. Essentially, the overall design for the Community (i.e., the design specifications in full) can be scaled to the size of a global society if the idea of peer participation is effectively integrated at a core structural level.

Individuals involve themselves in the participatory process because they either desire use of the output or they consider that it is going to be useful to someone else. Hence, one of the principal motivations for effort expenditure in this environment is the fact that the output maintains a 'use value' to someone (i.e., it has a purposefully thought out need). Individuals are highly unlikely to contribute in an intrinsically free manner to a project when their work can be appropriated by someone else and not shared. And, individuals cannot be said to exist in a state of valued cooperation with one another if they do not have open and free input. Further, open

and free access to outputs is required for coherent[ly oriented] adaptation - participatory adaptation through user feedback to user needs - participation becomes its own feedback mechanism.

The model of peer participation described herein is sometimes known as 'peer production', 'commons-based peer production', and 'mass collaboration'. It is a process with the following characterization, in the negative and positive:

1. In its negative characterization it involves:
De-institutionalization (it exists beyond fixed organizational formats and fixed formal rules), de-monopolization (it avoids the emergence of groups of individuals who monopolize power, such as governance structures, industries, and business entities), and de-commodification (i.e. production is for use-value, not exchange or trade value);
2. It is positively characterized by sharing within a community of commons. It is based upon free participation in regard to input, processing, and output, and free usage even by non-producers. A participation model involves the accessing of a common pool of shared resources for systematically fulfilling identified needs, wants and preferences in the community. It is a cooperatively organized commons that facilitates access to resources and outputs, and ultimately, the sharing of natural[ly life-grounded] services.

A community is equivalent to a natural living system. In similarity to a natural living system there exists a "circulation of the commons" and this is how the commons "reproduces" itself: open input; a participatory formal and emergent process; and a commons-oriented output. Notice that it is an adaptive process. People contribute and add to the emergently designed and constructed system, not because they are trying to gain from it [at another's expense], but because their contribution has a deeper meaning.

In order for peer production to exist there is a requirement for an enabling common organization, a similarity of architecture and of infrastructure. This organization is intended to service the needs of the community and facilitate [through enabling technologies] the arrival of equitable economic decisions based on a process of participation and re-formalization [as new and more accurate information becomes available in the decisioning space]. This organization must maintain a structure for systematically fulfilling the needs of individuals in the community if it is to remain orientationally useful (i.e., it must correct for feedback of information into a re-constructable or re-formalizable system). Herein, the Community conceptualizes the fulfillment of human needs. The 'service system' is a constructed and formalized system for servicing the needs of individuals in the Community. The concept of

a 'service system' and the types of service systems that exist in the Community are described in detail in the Decision System specification.

It is entirely possible for a society to design social and economic organizations to maintain a collaborative platform for enabling and empowering participation by individuals. Wherein, an open and collaborative social system will in turn create an open and collaborative economic [decisioning] system through the encoding of its social values.

When someone becomes involved in making and creating in their community, then they are naturally inclined to acquire an awareness and appreciation of what the process [of creation/construction] involves. Herein, every individual has the power to make a synergistic difference when given access, which leads to a state of stigmergy. (Dipple, 2011) stigmergy is a mechanism of related, but indirect, coordination between agents (and actions) and their environment (i.e., it is a *mechanism of self-organization*). In a stigmergic process, global system behaviour emerges from the indirect interactions of the agents that occur by modifying the environment. (Bourjot et al., 2003) The idea of stigmergy is that information traces left in the environment by a previous action stimulate the performance of a next action, by the same or a different agent. The term was derived from the observation of insects in their food gathering and construction processes. Subsequent actions tend to reinforce and build on each other, leading to the emergence of coherent, apparently systematic activity and behavior. However, without a sufficiently accurate model of the environment it is difficult to predict the outcome of self-organisational methods based on this mechanism as the global behaviour emerges through interactions with the environment; hence, falsifiable [scientific] knowledge is necessary for orientation and navigation in the real world.

Science has recently shown humanity that the fiber pathways in a human brain, the "connectome", are not isolated structures; in a very real sense, every pathway in the brain has a "relationship" to every other pathway given by their mutual position in a single unified grid structure. Through scientific understanding and technological construction humanity can now see the whole material structure of the brain. The "connectome" is a single unified whole structure that fits into a single framework which expresses developmental rules and per speculation, functional rules also. Maybe if society began to recognize existent relationships and participated in them intrinsically, then it would be a lot closer to acting like a unified and interrelated whole, a "social connectome" for human fulfillment.

4.3.3.1 Participation and the role of technology

Technology can extend the functions of [at least] human cognition, locomotion, and perception. We as humans have always recognized that the powers

of our mind and the motion of our bodies are limited to some natural degree. And, we have always made devices to compensate for these limitations. One of the most remarkable technological inventions is writing. If you think about it, writing is a technology for storing information outside of our heads so that we don't have to remember it. An abacus was an early calculator. Carriages move people faster than their legs can move. The bicycle is a technology that extends our muscles and ability to locate. We have a great history for recognizing this, and one of the defining elements of the human species is as a technically complex tool maker and a tool user. As humans, we are capable of recognizing our present limitations and also of "re-processing" (i.e., modulating the dynamics of our common human system) our world to build technical services and devices that provide relief, caretaking, and life betterment.

Go out in the woods with no clothing and see how long it takes to succumb to exposure ... because your clothes are a technology, shelters are a technology, food preparation with fire involves technology; hunting effectively involves technology. Even permacultural practices involve the communication of knowledge across time.

If you think about any technology, but computers in particular, the only reason we have computers and the only reason we value them is for our own purposes - to extend our ability to understand the world around us and to make better decisions. This is the purpose for their existence. It would be wise, then, to apply them where they might be most effective. And, to recognize in their application that there exists a similar computational network in every biological system.

In essence, thinking itself (i.e., cognition and the mind) is a kind of computation. It's not, of course, like the kind of computation done in a digital computer, for many reasons; rather, the elementary data representations and goal states that cause our behavior are implemented as neural networks and ultimately can be tied to [at least in part] the underlying neurophysiology. It is important to remember, however, that the argument toward neurophysiological computation laid out in Steven Pinker's book, *How the Mind Works* (original publication 1997), has been found to be reductionist [to the neurophysiological level of explanation].

Technology is an organic part of humankind, and we create these tools to extend the boundaries of how we live and express ourselves. The software application Photoshop, for example, allows for the unlimited expression of the self in 2D form; literally, anything you can imagine in 2D can be created with Photoshop. Biology is basically software that writes its own hardware - bacteria literally re-design their own genome. The spider's web is a technological aspect of the spider itself.

We are a species accelerating in its capacities to be creative and maintain thought responsive environments. Unfortunately, all the technological wonders of the world are just tons of junk unless they enhance the lives of the individuals [in a community]. A chaotic mind in a

thought responsive environment creates [exponentially] more chaos as the environment becomes more [technologically] thought responsive. In essence, it could be said that the very reason we create technology is to shrink the lag time between our imaginings and their instantiation. The more powerful our [computing and creating] tools the quicker we can create fulfilling change in the world, or destroy ourselves and our world. Technology, and digital technology in particular, is creating a new class of creative collaboration (e.g., the Internet + 3d phisble printing) that is disruptive to modern competition-based society and changing to old [power and thought] paradigms; wherein, traditional jobs and even the market [as an abstract entity] become seen for what they are, and become, obsolete. Yet, better technology alone will not save us or even make our lives better unless we make social changes as well.

In early 21st century society we have become dependent on our technology, and have come to believe that only technological solutions can solve our problems. Yet, the technology we develop is wholly dependent on our intentions. By relying on tools instead of improving our understanding, we are travelling down a slippery path toward further separation and possible destruction. Wisdom is found in the users of tools, not in the technology itself. The use of a tool cannot be separated from its origin and useful intention, just like humans cannot be separated from our natural environment or from the tools we use.

In a thought responsive environment we need to be careful in our thoughts, we need to be careful of faulty thinking, and also of not thinking at all (i.e., letting authorities do our thinking for us).

Are we actually getting the best of what technology has to offer right now? In some cases, we are: In an article entitled "Golden Eye" by Ross Anderson he speaks of the Hubble space telescope and how it is an instrument of mankind - it was the "eye" of mankind - an exoskeleton of humankind's optic nerve; which, literally allows an individual to mainline snapshots of universal time through their optic nerve. Instruments of science expand what everyone can see and verify. They represent the potential for the expansion of our minds. Scientific instrumentation, when applied toward the expansion of our perception, is eminently useful.

Technology can facilitate participation as well as provide a transparent and persistent recognition of a larger and more encompassing [dynamic] whole. And, a purposeful social orientation combined with participatively developed technology has the potential to create a state of equality in need fulfillment without an administrative bureaucratic class of governors. Yet, at a fundamental level we must ask ourselves, is the technology going to be used to facilitate lifelong holistic well-being or are we whitewashing a dystopian politico-corporate dictatorship. The statement, "It's what we do and how we use it," fits in nicely here. In other words, for what purpose is the technology being developed? Is it being developed through secret experiments

sanctioned in the name of profit and defense, or are the technological systems that we use openly developed by users for their own fulfillment?

INSIGHT: *You can ignore reality, but you cannot ignore the consequences of ignoring reality. When the environment changes, behaviours change - this is reality. A society must study its relationship to nature, the natural true world from which meaning is relationally derived.*

4.4 The processing principles of contribution

MAXIM: *Those who understand it, and participate with it, progress it.*

Scientific findings have uncovered a variety of basic principles for enabling contribution without expectation. These principles [and others] are well known in the field of social psychology. Research into contribution reveals that there are ways in which a community can inspire more "giving" without the expectation of [material] exchange. Society can be designed to facilitate contribution, participation, and sharing over self-oriented production, consumption, and profit. There exist [at least] three discovered principles that enable contribution:

1. People are unlikely to contribute in a non-transparent system where they do not know who precisely they are helping and how their contributions will make a difference.
2. Transparency allows for everyone in the community to have an awareness of what everyone else needs. Finding out what people need brings potential "givers" out of the woodwork. Because, they saw ways that they could contribute that they weren't aware of before. If a community wants individuals to contribute, then it must [be organized to] encourage individuals to ask for help and to inquire. And, the community's architectural and technological platforms must be designed to facilitate queries for information and assistance. Many people for discoverable reasons withhold help seeking in early 21st century society.
3. People are more likely to contribute when they share a common identity with the beneficiary; and possibly, a common value set. What identity, what values and understandings, does the contributor share in common with the beneficiary that actually makes their well-being part of the contributor's well-being? What makes helping them, and giving to them, a little bit like helping oneself - a regeneration of the state of contribution?

Research shows that there are many benefits to

contribution. Joy and meaning are two of the most commonly mentioned. Further, people who freely participate come to feel more valued and more appreciated, which lead to a host of positive psychophysiological (hormonal) benefits. However, not all social arrangements are conducive to the "success" of givers. Being someone who gives under certain social organizations, such as giving in a competitive market, might unfortunately mean that you get trampled on (Read: trampled over toward another's profit). A "giver" who resides in an environment composed of completely selfishly self-serving people is likely to be taken advantage of and exploited -- it re-generates the opportunity and

RESTORING A STRUCTURE OF FULFILLMENT THROUGH COMPASSION

Is it possible for the structure of a socio-economic system to cause the expression of particular social pathologies and associated diseases? In other words, is it probable that the structure of early 21st century society's socio-economic system is a strongly correlated factor in the social pathologies and diseases of early 21st century society? What if some of our fundamental ideas about society and community and social pathology are just wrong? What if blaming the "criminals" means we're blaming the victims [of at least a structurally violent system]? As a species on a finite planet we can no longer afford the luxury of arrogance. We know that violence during childhood elevates your risk of disease, child abuse towards others, and drug abuse, and there is even reason to suggest that such experiences as a child directly lead to these later in life behaviors.

Once we identify what safe and practical changes we can make to fulfillment in the community, then we may ask ourselves, "How can we move the community (or, the behavior of individuals) in that direction so that it becomes more the default rather than the exception?" Just because you know what to do doesn't mean you are always going to do it. Sometimes we have to put cues around ourselves to make it easier (i.e., more efficient); and believe it or not, that can be studied scientifically. What is clear is that we can't keep blaming those who inflict violence or have violence inflicted upon them. Most people in society want to do the right thing, but they have to know what that is, and it has got to work for everyone's fulfillment.

If social violence is nothing more than a proxy for insufficiently structured fulfillment, then what good does it do to punish those with the proxy. We need each other's empathy and compassion, and above all else we need individuals who are willing to consider that maybe "you" didn't let the system down, maybe the system of which "I was a part" is letting you down. We ought not substitute contempt for compassion.

provides incentive for some to take advantage of others [in meeting their own felt needs].

In looking at the principle foundations of participation it might be useful to explore how other species organize their communication and participation systems. Bees, for example, perform their own form of open and objective participatory communication in their communities. It is known as the waggle dance [en.wikipedia.org]. The waggle dance is a system of signaling communication used by bees to communicate information about useful resources to one another.

MAXIM: *Absolute inequality is harmful to everyone; and it exists absolutely in a market economy.*

4.5 Power as social power

The power to "do work" and to store potential energy in various forms may be observed in the structure of every existent system. It could be said that power lies in the harnessing and otherwise transforming (i.e., transformational movement) of energy from an environment through structure into new structure with a different potential for "doing work". In its basic form, 'power' denotes the movement of energy and the transformation of information into a different potential [of structure]. Power in this [systematic and structural] sense is a neutral concept that lies at every structural level and in every system in society, including but not limited to: the individual; the social; the economic; as well as the ecological.

At the social level power has the potential of becoming maleficent, forming a socially structured hierarchy of power (as in, "force" and "coercion"). In a social hierarchy there is the concurrent conceptual formation of the idea of "authority" (sometimes given the professional label "manager", "boss", "leader", or "commander") from which there is [em]powered pressure downward from the upwardly centralized structure. In other words, social hierarchy centralizes power upward and applies it downward as force and coercion. Therein, "force" may become monopolized into the idea of a perpetual State [of downward power] and "coercion" may become monopolized into the perpetuation of a market [of competitive power]. In other words, power becomes "force" at the level of government and "coercion" at the level of a market; although in truth, one cannot exist without the other, and hence, at the socio-economic level, when one is in play then both are in play and there is an active dynamic of the two forms of socially structured power [into what has become known by its umbrella term, "structural violence"]. This form of power exists in contrast to the form that maintains the "neutrality" of the concept of power at the social level, an 'open systems hierarchy'.

All living systems are open - they receive signals from their environment and respond with some degree of intentional freedom after the processing of information

from corrective-negative feedback. An open system hierarchy maintains the neutrality of the concept of power in its application at the social level - a system that does so may be considered "living", and a system that does not may be considered "dead". A socially structured hierarchy of power [into force and coercion] does not maintain that neutral understanding for it adds the addition of the idea of competition for rulership over items of ownership, wherein power becomes pejorative to human fulfillment (i.e., force and coercion).

From the perspective of consciousness as a self-initiated, goal-oriented process, power involves the open sharing of information, intentions and goals among one another to facilitate an overall, commonly fulfilling direction (as a commonly meaningful purpose).

Because structure exists at all levels, power exists in some form at all levels. And, in an environment where the idea of "ownership" is also encoded into the structure, then there will exist the ownership of power by competing entities [as a structural arrangement of that society]. Since effort (as work/power) is required to fulfill most needs, particularly those of a material nature, a society that encodes ownership will simultaneously encode the incentive for the monopolization of power to more effectively and efficiently fulfill one's own needs [under a state of competition for need fulfillment]. Therein, entities in the market will seek to own coercive power and parties vying for ruler-ship will seek to own forceful power. With such power there is likely to come greater ownership, and a greater competitive advantage, in the satisfaction of one's own felt needs. Therein, 'purchasing power' is the power to fulfill your own felt needs in the market and social influence represents the power to fulfill your own felt needs in politics (or government).

In modern times, there may be no clearer example of social hierarchy than that which takes the form of the modern State. The modern State involves an organized structure of people and technologies that are designed (or "instructionally trained") with the intention of monopolizing conflict for their own ends within an area they claim as their "jurisdiction". Also, it is still the case in some countries today that the hierarchical social-market class system is fairly prominent: the caste system in India is one well-known example. In either case, a social power hierarchy is a means to domination [in the exclusive fulfillment of one's own felt needs at the expense of the needs of others].

As noted, monetary economic power is in part measured by 'purchasing power'. And, political power is in part measured by one's hierarchical political position and one's social network of influence and favor.

The ownership of power by a State or market entity will fundamentally destabilize a society and it will have consequences that ripple throughout the whole of the [human] system.

At the economic level in a structured social hierarchy power becomes an economic resource of control, examples of which include but are in no way limited to:

employment; the military and police; subsidization; as well as State issued currencies and fractional reserve banking (which control the flow of the economy itself).

In a social hierarchy, power is the ability to "make" people do what you want through force and/or coercion, which may be highly discernible or indistinctly structural (depending upon perception, experience, and cognitive filtering). According to the classification by economist John Kenneth Galbraith, 'power' [at the level of social hierarchy] can be usefully divided into three categories, which he refers to as: condign power (i.e., force);

compensatory power (i.e., reward); and conditioned power (i.e., indoctrination).

These three forms of structural social power each represent a sympathetic form of structural violence:

1. **Condign power** – as coercion, aggression, and force. Note: This form of power is expressed through the claim to authority and the monopolization/obfuscation of violence. It is an aggressive form of power, which may become

THE RAT PARK EXPERIMENTS

Canadian psychologist Bruce Alexander, at the Simon Fraser University in British Columbia, Canada, suspected that the preference of rats to morphine over water in previous experiments might be affected by their housing conditions. To test his hypothesis Alexander et al., (1978) built an enclosure measuring 8.8 square metres for a colony of rats of both sexes. This area was around 200 times the area of standard rodent cages. 'Rat Park' (as it was known) had decorated walls, running wheels, and nesting areas. Inhabitants had access to a plentiful supply of food, perhaps most importantly the rats lived in it "together". It was a giant rat paradise enclosure built to house many rats of both sexes with plenty of opportunity for physical activity and healthy environmental interaction; essentially, to have a normal rat life (as close as could be approximated). Rat Park was what neuroscientists would call an enriched environment, or a non-deprived one. Alternatively, rats that live in a small cage on their own experience a form of sensory deprivation (housing isolation; "openness deprivation").

In the tests, rats reared in isolation cages drank as much as 20 times more morphine than those brought up in Rat Park. Inhabitants of Rat Park could be induced to drink more of the morphine if it was mixed with sugar, but a control experiment suggested that this was because they liked the sugar, rather than because the sugar allowed them to ignore the bitter taste of the morphine long enough to get addicted. When naloxone, which blocks the effects of morphine, was added to the morphine-sugar mix, the rats' consumption didn't drop. In fact, their consumption increased, suggesting they were actively trying to avoid the effects of morphine, but would put up with it in order to get sugar.

After the first phase of Rat Park, Professor Alexander then took this test further. He re-ran the early experiments, where the rats were left alone, and became compulsive users of the drug. He let them use the drug for fifty-seven days, so that they became addicted to the morphine. Then he took them out of isolation, and placed them in Rat Park. He wanted to know, if you fall into that state of addiction, is your brain hijacked, so you can't recover? Do the drugs take you over? The result was that under the conditions of Rat Park the rats previously addicted to morphine were observed to have a fewer twitches of withdrawal (than controls), they soon stopped their heavy use, and eventually returned to having a normal life. The "good" cage saved them from addiction. Essentially, the Rat Park experiments demonstrated found that the opposite of addiction is not sobriety, but a healthy connection to others and to one's surrounding environment.

The results are catastrophic for the simplistic idea that one use of a drug inevitably hooks the user by rewiring their brain. When Alexander's rats were given something better to do than sit in a bare cage they turned their noses up at morphine because they preferred playing with their friends and exploring their surroundings to getting opiated. Rats with poor living conditions will make choices that are poor for their health.

The rat park experiments have been similarly replicated in a host of other organisms. If these experiments were to convey just one useful idea it might be the notion that the structures we accept and build around ourselves into that which is our 'environment' have a persistent relationship with our well-being. How do our structures effect our decisions, and our health in turn? What variable are we neglecting to think about? It is wise for us to consider the possibility that we have unwittingly built cages around our social selves. Are modern cubicle farms not cages? Are employment positions not cages? Are professional institutions not cages? Is property not a cage for those who don't have property? Are schools and grades not cages? Is a belief not a cage?

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embedded within the fabric of society itself (i.e., become normalized so that it is no longer seen for what it is).

2. **Conditioned power** – as propaganda, public relations, foreign relations, advertising & marketing, schooling, mass media, the general organization (and culture) of society, and other non-economic incentives. This form of power involves the repetition of beliefs (or programmatic memes) to maintain a state of power through individual perception modification (i.e., belief systems management, -ism's encoding). The expression of this form of power is generally not accompanied by visible aggression. And again, if aggression is present, then it is often normalized.
3. **Compensatory power** – as economic incentives, such as investment, wages, subsidies, and welfare. This form of power leads to the expression of an extrinsically incentivized, socially stratified structure.

Condign power wins submission by the ability to impose an alternative to the preferences of the individual or group that is sufficiently unpleasant or painful so that these preferences are abandoned. There is an overtone of punishment to the term's definition, and this conveys the appropriate impression. There may be the threat of arrest, death, and beating [when condign power is not submitted to]. Galbraith also notes that while condign power is still crucially important in some respects, it has lost a great deal of general recognition in modern "democratic societies" compared to compensatory and conditioned power.

Condign power wins submission by inflicting or threatening appropriately adverse consequences. Compensatory power, in contrast, wins submission by the offer of affirmative reward -- by giving of something of value to the individual so submitting. Monetary reward and State social welfare are examples of this. Compensatory power often leads to an increase in dependence and decrease in self-direction, self-esteem, and intrinsically creative potential.

Conditioned power, in contrast, is exercised by the agenda-based changing of belief. Persuasion, education, or the social commitment to what seems natural, proper, or right causes the individual to submit to the will of another or of others. Therein, the submission appears to reflect the preferred course; the fact of submission itself, is not recognized. Whereas, submission is a common feature of both condign power and compensatory power – in the one case compelled and in the other for reward. Conditioned power is equivalent to the willing acceptance of the indoctrination of a belief system.

More than likely, if power is present in any of these structural forms, then all of its forms are present to some spectral degree in that society. Hence, if any of these forms of power are present then [structural] violence is

also present.

To mangle a quote from Gary Lloyd, "When a boot (i.e., power) is on your throat, whether it is a coercive boot, a compensatory boot, or a conditioned boot is of no consequence." All three "boots" lead to vast inequalities between human beings. All three "boots" flow from hierarchy and lead to internalized self-hatred, exploitation, suffering, death and genocide.

The major problem in separating these forms of power is that they are all necessary for each other. Genocide requires dehumanization of the enemy, and massive resources, to be perpetrated. "Property rights" require indoctrinated obedience and the force of the gun if they are to persist. Indoctrinating people to agree with a social goal, no matter what goal, requires some form of punishment for those who disagree, as well as the means to produce and propagate an effective message.

It is, in part, when powerful entities feel threatened that they use the power that they have amassed, and been given and accepted by the naive, against those whom they perceive as threatening. And scientifically, being in a position of power over others significantly diminishes one's capacity to empathize with others. In simple terms, social power reduces the capacity to empathize. Further, it is important to remember that historically, people in positions of power have very rarely undermined their own power (i.e., given away their own "right" to power).

The wrong people will always ascend in a political[ly] powered and socially hierarchical structure. A community may prevent all ascension to power through the intentional design of its system, which are designed to maintain the empowerment of the individual. There will always be interests in vying for control of mechanisms of social power in a competitive game for survival. It is the fact of the social [power] position itself that is the problem. When there are positions of social power there will always be people who seek the power and will move into those positions. If there is competition for need, then there will exist perpetual incentive to abuse the power.

The nature of government has always been to look at people who oppose what "they" do as being "threats". That's the nature of power -- to regard anybody who's a threat to your power as a [broad national security] threat, a "terrorist".

If you are someone who exercises power and you can know everything about what everybody else is doing, what they say, read, think, plan, and with whom they are interacting, and you can, at the same time, build a wall of secrecy around what it is that you are doing so that no one else can see or know what it is that you are choosing to do with your power, then the power imbalance becomes amazingly acute, which is why all tyrannies instinctively use surveillance as one of their principle weapons, as a weapon for social influence and control. The more you know about the world and other people, the more you can manipulate and control it, and the greater the likelihood of preserving one's own power.

The less that world knows about you, the less leverage they have over you. At its core, a power establishment is really about maintaining and increasing the power of one competitive group over another, of competitive advantage in a game.

Hence, an objective of a community is to either eliminate social power hierarchy [by removing structures of exclusion and oppression] while iteratively redesigning the system to distribute power such that it is equally available [by cooperatively organizing self-empowered systems]; which, is essentially the generation of an egalitarian (a.k.a., equalitarian) social structure.

It is untrue to state that egalitarians want everyone to be the same in every conceivable way, among which having the same job and the same possessions may be imagined. This vision of an living systems structure is more akin to robotic conformity, not equality (or equity) as expressed in terms of human fulfillment. Egalitarians do not want everyone to have the same job, they want everyone to have the ability or opportunity to express their desired form of energy into the socio-economic system (i.e., they desire intrinsically motivated, coordinated, and comprehensively informed effort). People holding different jobs or no job at all, or having different possessions, is perfectly egalitarian as long as those "jobs" or "possessions" don't give them power (and economic status) over others or generate structures of competition. Fundamentally, an egalitarian socio-economic environment is an environment without "elites" and "masses" (i.e., social stratification) -- it is not a structurally violent environment where there are elites and commoners. A system where everyone has a commonly equal amount of power to communicate and participate is not a system of "uniformity" in any form of negative expression.

NOTE: *Self-esteem is primarily generated from within, and there are specific environments and contexts of facilitation that more greatly ease its emergence.*

5 Efficiency

A.k.a., Efficient fulfillment.

Before elucidating upon the term 'efficiency', it is important to note that the intention herein is that efficiency be applied toward the fulfillment of the needs of the individual, not toward the exploitation or scientific management (Schiro, 1978) of the individual. The concept of efficiency is problematic only insofar as it is applied (or defined) from the point-of-view of force and authority, disregarding the values in this value system. In time, anything can be designed and accomplished on a more efficient basis. Just as human needs and desires can be fulfilled more efficiently, so too can tyranny and slavery can be carried out more efficiently. Hence, efficiency is a count of desirability for the entity doing the counting. Efficiency must maintain a value relationship with freedom, justice, and human fulfillment for it to be employed in such a manner that it leads to the betterment of the individual and the community as a whole. Efficiency is both a component of, as well as in service to, morality, not the sole other way around (i.e., morality does not serve efficiency).

In community, we work toward economic efficiency because the goal is human fulfillment, flourishing and well-being. The goal is not economic efficiency in and of itself. It just so happens that economic efficiency is a necessary value orientation to achieve and otherwise sustain the primary purpose for the Community's existence. Hence, it can only be said that the Community increases economic efficiency in so far as it relates to (or is qualified by its relationship to) human fulfillment. There is an important distinction here.

NOTE: *The scientific literature indicates that learning has a positive and significant impact on the expression of an individual's technical efficiency, as expected. When people know how to do things more efficiently and they are unhindered by bureaucracies and governance-control structures, they tend carry out changes that will improve their life, their work, and their well-being.*

5.1 The characterization of efficiency

INSIGHT: *The application of efficiency to technology leads to greater freedom for meaningful action.*

Efficiency is considered a concept of measurement (i.e., a 'measurable concept') and its application requires empirical evidence. Note, effectiveness is also a measurable concept. Anywhere quantitative and qualitative data is observed the concept of efficiency may be applied. This includes, but is not limited to, ecological and biological systems, technological systems, economic systems, and social systems. Technological

changes, changes in productivity, changes in biology, in physiology, and in society in general are all closely linked with the concept of efficiency.

Efficiency may be used to describe the state, operation or arrangement of physical objects (e.g., an engine) as well as abstract objects (e.g., an organization or thought process). In concern to efficiency as applied to abstract objects, for example, an organization might choose not to recognize, model or reward social status, for status is a form of social diversification and is inefficient in that it neither improves communication nor optimizes effort expenditure, in fact it hinders both. By not encoding, or removing the encoding, of 'status', there is a change in efficiency [of a social operational process].

Efficiency is a characteristic of every system, and may be defined for a process with any kind of input and output given the increment of time (or change). All time-based processes can be characterized by their efficiency (and their effectiveness in their resulting alignment with a desired goal/outcome). Also, every living information system is becoming more efficient or less efficient in any given moment [as a measure of entropy].

Efficiency is also a component of coordination. Coordination is a state of interaction where the actions of different parts of a system produce efficient and effective movements toward fulfilling the purpose (or objective) of the system. Coordination involves the *integration, arrangement, ordering, and adjusting* of interacting relationships as functions or parts involved in an action or movement. It is an act of organization in which cooperative effort leads to effective and efficient dynamics / relationships.

Efficiency is an excellent measure of the coordination of any action. The higher the efficiency, the more coordinated the action is, and vice versa. Inefficient movement is like driving a car with the parking brake on. You won't go anywhere very fast and you'll damage the vehicle in the process. Similarly, inefficient movement of the human body over times wears down its musculoskeletal system. In robotics' navigation one of an engineers' *efficiency objectives* is to obtain an 'optimum path', meaning that the robot should plan and execute a reliable path between the source point and the target point without colliding with static and dynamic obstacles found in a probabilistically uncertain and complex environment, and do so in a systematically conserved manner.

No matter how efficiency is characterized, it must begin with data. Data provides the necessary knowledge to quantify/qualify the state of a system as efficient or inefficient, or some degree thereof. Because data may come from different sources, a commonly agreed upon definition for efficiency and platform (or approach) for its application is essential.

And therein, we see the challenge. We as individuals have an attraction to efficiency, but when embedded within a destructive environmental structure our value orientation toward efficiency leads to the "cutting of corners" and the acceptance of "easy answers" without

a holistic thinking approach [to thinking systematically through problems]. The easy answers in a destructive system are often counter to what individuals truly need and desire.

5.2 The definition of efficiency

MAXIM: *A measure of efficiency in fulfillment is a measure of progress in society.*

A useful definition of efficiency suggests the examination of evidence as 'data' to make fundamental and constructive change moving forward (i.e., progress). Efficiency appears to underlie all progress in general.

Although efficiency can be defined in several ways, each way is essentially similar. Efficiency describes how something is accomplished. As the steady condition of an object, efficiency infers the idea of getting (or receiving) the most out of something (i.e., maximization or optimization). Over time, efficiency implies the idea of receiving more out of something (i.e., a gain in performance or optimization). In a system, efficiency implies that things exist which are preferentially maximized (e.g., product quality), while other things exist that are preferentially minimized (e.g., pollution and energy usage). For an organism, at the very least, a meaningful definition of efficiency involves an alignment with phenomenological, existent reality with at least the objective of optimizing self-preservation, sustainability, resilience, and well-being. At the social level, efficiency is the maximization of the potential well-being of the individual among a community of individuals seeking well-being. The human desire that needs be met in the most efficient manner possible shows consistently throughout history.

Efficiency involves preservation and conservation [of resources and information] to meet needs in the most strategic and iterative (accounting for time/change) way. In an engineered system it maintains the sub-conceptualization of 'parsimonious' - do not use any more resources than are required to fulfill the function.

As a component of this value system, efficiency is defined in three ways: from a *needs* standpoint; from a *value* standpoint; and from a *technical* standpoint. Their definitions are essentially equivalent, although they are applied to different elements of the community's structure.

In concern to **needs**, efficiency is defined as the optimization of systems and the maximization of the strategic allocation of resources to fulfill the spectrum of human needs, wants and preferences within a finite system while accounting for all known and measurable environmental influences (e.g., regeneration, carrying capacity, pollution). This is true 'economic efficiency' and may be contrasted with the market economy definition of "economic efficiency" (or "cost efficiency") [encyclopedia.thefreedictionary.com].

The market system is incompatible with the mode of optimized efficiency designed into the Community.

Optimization is defined herein as the most efficient *arrangement, formation, coordination, and quanta* of inputs, outputs, and processes given what is scientifically known and technologically possible at (or within) a given time. In this context, an 'optimization process' is any process that arrives at solutions to fulfill human needs that are "better" than the solution used before. The term "better" implies improved qualities such as longer lasting, requiring less energy, and less likely to necessitate repair, possibly more localized, and functionally useful.

The concept of efficiency may also be applied to each of the other **value** conditions in this value system. In other words, it may be applied to the evolution of those conceptual models that have been identified as supporting an orientational alignment with the community's highest potential direction. As such, efficiency is defined as the maximization [and optimization] of those conditions that are valued, while minimizing those conditions that conflict, contradict, and directly lead to a greater potential for socially insufficiency in fulfillment (i.e., conflicting values which may be plotted on a value circumplex). Hence, efficiency involves the optimal design, structure, and arrangement of the operational systems [processes] that form the community to maintain as well as to maximize the expression of desirable values.

Essentially, efficiency as it is defined above for both needs and values represents the optimization as well as the progressive and adaptive evolution of the [conceptual] systems by which known human needs are fulfilled. As such, efficiency is applied toward the optimum design of [material] community systems while accounting for the spectrum of valued conditions (i.e., the value system) and known human needs. This represents the application of progress in the direction of our purpose.

The term '**technical efficiency**' refers to the performance of processes for transforming a set of inputs into a set of outputs, using resources to their maximum advantage. Hence, technical efficiency is often defined as the state (or condition) where no more of any one input is used than necessary to produce a given output. In other words, the maximum objective output is produced with the minimum quantity of inputs [to create a higher potential state of preservation, and a system with optimized qualities, given what is known]. Technical efficiency improvement occurs when less inputs are used to produce the same output, or more outputs are produced using the same input. When technical efficiency is applied to the production of economic products, goods and services it may be known as 'production efficiency'. And herein, truly efficient production arises from common participation in a common direction of constructive (or productive) fulfillment, which requires systems-level efficiency transparency.

Generally, more efficient systems capture helpful interactions between components.

Because of the occasional difficulty in understanding

technical efficiency as defined above, it will be restated using slightly different terminology: Production/technical efficiency is defined as the optimal relationship between the inputs and outputs of a system, whereby efficiency is increased by a gain in units of output per unit of input. This can occur by holding output constant and decreasing input or by deriving greater production (or functional capacity) from the same level of input. Note that these definitions of technical efficiency do not count any waste that may be generated by a system's operation. When technical efficiency is applied with a whole-systems engineering approach, then optimization of the entire system (highest-level supra-system) is sought, versus optimization of isolated components for single benefits; hence, *waste must be considered*. 'Waste' can be 'pollution', or it can be an input into another process. Efficiency can come in many forms, including the degree of modularity of design and the degree of customization (Read: being more efficient by designing/getting things that are tailored to "you").

In a community, technical efficiency also references the known technical principles of nature, it takes advantage of feedback, and it is applied toward optimizing designs that preserve the habitat, reduce waste, and ultimately ensure fulfilled well-being. Nature is a self-organizing system with at least a discoverable technical rule set that may be used to optimize the means by which a community's needs are fulfilled.

From a whole, ecological systems perspective, waste is a product of an inefficient design. There is no concept of "waste" in natural cycles. In other words, waste is either to become a new input for the system in question (i.e., a recycled output) or an input for another system. In nature, individual species and organisms create a lot of "waste", and hence might be considered inefficient. But, integrated ecosystems are highly efficient because outputs of all components are inputs to others, reducing total net "waste" to a near probability of zero (Read: each organism's wastes are another's [eventual] food).

Together, these three forms of efficiency do not have a precise ontological classification; although they could possibly be classified together as 'life-systems efficiency' - a form of efficiency that examines the entire existent life-serving system and acts toward fulfilling the needs and highest potential direction of each human organism by optimizing processes, maximizing desired outputs, and minimizing inputs with all known information available.

Ultimately, nature does not care how "efficient" the human organism or its socio-economic system is - nature is affected by how many resources we extract, how much waste we generate, and what collateral damage we inflict on nature's own regenerative processes.

Note that scientists think that less-than-perfect efficiency is a characteristic of all natural processes due to the appearance of the decaying temporal nature or reality. Therefore, there can be no perfect or utopian (*u* ["not"] + *topia* ["place"]) socio-economic system, even if optimization was applied to every system in a

community.

5.3 Why is efficiency valued?

MAXIM: *As long as you are going to apply resources you might as well get the most out of them.*

Efficiency is valued because it provides the community more of [and optimizes] those things that have been identified as valuable, and less of those things that have been identified as corrosive or unhelpful, by increasing the community's organizational alignment with natural processes and a desired direction. Efficiency in movement is crucial for effective performance. Any lack thereof produces extra work required to complete the movement. Herein, efficiency is a principal component of a stable system, for without efficiency unrecoverable waste and persistent entropic randomness will lead to the [exponential] decay and eventual collapse of the system itself. An inefficient system is by definition a system in a relative state of collapse. Possibly, an individual human have an innate desire to conserve energy in one's work. In a socio-technical environment, information systems, software and machines, may be designed and operated to maximize efficiency. At the societal level, one of the many reasons for maximizing efficiency (Read: relationships that operate optimally/well and with little waste) is, increased well-being. One might also say, "We value efficiency so that we have freedom with our (within) time."

The consequences for the application of efficiency are numerous and include the potential for a greater degree of freedom for the individual, a higher likelihood of sustainability, and a more socially just and free system in general (Read: a system that is more freely responsive to our thoughts). For a community, efficiency is a matter of preservation and survival. If efficiency is not kept track of there is a high probability that a community will fail to adapt to changing conditions, lose track of its needs, and potentially accept values and systems that are contradictory to its very well-being. Therein, individuals may cling to the past, and their culture may inhibit the change required for their happiness and their very survival.

Efficiency is a necessary condition for resilience and sustainability; it underpins a reduction in waste and can lead to the preservation and stewardship of resources, of individual well-being, and of mutually fulfilling social relationships in general. Nature does not "frown upon", marginalize, or disregard efficiency, and neither should humankind. Nature is the final and only arbiter; natural processes are either efficient or they are soon, quite unlikely to exist.

Natural environmental constraints (i.e., the natural environment) are the ultimate arbiter, and they place a "natural" (i.e., not socially constructed) outside, environmental restriction (i.e., constraint) on individuals and humanity's behaviors. For example, if an engineer is

designing a several story building near a known fault line, and the engineer knows how to build Earthquake resistant buildings, then the environment logically dictates which type of building (resistant vs. non-resistant) will be built; if s/he has that knowledge. Similarly, in a universe where engineers know of ten ways to build a bridge and nine of those ten ways requires a resource that is unavailable, then the building of the bridge is constrained by a bridge design that has all the resources regeneratively available. These are simplistic examples, and decisioning in the real world is obviously more complex and involves an interplay of environmental, economic, and social factors.

In nature, there are two primary environmental constraints, which must be accounted for in any environmental decision inquiry:

1. **Resource positioning constraints** - resource constraints are identified by answering:

- A. What is the repository volume of a given resource?
 - What are a cities resources?
- B. What is the flow of a given resource.
 - Where and when are a cities resources?

2. **Carrying capacity constraints** - capacity constraints are identified by answering:

- A. What is the regeneration rate of a given resource?
 - Can the regeneration of resources, to continue the system, meet the demand?
- B. What is the maximum (or, optimum) population size for users of a given resource composed environment?
 - How many users can a particular design of the environment sustain given a rate of regeneration?

In nature, the efficiency of an organism in finding and assimilating sources of nutrition, in excretion and detoxification, in procreating, and in adapting often means the difference between survival and extinction (i.e., it means resilience).

In a community, attention must be given to the inefficiencies of particular methods and practices, such as that of: coercion as a form of behavior modification. When coercive methods are used to modify behavior, for example, then individuals and groups become impelled to act on the basis of an impled [externally programmatic] reaction. Impled reactions and those [reflexes] based on need deficits are unlikely to engage the [spatial] freedom of consciousness in sufficient consideration of an optimal[ly efficient] response. Wherein, consciousness is not given the space necessary to freely consider its decision space and respond in the most efficient and effective manner. Fundamentally, some customs and practices, some conceptual structures, are simply inefficient in their restructuring of an environment toward human fulfillment (just as

they might also be structurally ineffective also). Coercion is one of these structurally ineffective and inefficient concepts, and its methods and practices lead efficiently away from human fulfillment.

Inefficiency could be thought of as the occurrence of damage in a system. For instance, the deliberate withholding of efficiency so that material goods wear out and breakdown sooner (e.g., 'planned obsolescence') is an untenable practice that precipitates the degradation of freedom and justice through the excess consumption of effort, energy, and resources - excess consumption (or "exploitation") has a high probability of damaging any system. Also, inefficiencies have a higher likelihood of rendering the state of [artificial] scarcity and resource depletion. Scarcity antagonizes fulfillment. Scarcity means less potential energy for a desired purpose. It is wise to recognize that scarcity is likely to be artificially engineered into a system when the principal motive for the system's existence is something other than human fulfillment, such as, the profit motive.

Accomplishing production processes with greater efficiency could equate to greater freedom for both the individual and the community by freeing an increasing quanta of undesired human effort for that which is more meaningful and desirable to the individual. Basically, when "you" find a way to do something more efficiently, then "you" have more time and resources leftover for something else.

Ephemeralization is the ability to do more with less, and also through good design. It is the equivalent of Moore's law of exponential computational processing as applied to socio-economic fulfillment. Simply, ephemeralization refers to new technologies replacing and render obsolete the old technologies, and in so doing, conveying the less usage of resources for more added function. Note that rapid ephemeralization makes it difficult to predict the lifespan of a technology. Additionally, for materials that cannot be recycled and must be decomposed, it is useful to have them remain in the environment only ephemerally (i.e., for a relatively short duration of time -- short lived; so that waste does not build up).

Humankind's understandings of the technical nature of reality have expanded to the point that its technological capabilities allow for the increasingly complex and efficient restructuring of matter. Therein, the actualization of the real world referenced concepts (i.e., empirical concepts) of *conservation* and *efficiency* are likely to lead to the usage of fewer and fewer materials to maintain life supporting and enriching processes. For example, the first computer built in the 1960s covered ~1800 square feet of floor space, weighed ~30 tons and consumed ~160 kilowatts of electric power. Today, an inexpensive pocket sized mobile device computes substantially faster, running on a virtual trickle of electricity in comparison. And, similar advances in technology and understanding continue to occur across every domain of service. Effectively, technical efficiency allows for an increasingly higher standard-of-living and

quality-of-life with fewer and fewer resources.

Buckminster Fuller observed,

"We are beginning to do more with less, or ephemeralizing our social operation, or at least we are proving that it would be possible were it not for the natural pushback from an established power structure, which benefits off the back of restriction, and a lack of universality of availability."

Technology is all around us, "[it] is all we have," exclaimed Buckminster Fuller. Whereupon he went on to explain that with additions to human knowledge, inventions, and the development of new machines man is capable of doing "more with less" (or "ephemeralization"). Humans are now capable of extending their own functions into the thoughtful modification of material reality to create community-wide useful services, objects and processes. Technological advances allow us ultimately to meet our needs and desires using fewer materials and less energy; thus, imparting greater sustainability and a higher likelihood of preservation to a community.

In business and in finance (in particular) efficiency conveys a slightly different meaning, and a markedly different orientation for a society. In finance, businesses make more money and employ fewer people through increases in their overall technical efficiency. In business, there is an incentive to do the most profitable things with the least capital [investment]. In the market, inefficiency often comes in the form of non-funding of sustainable technologies and integrated service system. Practices in the market often go according to cost, rather than what actually works toward human well-being and is otherwise optimal for everyone. Unfortunately, in early 21st century society, many people don't realize how inefficient things actually are because they have nothing to compare it to. And yet, efficiency is necessary for an economy of scale.

In society, individuals make more of themselves and become more refined through increases in their overall efficiency. In humanity, there is a sense of desiring to do the most fulfilling things with the least expenditure of effort.

In a sense, the very existence of a market is an indication that a society's social psychological sense of itself is one of insufficiency -- a market is a reliance on object (or abstraction - currency) exchange for need satisfaction; it is not the empowering of individuals toward self-sufficiency and the localized fulfillment of need. The market [today] represents an obligation to exchange (or essentially, to die). It is not equivalent to 'efficiency exchange' in nature, which is the process of "trading" energy for higher functioning (and fulfillment).

An obligation to exchange at a social level presents: (1) an opening for conflict in the exchange (e.g., "cheating" and "stealing"); and (2) for usurpation of the exchange process itself by a more powerful player in the market (e.g., transactional taxation). Yet, trying to control others,

and conflict in general, is grossly inefficient. It wastes energy and spawns a host of other problems. Therein, control becomes an instrument for monopolization and not actualization, of self-imposed limitation and not ephemeralization. Envy, fear, and control are closely interrelated. For example, the fear of loneliness can generate a desire to control others or to lust after what they have. Fear is like a cancer that spreads through the mind and body and distorts how one views their life and makes decisions. One might ask oneself, "How is my motivation [for growth and fulfillment] impacted by my desire to control others?" Social control is a distortion that limits the efficient expression of one's fulfilled self. One of the ways a group can control a market is by withhold technical efficiency by buying technologies and sitting on them, by patenting them and forcefully limiting their use, or applying them clandestinely.

Efficiency and laziness are related. Frank Gilbreth, one of the early "efficiency experts", used to ask to be taken to the laziest worker in the factory. His reasoning was that that person would have figured out the quickest, easiest way to do the job. Often, the labelling of others as "lazy" comes from a misunderstanding of human behavior and a projection (or "embedding") of a "puritanical work ethic" onto others.

Laziness quite often means efficiency, and when laziness is combined with a strong drive then there likely exists a desire to find the most efficient solution possible. It might even be said that: laziness + drive = the automation of productivity [for that which is more meaningful]. Unfortunately, that which is more meaningful to dejected and chronically unfulfilled individuals might be nothing at all. Yet, it is efficiency (or "laziness") that asks, "Why am I doing this in the first place?" This question might become someone's first step toward self-inquiry ... as to whether or not the task that one may be procrastinating over is being extrinsically motivated, as well as to one's own general level of energy (or health), both of which impact drive and curiosity behavior. Fundamentally, the "singular" issue of efficiency, laziness, sloth, and procrastination is significantly more [individually, socially, and physiologically] complex than those who enjoy throwing around labels are often willing to admit.

INSIGHT: *Technical efficiency requires a conducive social environment. It is impossible to design structures with as much technical efficiency and integrity as possible when systemic pressures [on numerous levels] inhibit said process.*

5.3.1 Market-type societal efficiency

Economists employ several different definitions of efficiency, depending on the objective of their analysis. Allocative efficiency results when the total surplus in a market is maximized. Total surplus is the difference between the total valuation of the goods purchased

and the total variable cost of producing the goods. The invisible hand theorem states that in perfectly competitive markets, the equilibrium outcome is allocatively efficient. Productive efficiency occurs when producers' unit costs are minimized. Pareto efficiency is the condition that no individual can be made better off without making at least one individual worse off; that is, all possibilities for mutually beneficial trading have been exploited. Dynamic efficiency refers to efficiency analysis that spans multiple time periods.

Economic efficiency - a state in which every resource is made use of to serve each person in the very best way while minimizing inefficiency and waste. Economic Efficiency is determined by the combination of technical efficiency with allocative efficiency.

1. **Static efficiency** - exists at a point in time and focuses on how much output can be produced now from a given stock of resources.

A. **Allocative efficiency** - achieved when the value consumers place on a good or service (reflected in the price they are willing to pay) equals the cost of the resources used up in production. Condition required is that price = marginal cost. When this condition is satisfied, total economic welfare is maximised. A market can be said to have Allocative efficiency if the price of a product that the market is supplying is equal to the value consumers place on it, represented by marginal cost. When drawing diagrams for firms, allocative efficiency is satisfied if the equilibrium is at the point where marginal cost is equal to average revenue. This is the case for the long run equilibrium of perfect competition. Allocative efficiency can only be addressed through a suitable health planning framework. What to produce: known as 'Allocative Efficiency' and concerned with the optimal mix of goods and services.

1. **Pareto defined allocative efficiency** - a situation where no one could be made better off without making someone else at least as worth off.

B. **Productive efficiency** - a firm's costs of production and can be applied both to the short and long run. It is achieved when the output is produced at minimum average total cost (AC). Productive efficiency exists when producers minimise the wastage of resources in their production processes.

2. **Technical efficiency** (minimising unit costs of production).

A. Efficiency in how something is produced is known as technical efficiency (or production efficiency) and is concerned with the least

- cost combination of resource inputs for the production of supplied goods or services. This type of efficiency is also concerned with whom should goods and services be distributed; including, the question of societal justice or equity.
- B. While technical efficiency is desirable, it is only one of the three prerequisites for optimal resource allocation. Its achievement does not guarantee allocative efficiency or the achievement of societal justice objectives.

5.3.2 Other contextualizations of efficiency

INSIGHT: Consider that doing one thing more efficiently may lead to other useful (or "positive") effects and/or efficiencies elsewhere in a system.

The concept of efficiency has many applied contextualizations [as mentioned earlier]. If someone were looking for a definition of efficiency to apply to a particular context one may find it among the following bulleted definitions. These definitions of efficiency are essentially equivalent, and encompass the idea that a system is efficient if nothing more can be achieved given the information and resources available.

1. Efficiency describes using something to its maximum advantage while improving processes that accomplish objectives with greater ease. Simply, more desired results, less work.
2. Efficiency describes the extent to which energy, time, effort, cost or resource is optimally applied for an intended task or purpose. Simply, more benefit, less time.
3. Efficiency describes the maximum output of a process or system from a set of inputs. Simply, most benefit, given availability.
4. Efficiency describes the extent to which a system utilizes information in an incoming signal.
5. Efficiency is the optimal coordination of action toward an objective or purpose.
6. An efficient system describes one that quickly adjusts to new information.
7. Efficiency describes the state when there are no known alternatives for optimization or improvement.
8. Efficiency [in part] involves the optimal conservation of energy in a system; it is observed as the absence of waste.
9. Efficiency describes the state where the distribution of desired goods and services are optimally prioritized by how they fulfill their users' needs, wants and preferences (i.e., distributive efficiency). This definition is similar to the market economy definition of "distributive efficiency"

- [economicshelp.org].
10. Social efficiency describes the optimally equitable distribution of resources in society. Note that this definition of social efficiency differs slightly from how it is defined in a "market economy" [economicshelp.org].
 11. Access efficiency describes to the optimal distribution of (or access to) goods and services according to their users desired access quantity, location and schedule. This definition may be contrasted with the economic market efficiency terms, "allocative efficiency" [economicshelp.org] and "pareto efficiency" [economicshelp.org].
 12. Efficiency describes the state in which individuals' needs, wants and preferences [as goods and services] are fulfilled with the optimal combination of inputs and at the least possible "cost". This definition may be contrasted with the economic market efficiency term, "productive efficiency" [en.wikipedia.org].
 13. A clearer and more efficient mind restructures its mental information system based on new and more accurate information. Similarly, a more efficient socio-economic system comes from restructuring based on new and more accurate information.
 14. Optimization requires all systems working in concert, if one is off the entire system doesn't work properly or efficiently.

5.4 Efficiency and effectiveness

When everyone benefits [from greater equality] there is also an argument for efficiency, which herein, is a component of morality.

Efficiency is sometimes confused with effectiveness. A simple way of distinguishing between efficiency and effectiveness is the saying, "Efficiency is doing things right while effectiveness is doing the right things." Someone might be doing the right thing for some given purpose, but they might not be doing it as efficiently as possible. For instance, they might be doing the wrong intensity, the wrong number of intervals, or doing it with bad form. Alternatively, someone could be very efficient at something, but that activity is not appropriately meeting their goal. A need-oriented community necessarily seeks and encodes efficient and effective means of fulfilling common needs. The cross-section of efficiency and effectiveness creates the potential for freedom in the fulfillment of a community. The cross-section is: where does doing the right thing mean doing things right?

In concern to human needs, effectiveness is the ability to satisfy stated or implied needs. Efficiency is the quality by which the needs were or were not satisfied. Negative efficiency implies they were satisfied with the lowest possible reduction in quality.

5.4.1 Societal efficiency and cooperation

INSIGHT: *Coordination maximizes efficiency, and cooperation maximizes coordination.*

At the societal level, cooperation optimizes efficiency. In a social system, the optimal configuration (i.e., the low entropy configuration where there is the most order, productivity and value for the organization) is when everyone in the social system cooperates (Read: cares about each other, is helpful to each other, and shares resources). When each one is interested in helping everyone else, that condition, optimizes a social system. The opposite of cooperation is fear; fear is not about other and is all about self: "what can I get, and if I get it, how can I keep it, and if someone else has it, how can I take it away from them." Fear tends to be very self-centered and lacking in trust. If a system organizes toward cooperation (including, shared fulfillment and compassion for others) then it is going to lower its entropy and optimize entropy reduction, and hence, evolve (versus de-evolving toward fear and self-centeredness). In a fear based society, the individual units of fear start to group up (e.g., define mutual defense packs). Then, other individual units of fear group up separately. This leads to groups in a state of fear taking away the stuff that the smaller groups have in an effort to keep what they have got and take what others have (Note: notice the circular logic of fear). This leads to specific groups getting bigger and bigger. The bigger they get, the more invulnerable they are, which eventually ends up with a number of large powerful hierarchies entities based upon fear. Fundamentally, a fear-based social system is unstable. If someone finds a new invention or great idea, in a fear based social system they will keep it to themselves and not share openly (e.g., they may copyright or patent it). Because, good ideas might be good for them, by working that idea into something more for themselves, be it money or status or power in the organization. This self-centered bias, and incentive system, is sub-optimal for social stability, social efficiency, and social self-direction. In contrast, a cooperative person/organization arrives at a better ideas, understandings, and technology, and spread it openly (i.e., everything open source optimizes efficiency).

Among a society, there can be:

1. Efficiency for private gain at [an]others expense.
2. Efficiency for mutual benefit.
3. Other efficiencies that are irrelevant at a societal level.

Herein, challenges are presentable as opportunities, and serve as catalysts for development (or, expansion), which means getting rid of fear, which colors perception, clouds understanding, and makes decisioning less certain, effectively liming perception.

6 The seven operationally stabilizing value states

The following value states facilitate the stabilization of the social orientation of the Community. These values represent the other necessary [prerequisite] conditions for a stable social orientation toward a higher potential of human fulfillment. These values orient a society's organizational design toward the fulfillment of healthy human systems of interrelationship.

The seven grouped orientationally stabilizing value states are:

1. Learning and integration
2. Health and vitality
3. Appreciation and compassion
4. Regenerative sustainability and technological abundance
5. Openness and sharing
6. Cooperation and collaboration
7. Intrinsic motivation (autonomy, mastery and purpose)

7 Learning and integration

"Know thyself; all else follows."

- Adapted from Socrates; the Vedas have a similar saying: "To know yourself means to know that you are divine, from which all else follows."

To learn and integrate we must discover and explore. Learning is a lifelong process that originates from within the individual; it is a self-initiated and self-directed process. The process of learning involves at least the ideas of having novel experiences and of integrating increasingly accurate information. Learning is required for movement in any direction of progress. All organisms learn and learning is the basic adaptive process of all life. Learning is a natural part of the human experience and healthy functioning humans have an innate desire to seek out new experiences and novel information (i.e., information-seeking and curiosity-exploratory behavior). Intelligent beings devote much time and energy to exploring and obtaining information. Also, it is a scientific finding that the human brain has information-acquisition mechanisms that reward the human organism for learning about its environment – such mechanisms have an obvious evolutionary advantage. (Gottlieb et al., 2013) If information-seeking behavior is advantageous to an organism (and to consciousness in general), then it would follow that the brain has developed mechanisms that encourage such behavior. In community, learning and living are synonymous; together they lead to resilience, adaptation, and a life of fulfilling self-development. Learning is an autonomous and self-directed process-state of expansive adaptation [by consciousness] into ever greater folds of creative exploration. Conversely, knowledge that is acquired under compulsion has little hold in the mind.

7.1 Survival and adaptation

INSIGHT: *In a living system, environmental signals can re-configure the internal [system] environment (e.g., epigenetic expression). When the reconfiguration is efficient, then adaptation is efficient. When it is effective, then adaptation is effective. And, when it is efficient and effective, then adaptation is resilient to environmental change.*

The survival of an organism depends on its instinctive capacity to adapt to changing conditions in a complex environment (i.e., behavioral adaptation or 'adaptability'). An organism's behavior is adaptive or non-adaptive depending on the accuracy of its integration and subsequent evaluation of the environment. The capacity for evaluation depends on the organism's ability to sense and to make meaning of complex environmental stimuli, and then, to learn. Learning is [in part] the result of observation, inquiry, and studied experience based on curiosity and need (i.e., on intrinsic motivation). Intrinsic motivation for adaptive behavior is characteristic of

every (or most) biological organisms.

Human societies are living systems that depend on their environments for the resources they need to survive. But, evolution is a romantically ruthless process: most of the species and human societies that have ever existed are extinct because they either destroyed their environments or could not learn quickly enough and adapt to changing conditions.

Learning and adaptation are critical to survival. In nature, a system that adapts is more likely to survive when conditions change. Hence, a functional learning system is an essential component of a functional adaptation system [at every level]. In a functionally adaptive community both the individual and the community must maintain a functionally emergent learning systems. Herein, the Community details its learning system in the Learning System [design] specification.

The acquisition and integration of new information allows for individuals in a community to align themselves and systems more accurately with the community's intended direction (i.e., a fulfillment-oriented direction) under a dynamically changing environment. The human brain, in part, exists for this purpose at an individual level - it integrates and coordinates need-fulfilling movements [in the real world]. The decision and learning systems of the community operate for this purpose at a social level. And, in a sufficiently advanced technological society, digital computing technology may exist at the community-level for informing the integration and coordination of need-fulfilling movement.

One of the functions of the human brain is to process complex environmental stimuli, and then, make effective decisions for adaptive behavior. Therein, the survival of an individual depends upon his or her ability to identify meaningful patterns of information, and then, adapt to new social and ecological contexts. The processing of complex environmental stimuli can also occur at the level of community through formalized technical (and technological) processes. Functionally adaptive processes, behaviors and technologies depend on the human brain's capacity to understand the changes it is perceiving and to make intelligently informed decisions. Those brain functions which result in effective and efficient thinking (abstracted to systematic, analytic, and critical thought) are those which produce adaptive behavior and functionally useful technologies.

Herein, 'meaningful learning' is a function of the brain's capacity to process complex environmental stimuli and make decisions that lead to creatively adaptive behaviour. The processing of complex environmental information is a function of the highly developed mental processes of thinking - a mental process of the brain (and mind-body consciousness) involving the coordination of "thinking skills", including but not limited to: questioning; organising; analysing; associating; integrating; synthesizing; and evaluating. These mental/cognitive processes are necessary for the acquisition of knowledge required for intentional and informed decisioning.

Concepts represent a cognitive framework for individuals' interpretation of environmental stimuli derived from events and circumstances. During the integration process the individual compares the existing information with new information and then reacts (or responds) accordingly. A person with "inner freedom" is able to adapt and respond to the environment as it is rather than as s/he thinks it should be (i.e., with accurate environmental alignment). A person with inner freedom does not allow their preconceptions to obfuscate that which would otherwise be the verification and integration of new and more accurate information.

We have to be able to ask the tough questions of ourselves and others, and ask them often. Particularly in the context of learning there is the element of challenge (or controlled episodic stress) to facilitate growth. If we ask no questions we may get told no lies, but we will also pre-eminently hinder our self-development.

7.2 Learning and sharing

INSIGHT: *To adapt is to reconfigure.*

In order for learning to exist, sharing must occur. Traditionally, sharing was a sacred experience and it is tragic when it is hijacked. Verifying and collecting knowledge, and passing it on to future generations, has been a sacred tradition for humankind for millennia, and a necessary one for progress in any society. However, learning is generally sought limit to by power establishments for their own benefit (i.e., growth and learning often leads to the destabilization of existing social power structures). Hence, they sustain (and orchestrate) a differential advantage in access to accurate information and in the fulfillment of needs. The [Prussian and ivy league] schooling system was [in part] designed to maintain this differential.

Some social structures are corrosive to the effective sharing and integration of new information. Therein, establishments become the result of a systemic state of paralysis with an equivalent reduction in sharing behavior. Systemic adaptations are often not welcome by short-sighted "established interests" because such adaptations mean a potential shift in the application of systemic power.

If the social human organism is designed for sharing (as evidence indicates), and the socio-economic environment reduces the desire and likelihood of sharing, then such an aberrant organization will likely be costly to the psychological well-being and self-development of individuals in that society.

7.3 Programmed growth inhibition

INSIGHT: *When we learn (or are taught) superficially, we only recognize reality superficially.*

When personal growth is inhibited an individual is likely to remain attached to their momentary identity, which may

become easily threatened in a larger and continuously evolving system. The inhibition of growth frequently occurs through threats and other forms of violence against both children and adults who are shocked into a "programmable childlike state" wherein they eventually accept the domination program and begin to internalize the voice of authority itself (i.e., internalize the injunction [against the self]). This leads to the creation of someone who will take nearly any command from an authority without question, while underneath secretly having begun to desire to become the authority over others. Such attachment is the recycling of ones conditioning, and it programmatically and systematically hinders adaptation.

The "authoritarian conscience" interferes with a comprehensive understanding of the self and of others. It prevents the formation of meaningful interpersonal relations, and the result is socially inadaptive and potentially corrosive behavior. Such behavior is a direct result of the abnormal conditions for growth, which are prevalent in a cultural environment that focuses on the control of human needs as opposed to the fulfillment of human needs. Growth inhibition in turn affects the ability of a society to develop and evolve healthy individuals and a socio-economic system that supports them.

The programmed inhibition of growth can lead to the destabilization of the personality (of embodied consciousness). Wherein, it is likely to become destructive to itself and to others by degree.

NOTE: *The first act of war is to cut or manipulate the lines of information and communication to the enemy leaving them powerless to respond in the most informed manner.*

7.4 Critical integration

INSIGHT: *Prior to comprehensive integration and effective reasoning, there is the desire to avoid contradiction.*

All learning involves the logical integration of all information into common understanding for informing the processes by which decisions are arrived at. Herein, 'critical thinking' is a form of active and engaged investigation with the purpose of improving the quality of our thought and action, and our lives. If we are going to move forward with reason and actually arrive at designs that facilitate fulfillment, then we are going to have to apply critical thinking. Concepts inherent to critical thinking represent the progenitors of true intellectual freedom - they are useful for accurately integrating information. Through the logical integration of information in a non-contradictory manner individuals becomes capable of discerning greater approximations of truth, while deepening their understanding of reality, and thus, their ability to operate within it, and in the most fulfilled manner. Learning informs the accuracy of an entity's models of reality, and in turn, more accurate

models lead to more accurate and fulfilling orientational decisions [that are more closely aligned with a desired direction].

Individuals must be free to think critically, which entails an environment where they are exposed to and can play with the tools necessary to think and experience freely. Critical thinking leads to intellectual self-reliance. Individuals must be given the tools through which they may become self-reliant, and internally stable. This might involve the facilitation of the adoption of a methodology, or supporting a self-reliant transition into a fully participating individual in the community once called a "rite of passage". Individuals have enormous innate potential to become self-reliant and self-directed when the conditions are amenable to such development.

Critical thinking is the art of non-contradictory identification and logical integration. The principle of non-contradiction is that one thing is not another thing at the same time and in the same respect. Critical thinking is the process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, and communication, and used as a means of arriving at a greater approximation of truth.

Logic is a guide for integrating and thinking "correctly"; without contradiction, thinking visually and systematically. There are no contradictions in nature; things are themselves, they are not [identifiable] otherwise. If they could be identified otherwise they would exist in perpetual contradiction. Could the harmony of nature sustain itself in a random world? Nature exists and there is no contradiction in nature. Nature and truth exist, and both have qualified limitations. Truth is connected into language through logic and verifiable reference. The deprivation of these understandings leads to many issues in society. Things are themselves, inherently. And, we have inherited a world of limitation for growth and experience.

Our words relate to concepts that are held in our minds and encoded into our material lives. Critical thinking involves the continuous process of trying to match up the unrealities of our minds with the realities that exist in the world. And, in some cases, we can use language to come to know things for certain. For example, some people might say, "well, we can't be certain the sun will rise tomorrow". Well, in fact, we can be certain that the sun will either rise or not rise tomorrow. We can have 100 percent certainty that it is either one or the other. And the probability that it will "rise" tomorrow is high. It is almost common sense; although we can always skeptically argue one way or another or develop universally abstract ideals that lead us away from that which has occurred and is occurring.

Herein, logical communication provides a means by which to anchor objective reality among individuals. This common point of approach supports individuals in comprehending the nature of their needs and responsibilities in a social context.

Why is it important to recognize contradictions? The inclusion of a single contradiction in thought allows anything to be proven or justified under that false pretense. Fallacies and contradictions are counterfeits for reality, preventing the inquiring mind from reaching its destination of knowledge because it thinks that it has already arrived. This is the source of "assumption" and the role it plays in self-deception. Feeling that assumptions allow us some sort of freedom is a form of self-deception. Assumption fails to recognize the cause and effect reality of our decisions. Assumption allows the dislocation of these events from our causal activities. And, this opens up the potential for passive irrationality to fester into active irritation, which inhibits true justice and optimized thought. Assumptions that go unmentioned pollute our understanding, clouding our ability to see clearly and create efficiently.

Critical thinking reduces fragmentation in the integration and overall learning process. Further, it facilitates a cognitive environment where less contradictory, and more logical and reasoned connections exist. [Correct] Critical thinking is the most reliable guide to action humans possess. Thinking is a conscious mental process performed to solve a problem, arrive at a decision, or gain a new understanding through inquiry; and, it is the most reasonable and reliable way to test an emotion or intuition (as subconscious pattern recognition, completion, or generalization). Without intellectual integration intuition (Read: instinctive feeling) may drive us into chaos.

Learning and critical thinking involve more than just being able to read. Giving someone the ability to read (i.e., literacy) has nothing to do with their level of intellectual freedom (as the accumulation of understanding free from contradiction and authority). Literacy could even be said to be a form of slavery until the literate individual practices a form of critical thinking. Intellectual freedom necessitates the processing of information through one's own logical filters to remove manipulation. Without critical thinking Leo Tolstoy's reference to the printing press being a mighty engine for the dissemination of ignorance remains.

If "paradoxical thinking" and "authority" are given to children at a young age, then it is possible to gain tremendous power over how their minds will operate, and to direct how they adapt and respond to external stimuli. Of course, when it is normal to believe a particular way the questions stop flowing. It is only when someone starts questioning again that they may realize that there is little of cohesive or constructive value being communicated in today's early 21st century society.

In philosophy, an argument is the most basic and complete unit of reasoning. When a philosophical argument occurs between two people who maintain a nature of open and critical inquiry, then the intention of the relationship becomes one of arriving at a greater understanding of universal truth through cooperative integration and the removal of contradiction. See Figure 1-25 below for a visualization of the difference between

a philosophical argument and circular reasoning. This, in a sense, would appear to be the opposite of what is known as politics. Participation in the experience of politics is the negation of participation in learning. The two do not occur together. The experience of politics is the experience of ideological participation in a system of debate and of [factioned] authority. Politics is the continuous engagement in sophisticated rhetorical persuasion, often by emotional appeal and selective obfuscation (e.g., "syntax destruction"; Greenspan, 2012). It is the creation of bureaucracies and organizational power hierarchies. For those whose experience is filtered through a political ideology, learning re-starts when inquiry into the system itself begins. Fundamentally, it is natural for individuals to inquire about the social and economic systems they live within.

MAXIM: *Seek to encompass the paradoxical until you see that it isn't paradoxical. There is no trick in the universe; we only trick ourselves.*

8 Health and vitality

NOTE: *Without health, nothing else matters. Health is more than what you eat or how often you exercise. Health is [in part] a reflection of one's whole life and lifestyle. It is more than just the essential steps (or actions) to wellness. It is the energy and conducive environmental structure to live a full life. If you do not take care of your body and the environment, where are you going to live?*

A stable community seeks to maintain and restore a state of health and vitality within the individual, and among a population of socially connected individuals. Herein, maintenance and restoration are two naturally desired states that facilitate a homeodynamic balance that becomes waylaid under aberrant social and economic arrangements. Hence, the value system herein is designed to orient the community toward the optimal homeostatic (or homeodynamic) balance of our organisms, a state-dynamic of adaptive inner [as well as social and environmental] equilibrium - a state of self-re-generated health and vitality - a persistent state of energy to pursue a higher potential. Homeodynamics refers to the processes that maintain stability through dynamic interaction. Biological systems, for example, are dynamic networked systems that are continuously re-modeling themselves. The idea of 'dynamic equilibrium' is sometimes more simplistically known as 'load-balancing'.

'Homeostasis', one of the fundamental principles of physiology, and it describes the property of a system that regulates its internal environment so as to maintain a stable, adaptable condition within a set of required parameters for its survival. It is observed as "normal functioning" and manifests in an individual as harmonious and energetic feelings and behaviours. Ideally, health is a state of complete (or adequate) physical and mental independence in activities of daily living (i.e., spatial and cognitive freedom). In many ways, health is equivalent to freedom -- if someone has an illness or injury, then his or her freedom will be limited in contextual ways, including but not limited to: freedom of movement; freedom to maintain material fulfillment; and freedom from suffering. In a sense, freedom is meaningless if "you" have low or no health (i.e., health means/indicates freedom).

Health in general, and 'homeostasis' in particular, is valued because it establishes the basic foundation from which a biological organism pursues its potential(s). The prefix "homo-", meaning like or similar (or "the same"), is used to indicate that the body's internal environment is maintained within a range of acceptable values rather than a fixed state. "-stasis", as the suffix, means "standing still". Hence, some physiologists argue that the term 'homeodynamics' better reflects the small but constant changes that continuously take place in the internal environment, as opposed to 'homeostasis', which erroneously implies a lack of change (and is considered

more of a mechanical concept). Fundamentally, there is no static state in biological systems: a living system is a dynamic[al] system; it is dynamically self-organizing. Every dynamic system at a specific time increment has a specifically identifiable state. Therein, biological systems may maintain the same dynamics, but not the same state. In fact, biological systems are continuously dynamic, and they are not the same in the next unit of time; biological systems respond to signals from an environment; they adapt and survive. Fundamentally, we are all in a homeodynamic space that maintains our ability to survive and thrive, or become diseased and decayed.

Homeostatic processes exist to maintain a state of 'health' in a system, and they are essential for the survival of systems [in a dynamic ecological environment]. Herein, health may be defined as the state where all the systems of a whole (e.g., the mind, the body – nervous, muscular, skeletal, circulatory, digestive, lymphatic, hormonal, etc.) are working in an optimal way [for the highest potential expression of embodied consciousness].

The state of 'health' is composed of many different interacting and influential sub-states (and factors). Some of these factors are known and measurable, and others are not as yet, well defined, and so not currently measurable. Note that the term 'health' is similarly defined elsewhere in this document.

Health is a multi-dimensional concept that is usually measured in terms of:

1. Absence of physical pain, physical disability, or a condition that is likely to cause disease or death.
2. From a strictly medical perspective, health is the absence of [dis-ease] symptoms.
3. The qualities of an environment (including its epigenetic effects and expressions).
4. Emotional and mental well-being.
5. Social functioning.

Individual health status may be objectively measured by categorically, phenomenologically controlled observation and by instrumentation. Individual health status may also be assessed subjectively by asking someone to report their health perceptions in a domains of interest, such as physical functioning, emotional well-being, pain or discomfort, and overall perception of health. Subjective studies (e.g., epidemiological studies) may show correlation, but they do not prove causation. Correlation does not imply causation. But, each correlation adds to the case of there being more certainty that there is causation (each "coincidence" adds evidence to causation). It is a truism that "correlation is not causation". But, there are tools that can be used to determine probable causation.

Health really is a form of freedom, to go places and do things, the freedom to explore and participate in a

commonly natural environment. And herein, we must ask ourselves, "How do we adapt and respond to changing circumstances in a healthy way?" Herein, 'health' arises from a process of [full] integration. How do you know when a system is not healthy? Possibly, when it is neither flexibly nor adaptively integrated into its environment. When integration is not happening, then there is a move toward chaos and rigidity, toward dis-ease.

The health of an organism can be severely compromised [by degree of insufficient integration and fulfillment] in two primary ways: firstly, when its physiology is endangered, and secondly, when it is unable to change state and adapt (e.g., when it can't mount a defense against an infection by inflaming). Humans have an innate drive to meet their bio-physiological needs, which maintain the organism's effective material survival. When these needs are satisfied humans are freed to focus on higher potentials of growth and adaptation. When they are insufficiently fulfilled, then individuals stop exploring their environment, and they are likely to become addicted and de-pressingly ill.

HOMEODYNAMIC POTENTIAL

The cell membrane is an information processor -- the membrane reads the environment and adjusts the [homeodynamic state of the cell's] biology. The cell membrane, as part of the cell body, is an environmental recognition system. The nucleus of the cell, with its genes, represents a hard disk, and the genes are programs. The old belief system is that the genes were read only, and hence, whatever the genes are, then that would be the person's fate. However, new discoveries have revealed that the nucleus is not read-only, but it is in fact, read-write -- it is a programmable device, you put it into an environment and it will read the environment and adjust the expression of the genes to match the needs of that environment.

Essentially, cells are programmable in response to environmental information. If you put a culture dish of cells into a sufficiently adverse environment, then the cells will get sick and start dying, but if you take that same culture dish of cells and move it into a "healthy environment" the same cells will recover, proliferate, and flourish. The human body is essentially a skin covered petri dish. There are many more bacterial cells than there are human cells "in" the body (with the understanding that the digestive track is both internal and external to the body). Hence, a state of health (or disease) is really a reflection of the environment that we live in and the environment that we perceive.

Everything occurs [in reality] through a cause and the cause has to have the right conditions for its occurrence. Impulse signals (as environmental triggers) cause effects. And, those triggers can be external and internal.

At the social level, 'health' includes the idea that a system has the functional feedback ability to respond in a rational and informed manner to an event, without [superficial] impulse. Impulsive [emotional] reactions are highly likely to generate conflict in a social environment, and will hinder healthy interrelationships. Reactive instincts cause individuals to housed in bodies with needs and a desire for fulfillment.

Where there exist healthy relationships there exist healthier people. "Interdependence" (i.e., mutual dependence) can produce healthy relationships, particularly when the dynamics are based on a common direction, orientation, and set of verified understandings. All of nature lives in interdependence and community; never in complete dependence or in total isolation, in "independence". Independence negates adaptation, and adaptation is a necessary condition for survival, particularly in social situations. Fundamentally, the isolation [of consciousness] is not useful in a community. Community is not a subsistence system, it is a fulfillment system. In the end, the realization is that we are all in this together and that we owe each other civility and an obligation to help one another, which is of benefit to all, and that is what a society is.

Most people think that activities such as fitness, contribution, and socialization imply health, but the truth is that they do not necessarily occur together. It is ideal to have both health and to experience these other indicators of well-being; however, if these other activities are pursued at the expense of health, then someone may not live long enough to enjoy their physique or their social environment. Early 21st century society is often focused on ~~treating~~ profiting off of disease without examining the causal system relationship themselves.

8.1 Health and inequality

"It is no measure of health (i.e., no sign of wellness) to be well adjusted to a profoundly sick society."

- J. Krishnamurti

In social scientific and epidemiological research the fact that for many health related outcomes there is a socio-economic gradient is not disputed. For simplicity let's just say that at the individual level income predicts mortality risk. The relatively rich live longer and the relatively poor die earlier. There is no longer any controversy that individual-level health disparities are related to differences (inequalities) in exposures to risk factors that are partly indicated by (*inter alia*, "among other things") individual level income differences. This in itself suggests that equalization of access to that which creates or otherwise facilitates well-being will likely have some effect on health disparities without requiring any commitment to a causal view about the direct effect of macro-level inequality, which will in turn be affected by such an equalization.

In concern to social stratification, there is a relationship

to inequality and the rates of illness throughout the entire socio-economic pyramid, not just the people at the bottom. Clear and measurable differences in health exist based upon the economic state of a region.

8.2 Hormesis and stress of choice

NOTE: *Stress is not a "bad thing" in and of itself. In fact, the stress of challenge creates the chemical makeup for us to have new synaptic pathways. Humans need challenges, and if they don't have challenges, it is a problem.*

Survival is a constant struggle between mechanisms of disturbance (damage) and mechanisms of survival (adaptation). Life is a constant motion between damage and repair of damage. We are always exposed to internal and external sources of damage. In our body, sources of damage include oxygen metabolites (e.g., ROS), nutritional metabolites (e.g., glyoxal, carboxylic acids, aldehydes), and chemical infidelity (mistakes, mutations, malfolding). These continuously create disturbance and damage in the system. Evolution has created a whole range of maintenance and repair mechanisms (or systems) for genomic stability, epigenetic stability, protein stability, macromolecular turnover, and free radical counteraction. There exists a dynamic between damage and repair for survival. In the socio-economic lives of our hunting and gathering ancestors it is likely that they experienced something akin to 'episodic stress' (wherein the stress/tension exists for a relatively short duration of time and then life conditions change and the stress is reduced or null). In most of early 21st century society there is both 'episodic stress' and 'chronic stress', of which chronic stress is known to degrade the human system over time. Whereas 'episodic stress' is more hormetic in nature, 'chronic stress' (and artificial ambient stress) is more pathological.

When discussing health (and health maximization) it is important to also discuss that which is known as 'hormesis'. Hormesis is a transient stressor that stimulates something, causing adaptations that make it stronger and more resilient to stress. Exercise, for example, creates a transient burst of free radicals, which stresses out the body temporarily, and in response to that, the cells initiate a cascade of reaction that essentially make the body stronger. In physiological sciences there is a principal subject matter category known as 'disruptors'. Disruptors impact the regulation and balance of homeostasis. Therein, 'hormesis' is the biologic process that allows for a favorable biologic response on a cellular level to a small or low-dose exposure to a hormetic agent (i.e., to the disruptor or 'hormetin', to a stress). 'Hormesis' is an adaptively beneficial stress response. A good example of hormesis is exercise. In the right amount, it confers longevity and lengthens telomeres. In excess, it causes harm by [among other things] elevating cortisol levels and generating reactive oxygen species (ROS), which depletes stem cells. Essentially, the deliberate challenge of the homeodynamic "machinery"

will transiently stimulate compensatory, adaptive, and reparative processes. Effectively, growth is inherent to challenge; but, when challenge becomes overwhelming then breakdown occurs. Another good analogy is the creation of antivenin to combat snakebite poisoning by exposing horses to tiny amounts of snake venom in their blood. The horses build antibodies to the poison. Their blood is later separated from the antivenin and is used to save human lives. Appropriately timed and performed exercise, particularly weight training, is a well-known hormetic stressor.

A little challenge causes a body to adapt and grow stronger, whereas chronic stress (and stress not under one's own control) degrades the system. And herein, it is important to remember that it is during the rest and recovery period that the beneficial effects (i.e., the adaptive re-structuring) takes place. During rest, the body is trying to find and generate an optimal survival strategy such that the next time it encounters the stressor it manages (or "handles") it more efficiently. The human body is a natural, self-regulating system.

Generally, hormetins may be categorized as (Rattan, 2008):

1. Physical hormetins, such as exercise, heat and cold (i.e., thermal hormesis), and radiation.
2. Biological and nutritional hormetins, such as infections, micronutrients, and intermittent fasting.
3. Psychological hormetins, such as mental challenge and [un]focused attention (or meditation).

Hormesis, as deliberate challenging of the homeodynamic machinery, will transiently stimulate compensatory, adaptive, and reparative processes -- this is physiologic hormesis. A challenged system tries to counteract the challenge and derives a benefit. Mild stress, not chronic or continuous stress, is necessary and fulfilling. Hormetic challenge has beneficial effects. And, there must be a recovery period after the stress. The stress should not stay continuously at the higher level (because in terms of the energy dynamics of the cell, it overwhelms the cell). Just like exercise, the benefits come principally during the rest period. Then, the exposure has to be repeated -- there is a periodicity to the exposure and rest. Mildly and repeatedly disturbances create resilience - there are beneficial affects to some forms of challenge. THE body adapts to its circumstances and inputs; external environmental signals can re-configure an internal system.

Repeated mild *stress/tension of choice* can be beneficial. However, constant and chronic stress that is not under our own control is certainly harmful. When stress is of "your" choice and if "you" are able to manage this chosen stress, it may be adaptively beneficial. This is the phenomenon of hormesis, and hormetins are the conditions which cause hormesis. Essentially, stress can be useful, depending on the intensity, duration and frequency of the stress, upon restoration processes, and

on the cost of exposure to the stress in terms of energy utilization and other metabolic disturbances.

It is important to note herein that details and context matter in biology, and in community, and that using ambiguous terms like "balance" can create more confusion (and sickness) than the "balance" which is being promoted. For example, if someone has a gluten sensitivity or an immune response to eggs then they should not be consuming these substances in any "balanced" quantity while they are found to be reactive. When dealing with immune intolerances and potent toxins (such as mercury, lead, and dioxin), moderation is a myth and "balance" is a meaningless term. Just as conceptual ambiguity can damage our intellectual faculties [when integrated], physical toxins [when integrated] can damage our biological faculties.

INSIGHT: *A guitar string that is completely untightened and relaxed makes no sound, but when it is loaded with tension it can be tuned to create exactly the right note a performer is looking for.*

9 Appreciation and compassion

INSIGHT: *Without compassion for the self there can be no compassion for others. In the act of helping and appreciating someone you help yourself. Gratitude keeps one resilient to obstacles and mistakes.*

Humans are more than simply social beings, they are so-called, 'pro-social' beings. In other words, they get happiness not just from doing things with others, but also from doing things for others. Therein, appreciation is a recognition of the quality, value, significance, meaning, or magnitude of people, relationships, and events, and it is a conscious and internally chosen experience of gratitude and thankfulness. The internal practice of appreciation leads to the expression of respect for the object of the appreciation (and vice versa). Herein, 'respect' is defined as showing regard and understanding for the worthy essential nature of someone or something. It is hard to empathize or care for someone when you don't understand what their needs are.

When an individual values the experience of appreciation in all moments of their life, then they are less likely to take that which they have for granted and become de-sensitized to the meaning of 'value' itself. Behaviors that may be named "vulgar" and "exploitive" are often expressed when someone is in a relationship and has very little appreciation for the other entity in the relationship. For example, an abundance of food can lead to gluttony if someone loses appreciation (or respect) for the source and nature of their abundance, and that which the abundance exists to fulfill. Also, tools can make us "lazy" when we lack appreciation for their source, their design, and their usefulness in fulfilling needs.

Appreciation is hard to have when someone lacks the understanding that they actually exist in an identifiable relationship with things outside of themselves in a common reality. Compassion starts with an understanding of the truth that there exists a sameness in one's connections with all others -- it is compassionate to hold all of our needs with equal care. In every relationship with another conscious and living being there exists the potential for compassion as the understanding of the essential sameness in the other and a recognition that the other [with whom one is in a relationship] has needs and desires that when fulfilled sufficiently facilitate greater states of well-being and creative potential.

Herein, functional relationships arise out of a state of appreciative compassion - thankful, non-exploitive relationships where common needs and desires are understood and movement toward fulfillment occurs. All functional relationships necessitate sharing and mutual respect, void of expectations and projections, which hinder an allowance for what presently is. When expectation is reduced, then an openly intelligent connection leads to networks of interconnected and

supportive functionally intelligent relationships. What is a community if not a network of intelligent relationships where sharing occurs?

Above all else, relationships magnify the human experience. Some groups of people get together and magnify lousy states; others support the evolving whole and share toward a higher potential state of existence for everyone. In particular, human relationships provide a feedback device for someone's behavior. Relationships are always giving us opportunities to grow and become even more compassionate reflections of ourselves.

All relationships represent an allowance of existence. And therein, the acknowledgement of existence is the rosebud of compassion. It is through unbiased understanding and open inquiry into that which exists that compassion for all things is developed. Herein, compassion is experienced as an unconditional understanding of our own and other peoples choices and situations.

The intention of compassion requires only the development and execution that intention with as much knowledge, understanding, and experience (or wisdom) as one possesses at the time the intention is translated into "compassionate action". Errors in human action are unavoidable, since individuals lack degrees of both omniscience and moral perfection, are an opportunity for further growth and the expansion of one's state of compassion.

Living in harmony (i.e., a harmonious dynamic) and sustainability [within an ecology] may be said to exist when we enjoy the same things that are also good for ourself and others.

Neither compassion nor appreciation involve opinion and judgment. Instead of shaping perception, as occurs with enculturation and judgment, compassion and appreciation are degrees of openness and "acceptance", of "non-attachment" and equanimity, to that which is. Judgment shapes perception and appreciative compassion is perception without pre-conception. Empathy comes through an acceptance of that which is without pre-conditions; and empathy between individuals generates trust in a social system. Essentially, empathy is how we experience the others as ourselves so that we can make connections and we can see the world as part of our common framework. Therein, empathy becomes our experience of the world as a common framework.

Some structures inhibit the experience and expression of empathic connections between individuals. It is unhealthy to foster such structures, and it is healthy to understand why. In the Community, appreciation is spread amongst cooperators (or "constructors"); there are no unappreciated "losers". It is not only what "you" can do, it is also about what "you" can do with others.

10 Regeneration and abundance

Natural systems have the ability to self-organize and heal themselves, and humankind does too if it participates with them and acts as they do (i.e., aligns with and applies natural principles toward the design of its fulfillment). We are a part of nature, and our human nature exists within a larger natural, living ecological system. Life and land are not commodities, but they are a whole system of life-giving and living processes. It is essential to understanding that we know scientifically that life-giving processes are stabilized within systems. Hence, sustainable (and stabilizing) design necessitates a movement towards the systematic whole. If a community relates its values to what nature tells anyone and everyone through the verifiable about the world (e.g., biomimicry), then individuals have the potential to align their relationships harmoniously with one another and with the greater whole to create true global abundance. At a material-level humans are [at least] biological systems, and a biological system that is neither sustainable nor regenerative will die and eventually become extinct. Something which isn't sustainable comes to an end. If we don't become sustainable then we aren't here any longer, at some point; and while we are here, our lives will be less enriched because of our unsustainable practices.

One of humanity's greatest responsibilities is to be good ancestors. If we are to be genuinely good ancestors, we must carefully nurture and protect the natural wealth of our global home. We must provide for current generations, but not at the cost of future generations. We must share our knowledge so that others can learn to care for themselves and prosper. And, we will express the values of generosity, openness, respect, and dignity.

"Only after the last tree has been cut down, only after the last river has been poisoned, only after the last fish has been caught, only then will you find that money cannot be eaten."

- Cree Indian proverb

Sustainability requires thinking on a temporal scale. A sustainable society uses its resources to meet current needs while ensuring that adequate resources are available for future generations by intelligently coordinating and organizing ecology (natural patterns), economy (coordinated fulfillment), and equity (mutual fairness/access through the fulfillment of all human need). 'Ecology' is the pattern of relationships between living things and their environment. Economy is the transformation of resources into needed services and goods. Equity is mutually shared access to services and goods.

Whereas the highest aim of **sustainability** is to satisfy fundamental human needs today without compromising the possibility of future generations to satisfy theirs, the goal of **regenerability** is to develop and maintain [living] systems that restore, renew, and revitalize their

own sources of energy and materials. Therein, human sustainability is a pattern of human behavior of which the ideal form is the regenerative fulfillment of human needs [through regenerative abundance from natural services].

There is a truism: "How we look to the future defines how we live today." Sustainability implies a time issue. Sustaining is what makes life on earth possible. A sustainable structure (e.g., building) distinguishes itself by how it is built. Humanity must be able to dismantle the building without loosing more resources than were needed to build it in the first place.

If there is some goal to remain flexible and to minimize the negative impact of changes, is to be modular. Modular systems can be replaced. A module can be replaced with another duplicate module or with an updated module. Work in space has used this ability for years. The ISS space station is built entirely of modules.

Sustainability is an active condition of problem solving. Conservation alone does not produce sustainability. Problems with resources are not solved simply through conservation. A society can be destroyed by the cost of sustaining itself. Sustaining broken systems often requires more resources, and not less. To sustain is to maintain a desired state or condition. Therein sustainability emerges from peoples values -- people will work to sustain what they value. Sustainability is the ability to sustain that which is valued. What is sustainable is what can physically and possibly persist.

Regeneration is the web-of-life itself upon which long-term survival depends. It is life support over time. And so, in the human and ecological context, that which is sustained (as a sustainable communion between humankind at a social scale and nature) does not come through endless employment, economic expansion and self-interested competitive advantage; what is sustained in the broad sense is the proper ongoing integration with this web-of-life, accounting for how the system supports or thwarts its function. Our ability to sustain and interlink with nature is a defining goal for our species. A proper pursuit of sustainability is within its proper ecological context, as the term has been largely co-opted, and hence, trivialized and misunderstood.

In another sense, "to sustain" is to preserve; yet, we as a community can do better than simply sustaining: we can give back, we can caretake, we can facilitate environmental health and maximize regenerative abundance. Together, regenerative sustainability (or sustainable regeneration) allows for the co-evolution of the human species along with other thriving species on a single planet. Under favourable conditions (i.e., conditions of regenerative sustainability), most living systems are capable of regenerating themselves while retaining an essential sense of sameness. A system that is incapable of sustaining and regenerating itself is by definition a system in decline.

Consider the following requirements for a sustainable society. First, everyone in the community has their basic and social needs met. Second, responsive adaptation

is socio-economically acceptable. Third, the natural systems that support life on the planet and in the community are preserved. And fourth, technological systems are not divorced from ecological consideration (ecology > knowledge > technology). At the core of all principles of sustainability is a recognition of the largest order system. That system is a reference for all sustainable design. Essentially, sustainability involves the intelligent organization and usage (or "management") of the Earth's resources, via the application of a commonly effective and objective approach for the benefit of all individuals, species, and living-systems in a common environment. That which becomes our resources (or material economic inputs) are part of a living ecological system. Therein, an unsustainable ideology is one that inherently leads a person or group to unsustainable and protectionist practices, and to the commodification of nature.

Sustainable systems integrate the needs of society with the integrity of nature. A system that is no longer integrating needs is unsustainable; it is a system out of alignment with nature. An unsustainable system will either transform or collapse, and this includes social and economic systems. It is possible to meet the challenges of changing conditions and of looming transformation by developing new and more environmentally relevant worldviews, organizations, processes and technologies. The weakening of an existing system is not only a time of great danger, but a time of great opportunity.

From a strictly economic perspective, the idea of "zero marginal cost" is the most sustainable state because it allows for the design and production of goods and services with the minimal amount of energy, labor, time and capital, while optimizing [through emergent technical efficiency] the output.

Being sustainable is not enough; to sustain is to just maintain a flat line. It would be optimal if something was given back to regenerate the life process -- to caretake and to improve the health and functioning of the environment, and of ourselves. The aim of caretaking (in this context) is to make the world a better place for human life and all life, to be "good" ecological stewards.

Regenerative design goes beyond sustainability. Instead of trying not to damage an environment it seeks to improve the healthy cycles of an environment through caretaking (a.k.a. care-taking) such that the needs of a living system are restored, renewed, and revitalized with greater efficiency and effectiveness. Nature is the only known standard of regenerative design; a common and highly generalized example of which is the water cycle - first it rains, the water collects into rivers, streams, the ocean, then the water evaporates back into clouds before raining back down. This completes one round of an endless and highly complex closed-loop cycle. Species don't survive in the long run by exploiting their environment for profitable income, commodification, or for any other "wealth extracting" reason; instead, they survive in the long run by care-taking and improving their habitat.

Commodities are bartered, sold, traded, and aggrandized [in the marketplace] where there is little to no thought or respect given to ecological impact and long-term sustainability. And often, commercial entities present a marketed pre-tense of thoughtful ecological action and social respect, but in reality there is not transparent action, there is not ecological respect, and there is not social consideration. Instead, there is what is known as "greenwashing", and businesses have become extremely, scientifically sophisticated in their ability to create a "green" perception of their identity in the minds who come into contact with their propaganda, some of which they may have even digested themselves.

When ecological resources become commodified by profit-engineering entities in the marketplace, then truthful interrelationships between the individual and their ecological life-ground become socio-economically severed (or at least sufficiently distorted to prevent likely recognition). Often, the market pursues profit irrespective of the damage it does to ecological and life-ground systems - the market encodes otherwise. When economic services are provided by profit making entities (vs. a socially participative community), then the products of their engineering, their economic goods and services, will align with their ecologically disconnected orientation. Fundamentally, businesses are profit engineering organizations; they turn naturally common resources into commodities and then into exchangeable capital. Is "your" economic system engineering systems for profit or for systematic solutions to human needs. And, human needs require regenerative fulfillment by natural services if they are to facilitate the expression of a higher potential experience here in our world, which is something business cannot provide.

The ultimate objective of maintaining regenerability as an organizing condition is to foster a well-functioning alignment between individuals and the dynamic capacity of the environment's life-supporting ecosystems. This alignment represents a homeodynamic balance (or 'health') in the interaction of a population with its environment. It is this specific balance which is also the focus of a meaningful definition of 'sustainability' - thinking today as if tomorrow matters. There is a term in the Scandinavian dialect that carries the idea that it is preferential (or moral) to behave in a manner wherein one contributes enough and takes away enough for the community to continue; in brief, the word translates to "the right amount is best" -- the word is 'Lagom'.

INSIGHT: *Nature develops regenerative systems, it does not develop "sustainable" systems. When humanity builds, it would be wise to build in line with nature so that humanity builds regenerative systems, like nature. This idea of engineering system in line with nature is known by many names including 'biomimicry' and 'synergistics'. It is easy to be wasteful in times of perceived abundance without an appreciation for the source of abundance. In nature, when left alone,*

order arises. In truth, 'sustainability' is the only true form of "social security".

10.1 Permacultural abundance

INSIGHT: *The idea of permaculture maintains the understanding that ecosystems, and in particular, their design, have different potentials [for producing health and abundance].*

Permaculture is a vision of regenerative abundance where communities provide for the materials they need to survive and thrive using sophisticated ecological understandings blended with [engineered] design to create productive landscapes. It is a means of attaining essential human needs through methods that work with nature rather than against it (and it has been practiced for thousands of years across the globe). The idea of permaculture is to design a natural service environment

THE FOLLY OF MODERN SOCIETY

There is great folly in early 21st century society. For some reason we put up with so many self-created difficulties in our everyday lives in these "modern times". So many of our systems are clearly broken and the ones that cross the line of being especially offensive are the ones that thrive by making people feel broken instead; along with the ones that blatantly disregard the human need for freedom. But, what drives this? Why is it that we tolerate this? There may be no single, simple answer for we would have to take into account all of evolutionary history, evolutionary psychology, modern history, modern conditioning, language, and semantics, and in truth, even that may fall short of a full explanation. But, in the realm of diet and food, maybe there is something that we can learn from modern food production to provide us with some insight, even if only metaphorically.

We, as a society, have removed ourselves as active participants in the food chain. After all, only a tiny percentage of early 21st century society hunts, gathers, or farms. We have, in essence, outsourced this life sustaining activity to such an extent that we have become completely foreign to it, alien to it. We fill our plates with plants from around the world without ever planting a seed or having held a fist full of soil. We fill our plates with meat without ever having known or seen the animal, or a single drop of blood. And, this is remarkable, because the primary activity of nearly all animals in nature is the direct and intimate acquisition of food. And, this food acquisition, being such an essential part of life, would clearly help to define life.

When we grow our food, how can we help but not think about the importance of the sun, the rain, the soil, the harmony of nature's forces that go into producing life promoting substances. And when we hunt, we get to know the prey, we appreciate its senses, and we deeply understand that the animal's desire to live is similar to our own. We respect the animal's cleverness, and at the point of the kill it is both a victory and a loss, an ending and a beginning. And how can we help but not see this when we are inside the experience.

So, what happens when we remove ourselves from these experiences? Our time is freed for other activities. But, if those activities aren't as directly related to life and sustenance, if they are frivolous, then certainly our perspective on life would change. And so, the question is, whether we would value life more or less in the absence of this direct experience with not only food, but with an extremely intimate and crucial function of nature.

When we look at confined concentrated animal feeding operations, are these the results of valuing life more, or less. When we consider antibiotic injections for quicker growth or the haphazard of the genetics of other lifeforms does this stem from valuing life more? It's hard to imagine such behavior creating a greater valuing of life. And, what of all of the food that is thrown away in our culture? Food once living, that could at the very least be returned to the soil [for compost], is instead, wasting in trash dumps.

So what? In truth, we are producing more food than ever and it frees us up to do other things; and this is just the price of progress. But, what kind of progress are we making if we value life less? Should it be any surprise that at the same time we have confined our animals to concentrated feed lots that we have also confined ourselves to concentrated cubicle lots and urban/suburban blocks of lots. As we have deprived foul and swine from sunshine have we not also deprived ourselves from the same. Have not our children's lives shifted from the outdoors to the joysticks and keyboards inside. As we spray our plants with all manner of chemicals do we not also fail to think twice about spreading sunscreens and lotions on our bodies. As our farm lands have been transformed into monocrops have we not also turned our lives into a series of monotonous tasks. Have we not come to value myopic specialization over well roundedness. As we tolerate the abuse of the land and the animals, have we not also tolerated the abuse of our own lives and the lives of others.

And so, while returning to a life of hunting and gathering may not be something that will happen any time soon, nor is it something most people would want, it is still perhaps quite important that we think about and participate in the food that makes its way onto our families tables, at least in some way. Because, if we do not take a mindful approach to our food, then we may soon forget how to be mindful at all.

This section is adapted from:

- Coopala, A. (2014). *The Paradox*. Latest in Paleo Podcast, Episode 108, ~43m:43s [latestinpaleo.com]

to meet human needs while retaining, restoring, and improving the health of the ecosystem through ecological principles and relationships. Like every other element of this social system design, the underlying philosophy of permaculture is that we are a part of the natural environment and not separate from it, and that we must work with nature and its processes, rather than against it.

There is a fundamental relationship between individual freedom, the fulfillment of human needs, and the health of the ecosystem (or the 'lifeground'). Joel Salatin aptly states, "A community that can feed itself is free. A community that cannot feed itself is not." A community that isn't able to nourish itself lives in dependency of whomever is providing for it, and therefore, it is not only not free, but not sustainable. Conversely, a community that is able to provide for itself through naturally regenerative services does not exclude itself from other (or external) sources of nourishment, and yet it is free, sustainable, and independent. Through this type of interrelationship there exists the potential for abundance.

The three very basic permaculture principles are:

- **Let nature do it***, and optimize within nature
- **Integrate** compatible functions
- **Plan** spaces and zones, and maintain awareness of the emerging context

**The idea of "waste" as something which is to be thrown away and has no use in the cycle of life does not exist in the natural world. Hence, the permaculture principle, "produce no waste."*

Also, permaculture maintains the notion of leaving an area better than it was found, of 'caretaking' the Earth. And, some social organizations and conceptual modes-of-thought cannot integrate the very idea of permaculture for they do not orient their society, or even the individual, in this intentional direction.

Abundance (as an orientation) enables the intentional fulfillment of needs in living ecological systems. True advances at both an economic and social levels of a society promote the state of appreciative-abundance, which is represented by the condition that everyone in a community feels that they "have enough", and are enabled to live a self-directed and meaning-filled life. Abundance breeds a sharing-mindset through the satisfaction of primal needs and an environmental allowance for (or facilitation of) the individual opening to the realization that they are part of a greater whole. Essentially, abundance is an issue of access[ibility]. And, in an information system, it is an abundance of access to information about the system (and transparency of the system) that promotes sustainable resource perception, access, and usage.

The impulse toward abundance as a state of *fertility, prosperity, and plentifulness* is a perfectly natural and

intelligent desire, for it provides opportunities to expand into life's higher potentials. Humans, like many other mammals, naturally collect and store valued items, conserving against the future. If the question "what shall we eat, drink, and wear?" compel any state of community to react immediately, then it has no time nor inspiration for advance. Yet, when a community designs and applies systems that maintain the condition of abundance [and reserve/redundancy] through sustainable and regenerative designs, then the necessity for reaction diminishes and individuals have the time, energy, and space to contemplate and to progress.

Most environmental problems are fundamentally moral problems. A society with environmental "issues" is a society with moral issues; it is a society out of orientational alignment with itself and its ecology. We have the ability and intellect to design a fulfilling environment and lead enriching lives. Anything less is a measure of illusions grip on us. Then the question becomes, how much illusion can the world suffer before nature snaps in half?

INSIGHT: *Abundance is only useful when developed out of wisdom, for as Heraclitus once stated, "Abundance of knowledge does not teach men to be wise".*

10.1.1 Biological diversity

The most biologically diverse ecosystems are also the most stable. If a blight were to attack and decimate a single species of tree in a diverse ecosystem, it removes a minuscule fraction of the overall biomass, food and nesting source of the total. However, as we move toward the poles on this planet, we tend to have large covers of few species, and when we lose a single species we have a disruption of the whole ecosystem.

MAXIM: *A community isn't sovereign until it regenerates its own seed.*

10.2 Technological abundance

"Technology is a resource liberating force (or mechanism); it can make the once scarce, now abundant." [How might technology facilitate abundance?]

- Peter Diamandis

A community with permacultural zones might include 'sectionally robotic cultures' designed to fully and autonomously cultivate, caretake, steward, and distribute food (Read: technological permaculture). Automation can provide a service to the users as well as to the environment. Mechanization may "produce" a portion of our food while also caretaking the ecological environment. And, this may be done in place of repetitive and technical human labor. Humanity can achieve appropriate abundance by using machines to do a part

of the work.

The purpose of technology, as a labor saving device, is to free labor (as undesired repetitive effort) for the meaningful. Or, said another way, technology exists to free labor from repetitive effort for meaningful fulfillment. Essentially, through automation humans labor less and have the opportunity to participate more. As a community, we seek a human-centered approach toward our sustainability - increasing sustainability together with abundance in the fulfillment of our needs. We value *natural processes* and *automated systems* in effectively and efficiently maintaining states of material abundance. Through these systems and processes the Community reduces the fear of insufficiency, while providing for the needs of individuals. In particular, the application of automation to undesired and banal labor frees the individual from mundane and arbitrary occupational roles, which are often intrinsically meaningless to the individual (though may have acquired extrinsic meaning to them over time).

Some essential questions we must ask ourselves when discussing technological abundance include:

1. How do we frame these extraordinary developments in technology in such a way that they enhance and engage the flourishing of the human race? We create tools to enable us, yet, what are we enabling ourselves to do even more of?
2. Do we want a future where technology frees us from "work" (in its pejorative) or do we want a future where we are in fear of losing our "work"?
3. Are we designing tools to be used in the interest of the human community? Is that our reference-framework? What do we understand tools to be used for?
4. Why don't we use robots and automation technologies now to do the most unpleasant tasks that society requires? What tasks does a community actually require, and what tasks are required to keep an aberrant and unfulfilling system in operation?
5. Does "work" have to be a pejorative?

We automate so that we have more time to develop our higher potentials as human beings. We automate because we value efficiency and we recognize that there is meaning in our lives. We design technologies to make our lives better off. We can do more fulfilling thinking and things when we have the time and survival-certainty to do so. We desire less doing and more thinking [about optimized cooperation] -- a more automated autonomous (AA) world. Essentially, automation is the setup of more efficient pathways [in the fulfillment of our purpose].

The same technologies that displace labor in modern societies could be applied to free individuals from a

state of war-like competition and meager survival [over currencies, resources, and ultimately, life]. Automation can be applied to reduce repetitive work load while increasing the available time for leisure, learning, play, and growth. Therein, lives become less like drudgery and more "liveable". Repetitive and mundane jobs are also the easiest to automate. The technology available at this very moment could be applied to replace nearly all of the banal and repetitive economic activity humans do at the present.

In early 21st century society people get used to technology in dismissive ways, and that is what makes the incredulity of the future outlast the amazing leaps and bounds that would have proven that incredulity wrong, over and over again. Those who do not understand the fundamentals of the technologies they use tend to ignore the consequences, implications, and benefits of "their" technologies; they don't recognize the fact that more and more "impossible" things have been made possible through knowledge acquisition and technological application. They don't realize technology as representing a movement toward an increasingly thought responsive environment.

Herein, automation is seen as favourable to humans; it is not seen with fear because of its potential to replace commercial labor "jobs". Rational humans have a desire to replace banal and unfulfilling work with automation, for they recognize the value of efficiency in the fulfillment of their needs and its relationship to their freedom.

Also, technical efficiency in the form of automation enables a degree of safety in what might otherwise be a risky fulfillment processes. The use of robots in the process of mining Earth minerals might be one example of said automation, or safety airbags in automobiles. It would be wise to apply technology to the banal and repetitive technical efforts that compose an economic system; and hence, prevent unnecessary "human error" (i.e., "tragedy") from ever occurring in the first place. A useful economy would apply technological innovations, particularly automation, to technological service systems for the benefit of everyone. Therein, "jobs" that people do not want to do, or that involve physical risk, can simply be automated.

If individuals desire to "self-complete" economic tasks, then technology will only be applied to those tasks as a redundancy measure. In community, participation in an economic activity (or "job") involves intentional, participating volunteers; individuals who find fulfillment in the effort applied toward the activity and/or its result. The application of participative automation is essentially the freedom of choosing work that would be quite unsatisfying to the person if they were forced to complete it. Effectively, technological automation allows for a reduction in the necessity of human labor.

There is "work" that is fulfilling and accomplishes the goals of individual conscious beings, and then there is "work for the sake of work" [as a form of self-sacrifice and the re-cycling of competition]. 'Work' takes on a whole new meaning when someone is doing something

that is primarily intrinsically motivated wherein the reward comes from the enjoyment of the experience itself and the potential for self-growth. In community, we make our work our play and our play our work. The notion of "working for a living" is inhumane considering all the technology that has been given to us by prior human generations. Technology fundamentally changes the labor market (i.e., technological unemployment is a reality).

If human labor is necessary and it is not performed, then the system(s) for which human labor is needed will degrade.

The Community seeks to automate laborious and banal tasks [where such solutions are possible and desired] that are a drain on human potential. What use is technology if it does not make us, as individuals, more free? The human brain automates mental processes to free someone's limited conscious attention capacity for the meaningful. Why should we not do the same with our material service systems? The intelligent application of technical efficiency in the form of automation has the potential to orient society toward even greater social stability. From this value-view, it is negligent for a society to waste individuals' tremendous creative potential on repetitive, monotonous tasks that drain their life force and could be automated. Mechanization (or technical automation + human effort) is more productive, efficient, and sustainable than human labor by itself. And, full automation is even more productive. Machines do not need vacations, breaks, insurance, pensions, and they can work 24 hours a day, every day, to provide for the needs of the Community. In community, automation and mechanization are means of abundance; whereas in the market they are means of saving money and increasing profits. The relationship and result simply depends on the value orientation of a society. Some societies automate for profit, and others for fulfillment.

The intelligent implementation of automation technologies requires the designing users to ask themselves with each design step, "Am I doing this in a way that is going to free me from having to do it again in the future?" And that means building processes and developing systems and workflows so that after "I" am done doing it the first time it is "automated", or simple to repeat in the future [for myself and for others]. Hence the clarification: working "on" the system rather than "in" the system.

Never forget that technology is embedded within society. The question is, do "you" have a society that facilitates and allows individuals to do more with less people (to automate tasks), or do you have a society where people are dependent on jobs. Fundamentally, there will exist a different societal result (i.e., a different society) when productivity gains are shared. Life is not only about what is technically possible, it is also about social relationships, which strictly influence what is technically possible.

In the market, business do not want to create an abundance of access. In the market, abundance means

lower profit. If business were to create an abundance of access to any product, the typically results is a "flood of the market" with product, and a consequential lowering of the price of the product. Farmers do not want to create an abundance of food or they would be out of business (or make less profit than they already do). Energy companies do not want to create an abundance of energy or they would be out of business (or make less profit than they already do). Technology companies do not want to create durable and modular products or they would have less business. Medical companies do not want a healthy population or they would have less business. It is certainly in the interests of profit-motive power establishments that abundance be avoided at all costs.

Without a value system aligned to a higher potential machines may provide abundance, but will ultimately leave everyone in want (or "craving"). More than machinery, we need humanity. More than cleverness, we need kindness and gentleness. Without these qualities life will be violent and we will repeat mistakes without integration. The very nature of inventions like the Internet and the telephone cries out for the very "goodness" in humankind, cries out for the unity of everyone. We have the knowledge to create machines as well as universal abundance and a fulfilling organization.

We have to be careful of what we innovate and to that which we apply our cleverness least we conceive and innovate things we cannot spiritually, morally, ethically or physically metabolize. No one is a cog in someone else's machine. No one is a "human resource"; in reality, you are never obsolete. Humans are not capital to be managed, and natural services are not resources to be capitalized upon and commodified, if human fulfillment is the direction desired for society. When sorting people and other life into resources, some societies pay no attention to the thing they are sorting them from.

A system of political governance combined with monetary market economics will characteristically exist to manage human capital, along with commodifying everything available, generating disastrous incentives for bad behavior in the process. Such a system will not generate states of fulfillment, and within such systems technology is likely to increasingly be used by commercial entities to thwart human fulfillment for the very continuation of those who benefit off "the back of the system". And therein, 'human resource management' is always accompanied by the necessity for 'perception management' [due to the conditions imposed on the "self" by the "manager"] -- In other words, human management involves perception management, which is basically expressed as propaganda, public/personal relations (PR), and advertising & marketing.

Marketing and advertising exist primarily to influence for the purpose of profit. What is the use of "marketing" if not the creation of demand and need for something an entity in the market is going to sell. In part, marketing is designed (or engineered) to make people adopt conducive attitudes, associations, and feelings that

facilitate (i.e., make easier) the purchase of a product (or experience) in the market. Many industries, the beauty industry in particular, actually seek to make people feel unhappy or inadequate so that they will buy the [beauty] products. In the market, demand [in part] refers to the consumers' perspective. Essentially, advertising is supposed to drive demand (sales, market share) for the advertiser who has a product for sale. And in fact, often it does actually create or otherwise "drive" demand and consumer perception (of themselves and of society). Therein, fear, uncertainty, and doubt are the sales tools of the "elite" (or "leaders") in the market.

"Torches of Freedom" was a phrase used to encourage women's smoking by exploiting women's aspirations for a better life during the early twentieth century first-wave feminism in the United States. Cigarettes were described as symbols of emancipation and equality with men. The "Torches of Freedom" slogan is an iconic and larger scale example of an industry that manufactured demand. The orchestrated "event" was a marketing campaign designed to re-frame people's reality such that a group of people (women) would purchase a product (cigarettes)

they previously weren't purchasing. Consent can be manufactured and associations can be engineered. Who creates the pictures and concepts in our head, were they organically inquired, discovered, and integrated, or have they come through slogans and drip fed by State and industrial education (and media) systems. If you know someone is going to respond to a stimulus, then you can direct them, basically. And in particular, if there is a "culture industry" or there are "culture leaders" in your society then you may want re-evaluate in a more discerned manner the socially accepted (or acceptable) contents of your mind. Advertising & marketing is social engineering in its pejorative, and it is part of the "culture [creation] industry". It can, all too often, become a preoccupation with things that mean nothing in terms of human fulfillment and sustainability, and which only seek to cloud and dull the mind [of the engineered subject] leading consciousness further away from truth, discernment and intelligence.

Advertising & marketing is a form of social engineering. In its pejorative, social engineering is the sophisticated manipulation of the natural human ability

A SIMPLISTIC LOOK AT HOW TECHNOLOGY INFLUENCES SOCIETY

Technology does not exist in a vacuum. There is an interplay between technology and society. A "technic" is the term given to the power-oriented interplay between technology and society as coined by Lewis Mumford (a sociologist and philosopher of technology). Mumford wrote that any given technology either facilitated the consolidation of power or the distribution of power in society. The first question that differentiates whether a technology facilitates authoritarian social systems (i.e. power consolidation) or egalitarian social systems (i.e., power distribution) is: Can anyone in society make it, or is it made and controlled by an external and centralized entity who controls access to it?

Anyone can make a bow and arrow, and so, the technology and knowledge that goes into the creation of a bow and arrow facilitates power distribution. Conversely, a normal gun requires metal, and so, those who control the mines and the means of manufacturing control whether or not any given person in a society has access to a gun. Hence, in the market where these things are owned, a gun (as a technology) is referred to by Mumford as an "authoritarian technic". An authoritarian technic is one that emerges from and leads to authoritarian social systems. Given a choice of life sustaining activities that someone could participate in, no one wants to do the work of mining. Even with modern technologies, it is incredibly hard and risky work. So, generally, people don't do not do the work unless they are forced to do it. To some degree, agriculture and mining were the first two primary slave-based economic endeavours. The work is so incredibly hard that no one wants to do it unless they are forced to.

Here, we come to realize that the technology we create, and its application to our lives, affects how we look at, and behave in, the world. Think about how cars and airplanes have changed our perspective on distance. If you drive two miles down into town and you get a mile and realize you have forgotten something, then it is not a large hassle to drive back and pick up that which was forgotten; but, if you had to walk that distance you would think much more carefully about what you were going to take with you before you left the house.

The second question that needs to be asked in determining whether or not a given technology facilitates power distribution or consolidation is its degree of sustainability. A plough is good example of how the application of a technology has influenced our behavior in historic context and led to power consolidation. A plough would be considered an authoritarian technic - over time, it destroys the soil ecology, which means that it is an unsustainable application of technology. Through its use, land becomes less hospitable to life. In general terms, the use of some technologies mean that a society's way of life can't be sustainable in a given geographic area. Through ploughing, individuals will destroy their land base; and thus, they will have to engage in expansionist behavior. And, expansionist behavior requires military force.

REFERENCE

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to trust for profit or competitive advantage. For instance, marketing by the oil and gas industry in recent years has created the false impression in the eyes of the public that said industry is in fact in the sustainability industry. Fundamentally, people can be socially engineered into believing things and doing things (such as buying things) they would otherwise not believe or do/buy. Market interest is significantly subjective. Market desires can be contrived. And, market demand can be manipulated.

In *The Nag Factor*, Lucy Hughes states:

"You can manipulate consumers into wanting, and therefore buying, your products. It's a game."

"Torches of freedom" was a public relations scheme. Other terms for public relations (or "PR") include: disinformation, perception management, social engineering, propaganda, and advertising & marketing. It must also be admitted that the term 'public relations' is sort of "Orwellian" in its phrasing: it sounds quite nice, it has the word "relations" in it, which causes us to think of relations (possibly 'family relations') and it has the word "public" in it, indicating lots of people and a sense of togetherness. However, what is really being spoken of when the term 'public relations' is used is 'propaganda', which is the name of the book given to Edward Bernays' instructional work introducing 'public relations' to the world. In black and white Bernays says that controlling the public is doable and desirable, which he describes in the book "Propaganda". Of note, Ivy Lee and Edward Bernays also invented the concept of the 'press release' - of which all mainstream media news services use to shape the content of their "news" (Read: amusement). Philosophically speaking, amusements involve the outsourcing of ones own thinking to others. The nominal definition of amusement is: a [negate] + muse [to think & meditate] + ment [suffix]; "the absence of thought".

In *Propaganda*, Edward L. Bernays states:

"The conscious and intelligent manipulation of the organized habits and opinions of the masses is an important element in democratic society. Those who manipulate this unseen mechanism of society constitute an invisible government which is the true ruling power of our country... . We are governed, our minds are molded, our tastes formed, our ideas suggested, largely by men we have never heard of. This is a logical result of the way in which our democratic society is organized. Vast numbers of human beings must cooperate in this manner if they are to live together as a smoothly functioning society. ... In almost every act of our daily lives, whether in the sphere of politics or business, in our social conduct or our ethical thinking, we are dominated by the relatively small number of persons ... who understand the mental processes and social patterns of the masses. It is they who

pull the wires which control the public mind."

Propaganda was used to turn a needs-based global culture to a wants-based culture. People were convinced to shift their focus from that which they needed to live, to "consumers" who are obsessed with fulfilling their every want and naive to their real needs. And, this was done by design, primarily through the work of Edward Bernays. He created the field of "public relations", which was previously known as "propaganda". The term "propaganda" took on a highly negative connotation after the Nazis used it in its extreme to manipulate the opinions of the masses in an overt way. It effectively got cleaned up and renamed by Bernays.

Bernays started off working with different businesses and then began working with governments as well. "The Century of Self" is a three part BBC documentary on this very subject. The documentary reveals that so much of what we take to be normal everyday activities and purchases (normal and naturally developed and evolved) were actually created by design. One might come to realize by watching the documentary that a lot of things one thought were unique to oneself or one's culture, that instead, many of these things are actually a product of market, media, and government manipulation for their own agendas. Herein, one might ask oneself, "How much of a product am I of market, media, and government manipulation?" Many of the choices we thought we were making independently were actually made for us by others.

Sigmund Freud said that people have unconscious motives and drives. Then, Bernays (the nephew of Freud) said people have all these apparent unconscious motives and drives, and so, the lesson to learn from that is that people are fundamentally irrational and incapable of making sensible decisions by themselves. Hence, they need a special class of professional opinion managers, like Edward Bernays, to tell everyone what to think; otherwise all these crazy people will be thinking for themselves and you will have chaos.

The two primary marketable purposes of "public relations" are:

1. To sell a product.
2. To divert attention away from something and toward something else. Therein, industry has an incentive to act as a gatekeeper to the access of information.

In a market, public relations becomes the buying of positive influence. Wherein, propaganda can be bought and sold on the market like any other good. In a competitive market individuals and market entities look at information and technology with [at least] dollar signs; wherein, information and technological ownership are used to "turn a profit". Establishment structures will naturally emerge under such environmental conditions to control or otherwise engineer technological scarcity

to promote their own profit.

The use of technology does not necessarily "build the market" or "develop the State"; yet, it will do so if it is socially oriented and encoded to do so. Technology can dominate as well as care-take. It can facilitate our fulfillment and care-take our natural habitat; or, it can misalign with nature and dis-orient us away from our fulfillment. The application of technology without a recognition of common human need and environmental consideration (+ ecological care-taking) is likely to generate, or at least facilitate the developed persistence of, dominance and subjugation structures. Without our technical reality (and the totality of what that means) in our frame-of-reference, then we might just be duplicating more of the status quo, more of what already is [not really wanted].

Humans have an odd, though understandable (due to present conditions) habit of referring to things that other humans make as "artificial". When other animals make something it is just called natural, but when humans make something other humans have a tendency to call it "man-made"; a term that has a distinct association with that which is also "artificial". Can humans not make natural technologies also? Can we not fulfill our needs through the application of technology in natural ways? We do not use the same language when referring to other organisms that engineer technology from within their own conscious decision/need space. We do not apply the same thinking to bees when they engineer the technology of their bee hives. We do not call things made by bees, bee-made and maintain the presumption that what they have made is synthetic, artificial, or "not real". We do not call technological structures made by birds (i.e., nests) artificial or dams made by beavers synthetic.

We are as part of nature. The belief that all technology and all technological interfacing with the natural environment is harmful, unnatural, and/or inflicts unnecessary suffering on the environment is often held by those who prescribe to the "anarcho-primitivists" train of thought. Historically, such people have been known as "Luddites". It is important to recognize that our technological knowledge and capabilities can facilitate our fulfillment as well as facilitate our care-taking with (or of) our natural ecological environment. If communities began to design distributed service technologies that were effectively fulfilling their needs in a manner aligned with natural technical principles and an environmental care-taking philosophy, then why should these too not be called natural.

It is important to recognize that the industrial landscape sets the economy and the environment in opposition to one another. It would be wise to have a decisioning system that doesn't set the economy against the environment. But, as it stands in early 21st century society people are destroying the environment to make money, and to survive.

"We are absolutely right in recognizing this

nonsense of earning a living. We keep inventing jobs because of this false idea that everybody has to be employed at some kind of drudgery because, according to Malthusian-Darwinian theory, he must justify his right to exist. So we have inspectors of inspectors and people making instruments for inspectors to inspect inspectors.

- Buckminster Fuller

10.3 Sustainability and sustainable systems

The following section is highly adapted from Capra (2012).

The concept of sustainability has often been distorted, co-opted, and even trivialized through its use without the proper ecological context. That which is sustainable in a "sustainable community" is not economic growth, but the entire web of life on which our long term survival and well-being depends. In other words, a sustainable community is designed in such a way that its ways of life, organizations and structures, and so on do not interfere with nature's inherent ability to sustain life. And, the first step in this endeavour, naturally, needs to be the inquiry into an understanding of how nature sustains life. And, it turns out that this involves a new ecological understanding of life, and a new kind of thinking - thinking in terms of relationships, patterns, and context. And indeed, such a new understanding of life has emerged over the last century. To sum it up, at the forefront of contemporary science the universe is no longer seen as a machine consisting of several elementary building blocks; instead, science has demonstrated that the material world is an inseparable network of relationships, patterns of relationships. Humankind has discovered that the planet as a whole is a living self-regulating, living system.

The view of the human body as a machine held by Descartes, and other scientists and philosophers centuries after him, and of the mind as a separate entity, is now being replaced by one that sees not only the brain, but also the immune system, all tissues, all cells and consciousness in the body as a living cognitive system.

Evolution is no longer seen as a competitive struggle for existence, but rather a cooperative dance in which creativity and emergence are the driving forces. And with the new emphasis on complexity, networks and patterns of organization, a whole new science of qualities is now slowly emerging. One of the most important recognitions in this new understanding of life is the recognition that networks are the basic pattern of organization of all living systems.

The network is a pattern that is common to all life. Ecosystems can be understood in terms of food networks, that is networks of organisms. Wherever we see life we see networks. These living networks are called "functional networks", that is, connections

between various life processes that form a network pattern. In a cell, for example, these processes are chemical reactions among the cells molecules; in a food web the processes involve feeding on and eating one another, and in both cases the network itself is a non-material pattern interconnecting these processes. A closer examination of these living networks over 30 years has shown that their key characteristic is that they are self-generating, in a cell all the biological structures, the proteins, the enzymes, the membranes and so on, the DNA, are continually produced, repaired, and regenerated by the entire cellular network. Similarly at the level of the multi-cellular organism the bodily cells are continually regenerated and recycled by the body's metabolic network, so living networks continually create or recreate themselves by transforming and replacing their components. This lies at the very core of the new understanding of life. And since a network is a pattern of relationships it is evident that understanding life in terms of networks requires that we learn how to think in terms of relationships, in terms of patterns, in terms of context; and this thinking in science is known as systems thinking or systemic / systematic thinking.

Systems thinking emerged in Europe in the 1920s and 1930s from a series of interdisciplinary dialogues among biologists, psychologists, and ecologists (ecology being a new science in the 1920). From the very beginning, systems thinking has been an interdisciplinary effort. In all these fields, scientists realized that an organism, an ecosystem, and also a social system (social networks) are all living systems. A living system is an integrated whole whose properties cannot be reduced to those of smaller parts. The systemic properties are properties of the whole, which none of the parts have. So, systems thinking involves the shift of perspective from the parts to the whole. For example, if you ask yourself, "What is stress? Or, what is health?" These are questions about systemic properties; the stress of an organism is not the sum of the stresses of the molecules. The mass of the organism is the sum of the masses, but the stress of an organism is a systemic property. In a community, fulfillment is a systemic property.

To promote this shift of emphasis from the parts to the whole, the early systems thinkers coined the phrase, "The whole is more than the sum of its parts", which became a sort of slogan for the systems [thinking] movement.

In what sense exactly is the whole more than the sum of the parts? The answer is: relationships. All the essential properties of a living system depend on the relationships of the systems components with each other and the relationships of the system as a whole to surrounding environmental systems. Systems thinking means thinking in terms of relationships. Understanding life requires a shift of perspective; not only from the parts to the whole, but also from objects to relationships. And, this type of thinking is a serious challenge for most, particularly for those who were educated in science, for those who were taught science we taught that in order to

be scientific you have to measure something, you have to weigh and quantify it. And, that even spilled over into the social sciences, for instance, there is a well-known saying in management, "What can be quantified, what can be measured, can be managed".

So, what do you do with perceptible relationships, how do you manage relationships. You can't measure them, but you can map them; you can visualize a map of how things are interconnected. So, there is another shift that goes with the shift from objects to relationships, it is a shift from measuring to mapping. That is to say, it is a shift from quantities to qualities. The early systems thinkers in the 1920s and 30s identified these basic concepts to describe living systems as integrated wholes, concepts such as: organization; pattern; complexity; the idea of emergent properties; the notion of living systems as self-organizing; the concept of the ecosystem; and the associated notions of ecological cycles, food webs, and so on. These are the basic concepts. By the end of the 1930s, most of these key concepts had been identified and defined, then, the 1940s saw the formulation of actual systems theories. This means that the system concepts were integrated into a coherent conceptual framework, into theoretical frameworks describing the principles of organization of living systems.

When you looking at the history of systems thinking in standard textbooks, you find that the Austrian biologist Ludwig Von Bertalanffy is commonly credited with the formulation of the first such conceptual framework, which he called General Systems Theory. Most people today when systems thinking is mentioned will think of general systems theory by Bertalanffy. However, 20 to 30 years before Bertalanffy , before he published his first papers, Alexander Bogdanov, a Russian medical researcher, philosopher and economist, developed a systems theory of equal sophistication and scope, which unfortunately is still largely unknown outside of Russia. Bogdanov called his theory 'tektology' (or techtology) from the Greek word d "techton" meaning "builder". It stems from the same root as "architecture", meaning the "master builder". Essentially, tektology can be translated as, "the science of structures". Bogdanov's main goal was to clarify and generalize the principles of organization of all living and non-living structures. Techtology was the first attempt in the history of science to arrive at a systematic formulation of the principles of organization operating in living and non-living systems. It anticipated the conceptual framework of Ludwig Von Bertalanffy's General Systems Theory, and interesting, it also included several important ideas that were formulated four decades later in a different language as the key principles of 'cybernetics' by Norbert Wiener.

The stability and development of all systems can be understood according to Bogdanov in terms of two basic organizational mechanisms, formation and regulation. The dynamics of formation consists in the joining of systems (or complexes) through various kinds of linkages, which Bogdanov investigated in great detail. He emphasized in particular that a *tension* and *reconciliation*

between "crisis" and "transformation" is central to the formation of complex systems. Bogdanov showed how crises manifest as a breakdown of the existing systemic balance and at the same time represents a transition to a new state of balance. He also defined categories of crises, and with that he anticipated the concept of catastrophe, which bifurcated and became a key concept of complexity theory. Bogdanov technology anticipated not only general systems theory in most detail, but also cybernetics and key aspects of complexity theory. The view of living systems as integrated wholes led some scientists of the late 19th and early 20th centuries to extend their search for wholeness to the entire planet, and to see the Earth as an integrated whole, a living being. Living systems are self-organizing networks whose components are all interconnected and interdependent was expressed repeatedly by the early systems thinkers.

Complex systems are non-linear systems. Fractal geometry is a part of non-linear dynamics, of complexity theory. Ilya Prigogine in Brussels was one of the first to apply these theories to living organisms. He found that living organisms were able to maintain their life processes under conditions of non-equilibrium - thermodynamic and chemical non-equilibrium. In another words, in a living organism there are always processes happening. Energy and matter comes from the outside, is absorbed, there are structural changes, there is development, evolution, there are many chemical processes. There never is a static chemical equilibrium. Prigogine became fascinated with these systems far from equilibrium. Non-linear thermodynamics is often called emergence. It is one of the hallmarks of life. Creativity, the generation of new forms is a key property of all living systems. All dissipative structures have the potential to evolve. And, not all dissipative structures are alive. Yet, evolution potentially occurs in all dissipative structures.

Sustainable community must be designed in such a way that its ways of life do not interfere with natures ability to sustain life. To do so, we must first understand how nature sustains life. Sustained life is a property of ecosystems and sustained fulfillment is a property of social systems, rather than individual organisms or species. The Earths ecosystems have evolved certain principles of organization to sustain the webs-of-life. Knowledge of these principles of organization, or principles of ecology, has become known as ecological literacy. To understand the basic principles of ecology and to live accordingly is to act with ecological wisdom. Matter cycles continuously through the web of life. The energy driving the ecological cycles flows from the sun. Diversity ensures resilience. Life, from its beginning more than three million years ago, took over the planet by networking, by cooperation and the formation of [integrated] partnerships. We become ecologically literate once we understand the processes and patterns of organization that enable ecosystems to sustain life, we also understand the many ways in which our human civilization, especially since the industrial revolution, has ignored these ecological patterns and processes,

and has interfered with them. And we will realize that these interferences are the fundamental causes of many of our current world problems. Thinking systemically, we recognize that the major problems of our time are systemic problems, which means that they are all interconnected and interdependent; and to solve these problems, therefore, we need systemic solutions.

As a community we can turn around the interconnectedness of the world's problems to our advantage so that one action can solve several problems at the same time. We have the knowledge and the technology to build a sustainable future, what we need is a social value re-orientation and will-power with conscience (not political leadership).

NOTE: Humans are here because of what nature provides them. Humanity ought to seek an understanding of nature and to living within its regenerative bounds. Resources and their usage when handled improperly by a civilization can culminate in some large problems despite technological advancement.

11 Openness and sharing

"Flows of energy through open systems tend to drive them to states of higher organization. Open systems are any bounded systems that can exchange energy with their surroundings. We can call this the principle of driven self-organization. If the principle of sufficient reason is the paramount explanatory principle in nature, and the identity of the indiscernibles her prince, the principle of driven self-organization is the good angel who does the detailed work in myriads of stars and galaxies to ensure a diverse, complex universe."

- Lee Smolin, "Time Reborn"

Openness and sharing lead to new forms of organization and are valued for their characteristic ability to maintain environments that improve the quality of our coordination, the accuracy by which we arrive at decisions and solve problems, and the effectiveness of our designs in facilitating fulfillment. The concepts of openness and sharing play an essential role in a *functionally volitional* and *operatively participatory* environment. Herein, they facilitate the adoption of systems and approaches that focus on solutions and are in alignment with an open and shared focus, a common purpose [and pool of common heritage resources]. They are concepts that lead to the idea of 'inclusive-by-design', and the by-product of this form of design is organisational and social cohesion. Openness and sharing are enabling such that their existence leads to the potential existence of more complexly coherent systems of organization.

Systems must necessarily be open in order for the highest level of efficiency, freedom, and justice to exist. If a system is not open, then it is "secretive", and as discussed earlier in this specification, secrecy will generate a structure antagonistic to freedom, to efficiency, and to justice. Openness and sharing [through feedback] are a basic requirement for the conditional existence of efficiency. When they are applied in an organized manner they reduce duplication and increase cohesion. Further, openness is an instrumental condition necessary for maintaining justice. Openness requires justice to prevent self-serving agendas and secret bias, and it provides for equitable and effective fulfillment; justice requires openness to avoid outdated solutions or ideological blinders, to avoid the formation of hierarchy in place of shared access.

A system's openness is characterized by its **interoperability** and source [code] **transparency**. These characteristics are necessary of any system that seeks to maintain fulfillment-oriented value conditions, such as that of equality in access. The lack of these attributes will limit information exchange and make it difficult to measure the effectiveness and performance of all other conditions both within the system and in the systems interrelationship with an environment, which may be useful by an authority for social control, but is not useful for a community. The exclusion

of interoperability and transparency will always be perceived negatively by the users of a system as it represent a restraint on the usage of and access to a system (qualified by perception management, of course). Basically, their exclusion represent a reduction in the ability of the user to direct the future of the system that they use, which is likely to create a social power disparity. Their exclusion also represent a multi-issue danger to the users of such a system. To remove transparency and interoperability from users of a system would mean to replace the users full participation in the system with something else (possibly profit or surveillance or manipulation, or all three). At the social level, without the full application of interoperability and transparency, then competition (vs. interoperability) in conjunction with ownership/profit/deception (vs. transparency) will be rendered into the social and economic systems of a society, and there will no longer exist community. In concern to engineering, transparency reduces the potential for subjective projection (of bias) into a socio-technical design.

In communication, transparency is defined as the receiving of information that doesn't transverse a censor or is knowingly communicated falsely (e.g., lies and other deceptions). Transparency is also an organizational state - it occurs due to the way in which the system is set up and designed, or more accurately, cooperated with. Transparency dynamics require intentional design and cooperation by intelligent social beings. If the necessity for intentional design goes unrecognized and cooperation is not an embedded value, then transparency becomes difficult. And, when transparency becomes difficult in society, then social hierarchy is likely to form. With hierarchy comes competition. With competition comes deception. And, with deception comes behaviors that generate conflict and psychological dissonance.

The degree of openness of a system may be assessed by looking at its **accessibility** and **responsiveness**. If an individual, for example, can obtain information about a particular technology without any form of restriction (based upon permission, price, status, or association), then that information is more open (accessible & responsive) than if, for example, a subscription is required to obtain access or if the information were only available using a proprietary software program. Any proprietary technology gives the user near zero trust, through confidence in understanding its operation. As a result, the user is forced to put all of its trust in the private owner(s).

The notion of 'accessibility' comes with the question, "How accessible is a system to its users?" Alternatively, the notion of 'responsiveness' asks the question, "How responsive is the system to the needs of its users?" Also, accessibility and responsiveness involve the concepts of *distribution* and *redundancy* for purposes of *recovery* in the case of an unexpected failure of the system. Responsiveness [in part] asks the question, "How open and accessible is a system when it experiences a problem?"

The idea of participation [in society] is similarly related to openness. If an individual can make his or her own contribution to the progression of information, and can use his or her unique insights and experience to modify, re-purpose, and redistribute it, then that information is more responsive, and thus, more open, than if the information is "read only" or "plausibly deniable" (Read: scientifically unverifiable).

Openness is a principal condition for a system to remain in a state of dynamic equilibrium with its environment through the sensation of new information.

Openness has epistemic benefits; it makes it possible to construct conditions favourable to knowledge discovery, and thus, the arrival of truly informed solutions. A lack of openness and transparency means that scientific problem solving and information discovery is constrained to those who work in secret or who typically fail to collaborate with a larger community and leverage the entire accumulation of collected knowledge available. This is such an important statement that it bears stating another way: The result of a lack of openness is that problem solving activity is constrained and fails to adequately apply the power and resource of the system-community. Hence, without openness there is not a systematic solution-orientation. Openness and unrestricted information sharing are critical to scientific and social progress at the level of an information community. Deception and obfuscation at the social level, at the level of material resource, and within the individual also, is costly to our fulfillment, our well-being, and our very survival.

A community is [in part] characterized by the application of openness to information, to systems and services, and to the commons [of the real world]. Herein, there exist several forms of openness, including: freely available access to information; the community and its systems are transparent, interoperable, accessible, and responsive; and, material goods and services are openly accessible and shared. In a community, openness represents:

1. **The social domain:** freedom to use; freedom to contribute; freedom to share; transparency of needs; transparency of resources.
2. **The technical domain:** open functional specifications and standards (use of open standards and interoperation); open developmental specification standards (use of open source); open research, knowledge, and technological development.
3. **The ecological resource domain:** open access to goods and services from a common pool of ecological resources and collaborative commons services.

The P2P Foundation maintains a mindmap structure describing openness and its application to society. The visualization contains 8 aspects of processes

representing the cycle of reproduction and growth of openness in our societies (Bauwens, 2010):

1. **Aspects of openness** - the requirement and expectation of inclusivity or open access. For example, the requirement to participate or contribute for work to be completed; the demand on the part of people for transparency and shareability.
2. **Enablers of openness** - definitions and standards representational of openness. In the market-State, this includes licenses and standards that are open.
3. **Infrastructure of openness** - technologies that allow everyone to contribute and produce in an open manner. For example, open collaborative technical platforms, open communications software and knowledge repositories.
4. **Open practices** - behaviors and procedures that reflect openness. For instance, sharing and releasing information in an open manner.
5. **Open domains of practice** - behaviors and procedures that reflect openness which are embedded in domains of practice. For instance, domains of practice, such as scientific research, technology development, or education where openness is encouraged and promoted.
6. **Open products** - this is essentially item # 2 (infrastructure of openness), but is more specific in that it refers to specific hardware and software systems that are open, such as the Linux operating system and Apache servers, or the hardware systems produced by Open Source Ecology.
7. **Open consciousness** - this refers to the consciousness/mental state of individuals, such that they are mentally open and desire to share. It also refers to the knowledge of how sharing benefits everyone.
8. **Open movements (market-State only)** - social movements specifically dedicated to increasing 'openness' are also tackling openness as a social awareness concern. For example, P2P Foundation.

In an open system, anyone (conditionally) can use and contribute to the system, and all changes go to the mutual benefit of the everyone [due to the way in which the system is designed]. Mutuality (as mutual gain and benefit) recognises that a sustainable world can only be achieved through the sharing of a common pool of resources (or mutual participation in a common, living ecological system). And, an open system requires an open and collaborative approach to the nature of its design if it is to remain open.

When the idea of openness is applied to 'information technology', then it acquires the labelled, **open source**. The concept of 'open source' (or "free-shared") maintains at least three characteristics (all without the requirement

of exchange or currency cost): (1) the free and open access to material; (2) freedom to redistribute material; (3) freedom to reuse material. With closed and "secure" content (i.e., "protected content") the "author" of the content is the sole creator and owner of said content. With open content the "participative creator" is in a state of collaboration with those who have come before as well as the community of users of the content. The community of users and the "participative creator" are all creators and to an extent, accessors (or "owners"), of the content. An open system is a closer approximation to the existence of every living systems (in nature), and closed content goes a long way toward limiting the evolution of a community and causing unnecessary inefficiency (and suffering) in the world. Closed content does not account for the fact that the "participative creator" of the content would have been unable to create the content in the first place were it not for their prior learning, informed by the earlier work of many socially participative others.

An important thread that connects these various meanings [of openness] is the idea that by reducing barriers, and sharing what we learn and create, the systems that we are a part of will work more efficiently, fulfill our needs more effectively, and align more closely with our desired direction. Openness and sharing are essential elements for a culture of emergence where individuals design for adaptation and the fulfillment of common needs through a common pool of resources (i.e., a 'commons').

Fundamentally, systems either controls users (e.g., proprietary software) or users control systems (open software).

As individual human beings we must remain open to new knowledge, understandings, and interconnection for without openness our systems and our psychology might become stuck in an ever deepening rut. Herein, the very idea of 'openness' allows consciousness to see that it is in a rut.

When someone thinks of openness they might also think of their biology and the human body, of a particular structure. The human body is an "open system" and thrives because of its openness. It is structured "to be" open. The human body is constantly exchanging things through valuable interrelationships. Whether it is oxygen and CO₂, or nutrients and waste - the body cycles - resources in and waste excreted. Human biology requires openness to live.

In philosophy, openness is the degree to which someone is open to the realities of life, to the truth of that which happened and is happening. More specifically, openness is the degree to which a person:

1. Is willing to face reality as currently perceived.
2. Is willing to recognize that there may exist limitation in perception as well as an ability to derive more accurate evaluations of life.
3. Is willing to see reality as it is and reduce contradiction

4. Refrains from forming answers until the answer is clear.
5. Acts in accord with one's current understandings.
6. Is compassionate in all one does.

At the level of someone's personal experience, openness is the degree to which a person:

1. Has imaginative capabilities.
2. Has broad intellectual curiosity
3. Values and respects oneself and others.
4. Is open to re-examining closely held beliefs and values in the presence of new information.

Openness within and between individuals builds equality and trust in their relationships, and therein, it also maintains the qualities of honesty and integrity. Sharing deepens relationships, literally. In community, we are all privy to information about the operation of the community.

The more you know about someone or something, the more likely you are to be "in synchronization" with them, and hence, the more efficient and effective the entire relationship. Personal relationships in synchronization are likely to be experienced as supportive and based upon mutual trust. Relationships with nature based on [brain] synchronization are likely to enhance learning. It is important to note that when openness is applied at social-level organization, then it is qualified by respect for an individual's desire for privacy and quietude, for *personal restoration*, which is a human need.

Openness is a word that denotes opportunity and possibility. Openness and sharing are enablers of participation. When sharing occurs on an individual level, collaboration at a community level becomes possible. The application of the values of openness and sharing have the potential to create a socio-economic system with a common approach to decision-making at a community level rather than management of individuals by a centralized authority (possibly, through a security enforcement system). By making all knowledge, ideas, and research open and accessible to everyone, everyone has the opportunity to be engaged.

Humans have a natural desire for access to experiences and material in which they have an awareness and interest. By its very nature, sharing implies and enables access, and thus, the issue of sharing will never go away, for human curiosity will never go away. Hence, it is surprising how many people do not realize the damage done to society by restricting and penalizing those individuals who still maintain a natural desire for openness and sharing - all forms of sharing. There are no pirates of information and knowledge, there are only "criminal" inhibitors of sharing. The value of sharing is summed up quite nicely in the following statement of gratitude: "Everyone thanks everyone for sharing in the community." Humans have a primal instinct to share. If the instinct is blocked it will lead to repression and other

troubling states.

At the organizational level of a community the concept of openness involves four principal sub-concepts:

1. **Collaboration** - openness in the sense of the boundaries of organizations becoming more porous, fluid and open [interoperability].
2. **Transparency** - the communication of pertinent information to everyone in the community. The organization itself becomes "naked". If you are going to be naked it is important to have good value and parts. You must have values, emergence, and integrity as part of your structural makeup, your "DNA as an organization", because if you do not then, trust does not exist. Metaphorically speaking, sunlight is the best disinfectant ... and we need a lot of sunlight in this troubled world. Transparency is about the accurate and complete communication of information. Transparency becomes a means to optimal production (Read: productive/abundant fulfillment). Additionally, transparency allows for auditing at scale; and hence, greater trust at scale.
3. **Sharing** in access to our common heritage and to all information has the potential to "create a rising tide that could lift all boats".
4. **Empowerment** - that which empowers the participation of the greatest number of people. The distribution of knowledge and processing is a powerful form of organization for it leads to the potential for the sharing of improvements to all the systems used by the community. As knowledge becomes more distributed there is a concomitant distribution and decentralization of power that takes place, a disaggregation of power between groups of individuals and an aggregation of power within the indivisible individual. An open world brings forth the freedom to express one's power in a higher state of creation.

Humankind now has access to technologies that extend its functions "deeper" into the material environment. For example, the printing press gave future generations direct access to the knowledge of prior generations. The Internet gives us direct and instantaneous access to the intelligence contained in the cranium of other human beings on a global basis; we are an age of networked intelligence.

Bees come in swarms and fish come in schools. Starlings come in murmurations. Predators are chased away by the collective power of the starlings as they fly in what are known as 'murmurations'. In the murmuration there is "leadership" (as in, stepping out to go first), but there is no one "leader" (as in, authority). The murmuration functions according to the four sub-conceptions of

openness previously discussed, which are generators of a courageous individual. The individual birds [somehow] understand that their interests are in the interests of the "collective" group, the 'murmuration'. Essentially, to be open is to remain open to answers that support us in the evolution of our fulfillment, or in protection from a predator [through the courage of individuals].

Where there exist [market] entities (e.g., businesses) that are afraid to share information about their services, often stating, "we don't want to share too many of our secrets", then where is the fulfillment? The secretive withholding of information about (and around) the services that someone uses is inoperative for creating a fulfilling environment. There is neither fulfillment nor trust when there are secretive entities that contract with one another [because they do not trust one another] and are afraid to share information about their past, current, and future products. Basically, competition in the market place reinforces mistrust.

INSIGHT: When things are hidden, they can't be healed.

12 Cooperation & collaboration

MAXIM: *Common sense brings common actions. When useful information and tools are available to all self-directed individuals, then conclusions will coalesce, a common direction emerges.*

Cooperation literally means “working together” (from the Latin “co”, together; and “operate”, to work). It is a value [construction] process of two or more people engaging in an activity for shared purpose or gain [by mutual benefit], supported by *communication* and *coordination*. In other words, cooperation is the act of working together for common gain to achieve more than possible individually. The words cooperation and collaboration maintain a similar conceptual meaning. Collaboration and cooperation are sometimes used as synonymous terms; though herein, when two or more people are working together to cooperatively create something, then the word collaboration (co-labor) is a more ideal fit. Effective collaboration begins with a common vision and a conducive value system, and it ends (or begins again) with a distributed network of participation. In this model, collaboration involves mutual commitment [as a member of a system’s team]. Essentially, collaboration belongs to teams (or groups), while cooperation is a general value orientation typical of individuals in a system or network. The distinction herein is that cooperation is more of an orientational value state-dynamic, whereas collaboration identifies a distinction in the work (or labor) of individuals who are working together.

Cooperation is an essential humanizing experience that predisposes participants to a benevolent view of others, while creating environments of encouragement and support, promoting more fulfilling learning experiences, and enabling the coordination of activities toward a desired objective. Cooperation opens a whole new world of adaptive opportunity. This has clearly been the case when molecular processes teamed up to form cells, when cells teamed up to form multicellular organisms, and when humans teamed up to form organized functions in their societal systems.

Life, from its beginning on this planet more than three billion years ago, took over the planet by networking, by cooperation and the formation of [integrated] partnerships. Cooperation is widespread throughout nature as a common survival strategy expressed at many levels of life from bacteria to complex living organisms. It is present in the social structures insects and it is universal in mammals. The Earth itself could even be perceived as a cooperating and living system made up of interrelating elements that form a unified living and whole system. The evolution of life occurred in a biologically cooperative way at the cellular level when life was just forming on Earth. When the lower biological units began to cooperate they started to form increasingly complex structures, lifeforms.

Life cooperates, and cooperation among organisms

of the same species [and between species] offers a clearly observed survival advantage. The evolutionary advantages of cooperation are significant. Wherever evolution is able to exploit these advantages by organising cooperation, it will do so. Any organisms, whether of the same species or not, can benefit from the evolution of relevant cooperative relationships. Whatever the evolutionary challenges faced by organisms, they can be met more effectively through cooperation [in the integral and synergistic fulfillment of needs]. At a fundamental level, if it is true that we are social beings with social needs, then cooperation is necessary for social fulfillment.

The advantages of cooperation continue to apply no matter how large the cooperative organisation becomes. In other words, progress in cooperation structurally reinforces social benefits [in the fulfillment of needs] the larger the network becomes. The advantages do not cease once a cooperative organisation reaches a particular size. Increases in cooperation deliver further evolutionary advantages as growth occurs. Increases in the scale of cooperative organisation did not stop providing advantages once cooperation reached the scale of a single cell, or the scale of multicellular organisms, or of human villages. In all these cases, the potential benefits of cooperation between organisations of the largest scale continued to drive the expansion of [potential] benefit.

A group survives according to its members’ abilities and desire to cooperate for common ends aligned with natural processes. Systems exist because of internal cooperation. And, what better example of a cooperative system is there than the organization of the socio-economic environment around fulfilling the desire of individuals to do that which is most meaningful and appreciatively desired.

Almost everything someone uses and depends on in their everyday life is produced and brought to them by the coordinated actions of many other people. Almost everything made by humans is produced cooperatively (by degree and context). Herein, cooperation involves a necessity for teamwork, and teamwork involves technical cooperation (as collaboration), which is required to maintain the functioning of a community.

In Community, information is held in the commons and we collaborate freely.

Those who maintain a cooperative mindset may know that “win – win” is a better way to live, but persuading, campaigning, cheerleading, and manipulating other people to be more cooperative and collaborative is not a systematic solution to a general structure that maintains a state of opposition to cooperation. Instead, the needs of others must be sought/brought fulfillment (survival, safety, self-esteem, a sense of belonging, etc.), or they will not feel the value of *wholeness*, *togetherness*, and *interconnection* that leads to true cooperation-integration and not separation. The forced fun and manufactured moral of corporate “team building” events can wear thin on many people. Corporate team building is often used

to keep workers on-task and committed to their work. And, these events are no solution to systemic, structural opposition to social cooperation.

For the purpose of semantic clarification it is important to note that the words cooperation and collaboration both have negative nuances in common parlance. For example, when a competing camp "collaborates", then there may exist "collaboration", but there is not trust. And, when the apprehended man "cooperates" with the police in double-crossing his partners for a shorter sentence, then he might be said to have "cooperated" [under duress]. There is also the common phrase in war and in competition that, "he was hanged for collaborating with the enemy". In their negative, "collaboration" (without trust) and "cooperation" (under duress) are used to mean working with an "enemy force" or "competing party". These negative nuances are not conceptual components of the value conditions of cooperation and collaboration discussed herein.

As a community, we cooperate to more greatly understand ourselves. We don't lose our individuality; we still have our individuality, we are just part of something bigger. Cooperation does not have to mean the loss of our individual freedom by being part of something bigger. Instead, we gain freedom, we have more options; our decision space grows, not shrinks, as we become an individual [part] of something bigger, a larger community of individuals. When "we" cooperate together it doesn't mean that "you" or "I" become a slave to a larger organism; instead, it means that together we get a larger decision space. We have more choices, not fewer.

INSIGHT: *In society, cooperation between individuals leads to the creation of technologies that further facilitate that cooperation.*

12.1 Competition

INSIGHT: *When we realize that we share one earth we may come to understand that competition is obsolete.*

Competition sets individuals in opposition to one another. As a value state, cooperation exists in contrast to competition. Competition is the struggle between and within species for survival, and it too is widespread throughout nature. However, complex biological entities are in fact wired for connection and cooperation; although, their competitive drives can be triggered and reinforced under a structure that necessitates (and incentivizes) gaming behaviors.

Cooperation connects deeply into the "social" body of humans, wherein the more connected we feel to others the healthier our expression and the happier our experience. Society, in general, is full of the evidence of this need for connection: from books to the social media phenomenon, from public events to group activities, and from knowledge advancement to technological infrastructure. There is a general social nature to

everything that humankind does. Cooperation is a fundamental necessity for maintaining stable human arrangements, while a spectrum of counterproductive and destructive actions, behaviours, and "attitudes" arise out of competitive environments. Some societal systems incentivize deceptive behavior, which creates instability in the system.

For any given task, there are basically 3 ways to perform it: (1) with other people; (2) apart from other people; or (3) against other people. If the task is done with other people, in the purest sense, then cooperation exists. The purest form of cooperation says that "I can succeed only if you succeed too, our fates are linked and we sink or swim together". In a sense, that is descriptively accurate of our entire world, but it is not always true of individual tasks. The second possibility is a type of individualistic model where someone performs a task totally removed from others doing it, so any given persons success at the task is unrelated; one person's success and another have no connection to one another. There are learning-oriented and creative-oriented tasks where the individualistic model is more useful. And, the third possibility is that the fates of individuals are negatively linked so that one person can succeed only if another fails, and vice versa (i.e., competition [in fulfillment]). Many of the tasks performed in modern culture, at home, at work, in the market, at school, at play, and in modern life in general are set up not necessarily, but artificially, in such a way that most can succeed only at the price of other peoples failure.

Resources cannot possibly be utilized in the most efficient and effective manner when there competition over their acquisition and usage.

Fundamentally, even though cooperating with other participative users in a society doesn't guarantee things are going to be great, being under the power of societal competition pretty much guarantees that things are going to be bad (for most/many people).

NOTE: *What was the first game you ever learned? Was it "musical chairs" where "n" children were scrambling for "n-1" chairs. In the game of musical chairs children walk around a set of chairs to the sound of music and when the music stops everyone rushes to sit in a chair; but, because there are always 1 fewer chairs than children, one of the children is "out". The music is then put back on and another chair is removed, and when the music stops again another child is "out". This process is sickeningly repeated until at the end you have one chair with one child on it, triumphant, smug, the "winner". And everyone else excluded from play, unhappy, "losers". That is how you learn to have fun in modern culture. And, it is a prototype of artificial scarcity that people in early 21st century society have been conditioned into accepting. The standard form of the game of "musical chairs" exists in contrast to the game of cooperative musical chairs, where you take chairs away and the challenge is to fit everybody on minus 1 chairs each round so that*

children have to figure out and work together how to fit everyone on one fewer chair; and there is no such thing as "out" or "loser".

12.2 The three central arguments

INSIGHT: Cooperation lowers entropy in a [social] decision space, whereas competition increases it.

In general, there are three central arguments against competition and they revolve around:

1. **Psychological health** (self-relationship);
2. **Relationship health** (social-relationship); and
3. **Performance motivation** (system result) as motivation to do one's best.

NOTE: Community engineers "win-win" solutions.

12.2.1 Psychological health

INSIGHT: Scientifically speaking, there are "competing" centers in the brain and you can be materialistically oriented or relationship oriented, but you can't really be both at the same time.

First, competition has a clearly damaging effect on the psychological health and self-esteem of individuals. Competition is to these components of the individual as sugar is to teeth -- it rots psychological health and self-esteem. The meaningful distinction herein is not between those who "win" and those who "lose". In terms of psychological health, the meaningful distinction is between those who have to compete and those who are blessedly free from having to compete.

To the individual, competition teaches that "I am only as good as my last victory, that my sense of competence, and thus, my confidence is contingent on my having defeated other people" -- esteem becomes artificially circumstantial. When someone "loses" it feels lousy, and that lousiness can turn in to a form of self-corrosion. But, even when someone "wins", it is a shot of adrenaline and other hormones that do not last long, and one falls back to baseline (or below), and then one needs more and more victories to try and recover that initial euphoria, which is not unlike developing a tolerance to a drug. Competition, regardless of the results in any given encounter, encourages us to doubt ourselves and to believe that we are never ultimately successful or fulfilled, and must always try to beat other people, which over time creates a reinforced perception that competition is "necessary". And for some people it does in fact become a necessary "pick-me-up". To try and feel better about ourselves by "winning a prize" is like trying to slake a thirst by drinking salt water: it is not just unhelpful, it makes the problem worse. So, the more you compete the more you need to compete in order

to feel satisfied, and the more likely you are to feel that competition is of the utmost necessity.

Therein, socialization into a competitive society at an early age appears to produce people who don't really care about anything until it turns into a competition; for they only recognize as meaningful that which occurs under the state of competition.

Researchers have found that competitive structures reduce generosity, empathy, sensitivity to others' needs, accuracy of communication, creativity, and trust. Also, competition makes self-esteem precarious and conditional: one's value is likely to become contingent on how many people one has beaten. Competition is a damaging force that is divisive of effort and leads to an extremely unhealthy mental attitude in people. Research finds that children who have been conditioned to compete against others are less trusting. Why would you trust others if you keep finding yourself in activities where others' success comes at the price of your failure? Conversely, cooperation is known to encourage trust, sensitivity, open communication and coordination, and ultimately, helpfulness.

What does it mean to apply the general concept of competition to a system? If competition, as a value orientation, is being applied to a system, then it is being applied to the structure of the system. What does it mean to apply competition to the structure of a society? Herein, the problem is [in part] with a structure that sets people against each other. When is such a structure ever likely to be beneficial psychologically or interpersonally?

When people say they "are really competitive" they are in fact admitting to others that they have a psychological myth roaming around their psyches. Notice how such people do not claim that they desire excellence for themselves or that they are deeply motivated; instead, they are actually saying, "I am not satisfied until I have defeated other people". That is a sign that there is something terribly wrong with them, psychologically. Modern culture valorizes competition instead of identifying it as a flaw in the social structure. Therein, the cloaked message is repeated over and over again that the only way to do anything is to try and make other people fail. The lesson taught ad infinitum is that it is necessary to "win" and not "fail"; that other people are not to be worked with, but to be worked against. If competition were "just a part of human nature", would it be necessary to have such continuous conditioning, and a socialization structure to mould people in this way (i.e., into slaves to competition)? Or, are cults, businesses, and governments trying to do so without even making it plain that it is one of their structural goals (and value encodings).

CLARIFICATION: To 'conspire' is to plan in secret when under the condition of competition. In early 21st century society, everyone conspires. In community conspiracy is irrelevant and unnecessary.

12.2.2 Relationship health

INSIGHT: *The human body does not compete with itself. The brain does not compete with the lungs. The lungs do not compete with the liver. Instead, they use their 'variety' (a cybernetics term denoting the total number of distinct states of a system) of different system states to find an dynamic equilibrium for the benefit of the whole system.*

The second effect is that of competition on other people and on relationships where competition teaches one enduring fundamental message: "Other people are potential obstacles to my own success". They are not potential friends and allies and helpers; they are potential rivals whom "you" must best. A competition-based value orientation states, "I succeed if you fail" -- it is fundamentally a win-lose structure. And, there is a stronger version of it, "I succeed only if I make you fail." This is overtly visible in professional organizations (e.g., professional sports, industry, and market employment) where competition facilitates "in-group" teamwork and "out-group" aggression, which is useful for in-group profit. Within such an environment, not only is it irrational to help someone whose success might require your failure, but competition creates a climate in which such help is unlikely to occur in any case.

For instance, organized professional sports are similar to nationalistic soldiering on an authoritarian team with a leader who coerces and manipulates through appeals to emotion and appeals to authority in return for spectacle and reward. It is a militant environment where the coach is the authority and players on different teams attack each other.

The greater the competition the more society sees the predictable effects of competition on human relationships: the aggression; the "cheating" and "crime"; the self-destructive behavior (especially in sports); the envy of winners; the contempt for losers; the reserve and distance an individual finds himself or herself in while holding others at arm's length; the isolation and loneliness; and the fear that is generated in the experience of separation. These consequential[ly structural] effects occur over and over again, and whenever they flare up into truly ugly behavior society blames the individuals who were forced to compete, for not knowing how to compete "properly", for not having been taught [or engaging in] "sportsmanship".

Structural social competition does not, in fact, "bring out the best in us" and "push us farther and faster" than we are ever able to motivate ourselves. Instead, it induces psycho-social stress, and a regenerated probability of fear, greed, and social aggravation. In competition we are threats to each other -- we see each other as a threat to an achievement that only one of use can achieve.

Competition generates artificial distinctions and separations among a society. And, it makes it difficult to determine whether the advice (or feedback) we receive is for our benefit, or does it primarily serve someone

else's interests. Competition cloaks agenda and conceals malicious intent.

A community does not need the concept of "sportsmanship" when individuals are playing cooperative games. This isn't to say that sportsmanship is not necessary; instead, it is to say that the concept has no meaning. It is the equivalent of the non-existence of the concept of "theft" in a society where there is no personal property and where everything is shared and accessible. When humans have access to the necessities of life, then they do not steal. If you don't understand that, imagine a community living near a waterfall with lots of fresh water. No one comes at night and "steals" water. Therein, the concept of "theft" has no meaning, or is re-defined with a distinct context, such as the appropriation of land into property as 'theft'. Similarly, in a community, the concept of "sportsmanship" has no meaning. The concept has no meaning for there is no norm telling you what you are otherwise supposed to do. It is like cities where there are no "jaywalking" rules; the idea of jaywalking has no meaning because there is no rule that says you are only supposed to cross at intersections. Most concepts are contingent on some other thing people have accepted, whether they realize they have accepted it or not. For example, the concept of "blasphemy" has no meaning if you don't believe in a "divine authority". The concept of "leisure" has no meaning unless work is alienating. Maybe even the concept of "attitude" has no meaning when individuals are intrinsically fulfilled and not extrinsically coerced. Is "sportsmanship" an "attitude"? Is fulfillment a[n attitudinal] direction? And so with cooperation, the idea of "sportsmanship" is not merely unnecessary, but without meaning. In community, what is the real point of cooperating as a "team" if just for the purpose of defeating another group of people who are cooperating as a "team"? And for the most part, this is as close as most people get to real world cooperation in early 21st century society.

A good shot in tennis by definition is a shot that the other person can't get to in time and return properly. So a player's goal at each instant of play is to make the other player fail ... as in war. Some people then erroneously suggest, "well, play tennis where you aren't trying to make the other person fail, but you are trying to play your very best". Such a statement is nonsensical, for such a game would not be tennis, it would be another game, perhaps with two rackets, a ball and a net, but not tennis. If the rules of the game, literally or conceptually, demand that individuals work at cross purposes, then the changing of "attitudes" about the activity is not sufficient. The structure of the activity must itself be changed. Some structures inherently set individuals against one another (e.g., the business/economic market), not because the individuals are neurotic or malicious or sadistic, necessarily, but because the rules of the game (i.e., the structure) demand that they view everyone else as obstacles to their own success, which will inherently generate secondary psychopathy (Read: sociopathy) in most individuals given sufficient time. Competition

fractures trust and support in an interrelationship. If the resolution of a game dictates awards, rewards, trophies, prizes, medals, certificates, or some other form of recognition that has been decided in advance that not everyone can get, then the message is clear, everybody else around is there to be beaten. Therein, each individual's job is to beat everybody else. Full stop.

Research into the effects of competition finds that when people are led to compete they are less able to perceive how the world looks from someone else's point of view, which psychologists call "perspective taking". Therein, they are less likely to have sympathy, empathy, compassion, and visceral resonance with others. They are less likely to help people in need. They are less likely to recognize evidence in a situation of disagreement (i.e., they are less likely to inquire openly and actively). And, they are less likely to communicate objectively and accurately. This is not because of personality differences; this is because of structurally conditioned differences. One study mentioned in Alfie Kohn's book, *The Case Against Competition*, found that you could tell how ungenerous a child was in his or her relationships just by how competitive the child's father was. Just living with someone who is competitive is enough to make children selfishly self-interested - desiring rewards at others expense.

A wide variety of studies confirm the logical argument that competition sabotages relationships and undermines self-confidence, while impeding fulfillment and long-term interests [particularly in learning]. These and many other destructive outcomes (e.g., envy for winners, contempt for losers, aggression, hostility, and suspicion) damage the stability of a community and contradict multiple other conditions valued by this social design. And, a diminishing "attitude" toward cooperation clearly emerges as the degree of competition increases. In many ways, there exists a choice of mindset: are we going to remain in a state of fear, fight and compete, or are we going to help ourselves by helping one another?

Alfie Kohn, a sociologist and author of multiple works on human nature and behavior, presents some salient arguments in his well-researched book "*No Contest, the Case Against Competition*" (1992; Kohn, 2011). Therein, Kohn analyzes hundreds of studies conducted over a sixty year duration that compared cooperation with competition. His findings concluded that both, in business and in education, cooperation consistently outproduced competition. He writes how "[in competitive societies] we are encouraged to pit ourselves against one another and taught that competition is a prod to productivity, a builder of character, and an unavoidable part of human nature." (Kohn, 1986) Kohn goes on to show that, "Any win/lose structure is psychologically destructive and poisonous to our relationships, while a little [competition] is not as bad as a lot, evidence and logic suggest that none would be better still." (Kohn, 1993)

Much of the discussion on competition is based on the belief that there is nothing a community can do

about it anyway because competition is just "human nature". However, there is no evidence to support this belief, and there is considerable evidence to challenge it from scientific research into [at least] evolutionary biology, cross-cultural anthropology, and the learning / performance sciences. The research can all be summarized in a single sentence by Alfie Kohn, "We compete because we are raised that way, not because we are born that way. It becomes very convenient for some to then go on to say that they have no responsibility for changing their [and our] practices because competition is innate. This is not so. The belief that we have no choice about being competitive is [untrue at the least and potentially deceitful at the worst]." Many people confuse how the world really works with how they have been brought up to perceive the world to work. Competition is not a necessary part of human life, just like standardized tests and grades are not a necessary part of learning, and business is not necessary for the economic fulfillment of human needs.

There are many other works that examine the effect of competition versus cooperation on the individual, on society, and also, among other species. Lynne McTaggart's book, *The Bond: How to Fix Your Falling-Down World* is one of them. The findings she outlines in the book are consistent – the optimal amount of competition is "zero", and species that cooperate are more likely to survive. McTaggart's research found that even "friendly competition" between sports teams and within companies had downsides. Competition generates anxiety, it promotes the production of stress hormones, and most importantly of all, reduces the probability that cooperation will occur later on. McTaggart states, "we are in a constant relationship with everything and everyone ... we must share and recover wholeness in our lives if we are to survive and flourish".

MAXIM: *Competition begets competition, cooperation begets cooperation.*

12.2.3 Performance motivation

APHORISM: *In competition, the depression of another is the price of another's exhilaration. One's misery the occasion for another's rejoicing.*

The third effect is that of competition on performance motivation. The claim that competition motivates people to do their best is unfounded. The middle of the road approach says:

"Maybe competition isn't so good for how we feel about ourselves, but when we are trying to win we are much more likely to achieve great things. If we weren't competing we would all just stagnate in a pool of mediocrity."

Some people say that all societies need a middle of the road position when it comes to competition: a position of "balance" - not too much competition, but not none

at all. Unfortunately for those who promote "balance" in competition, the research finds that competition not only isn't necessary for excellence, typically its absence is necessary for excellence. At best, competition provides no advantage. The research clearly shows that not everything that is bad when done to excess is "ok" in moderation. Some things are bad because of what they are (their structure), not just because of how they are being done or overdone as the case may be. Some orientational structures are inherently and fundamentally unfulfilling, regardless of whether they are done to a minimum, done to "moderation", or done to excess. Competition is one of these fulfillment-destructuring forms of social organization.

Studies find that the more focused an individual is on getting a prize the less likely they are to take "risks" and challenge themselves, to play with possibilities and potentials, because they don't want to do anything to jeopardize their status of getting the award. An 'award' is a 'reward' that everybody can't get, so it adds the arsenic of competition to the strychnine of rewards (or rewarding extrinsic motivators). Setting people against each other to try and identify the "best" undermines the quality and creativity of human performance.

There are perceptions of self-interest that shut out rational and sustainable self-interest. For instance, the perception that competition is in one's own self-interest is antagonistic to cooperative coordination (or collaboration) at a social scale. For many tasks in the real world, what conduces to excellence is collaboration, and not competition. Together, all of us are smarter than any of us. The synergy of all individuals applying ourselves is greater than any one individual applying himself or herself. A well-functioning group is often, though not always, able to produce better results than the most expert member of the group could do on his or her own. The most effective means of producing or creating is ruled out in a competitive environment because sharing negates the success[ful winning] of the person who has solved a problem. And, this is why [in part] the market-based economic system is not an efficient economic system for it inhibits sharing behavior and generates unsustainable perceptions of self-interest.

Competitive market entities rationally "stifle" their competition to protect their market share. Markets can be controlled. Some market entities are always likely to take advantage of human whims and instincts [for their own commercial benefit]. Those market entities with the organized capability of controlling human whims through knowledge, deception, property, or force are likely to take [competitive] advantage of such opportunities. Competition's very structure maintains destructive consequences. Competition decomposes community. And, competition for survival [in any manner] is a recipe for disaster.

Just as competition isn't good for our mental health, and just as it isn't good for our relationships, it isn't even good for our individual performances. One obvious result of competition is anxiety. "You" are naturally

under a degree of stress and anxiety when you are told that you have to compete, or to be the best, and stress and anxiety tend to get in the way of thinking well and performing well. Yes, challenge is necessary for learning and for growth, but it is not accurate to say that without competition there will not exist challenge. It could even be said that competition is a destructive form of challenge.

When competition engages self-preservation, then competitors are unlikely to back down, to consider and re-orient, for they have engaged their basic biological reflex responses, their egoic attachment to identity, their financial survival, their trauma and their drama. Competitors become "invested" in something which is actually impermanent (i.e., they become "investors"). Therein, adaptation (as a measure of performance) becomes inhibited and growth potential becomes stifled. Basically, adaptation isn't supported by the structure of a competitive socio-economic system [in part] because it cuts off the sharing of feedback [as well as trust in the "feedback" itself].

Also, non-cooperative approaches almost always involve the duplication of effort (i.e., inefficiency), since someone working independently must spend time and energy on problems that may have [unbeknownst to them] already have been encountered and resolved by someone else. This leads to the creation and eventual expansion of a bureaucracy (i.e., the duplication of unnecessary efforts at a social scale). In the area of scientific investigation, scientists sit on important discoveries, sometimes for years, prior to publishing them because they do not want their competitors to acquire the same new knowledge. The potential for an overall effective performance becomes reduced through competition.

Noam Chomsky observed,

"The smart way to keep people passive and obedient is to strictly limit the spectrum of acceptable opinion, but allow very lively debate within that spectrum, even encourage the more critical and dissident views, that gives people the sense that there is free thinking going on, while all the time the presuppositions of the system are being reinforced by the limits put on the range of debate."

What do people in early 21st century society call learning from one another in school? There is a common word for this, and it is called "cheating". It is even more interesting that when the word "cooperate" is used in most schools, it is used to mean obedience; it is used as a euphemism for mindless obedience, not real cooperation.

APHORISM: *Deceptions is considered a good strategy in war.*

12.3 The acceptable positions

INSIGHT: *The ultimate potential of cooperation is the restoration of [common]unity. Community is our most informed model of cooperation.*

There are two acceptable positions in most of modern societies about competition:

1. **Unqualified endorsement** - competition is what made this land great; competition is what motivates people to do their best; competition builds character and we need to start them when they are small; it is a dog-eat-dog world out there and so we might as well make it a dog-eat-dog world with little children too; and if you don't like competition there is something wrong with you (you are either scared of it or you can't handle it).
2. **Qualified endorsement** - maybe we have gotten carried away with too much competition; we do it too intensely; we do it with children who are too young; but if we don't get carried away, if we keep things in perspective, if we do it appropriately, then some competition is useful, productive, and so on.

Those are the only two respectable positions in most early 21st century society concerning the topic of competition. But, there is no evidence to support the idea that competition is ever the optimal arrangement for children and adults at work, at home, in learning, in play, or in any socio-economic context in general. Why would society every set a social arrangement up so that one individual or group can succeed only if others fail. When does that ever produce optimal results compared to pursuing tasks independently (and then sharing) or cooperatively. The idea of social cooperation is generally a heretical position in modern cult[ure]. Regardless of what most people happen to think, the research is clear, the optimal amount of competition in any socio-economic environment, especially those involving children, is none.

A socio-economic system based primarily on competition might evolve into a free-market where all things are capable of being commodified in a state of competition with other commodifiers. In a market-based paradigm, cooperation is not an acceptably reinforced position. A monetary economic system forces the masses to compete with each other for limited resources (some of which are truly limited and others artificially engineered into limitation). Alternatively, a socio-economic system based primarily on cooperation might evolve into a distributed resource-access system, where cooperation and a sense of unity are ever present in the fulfillment of needs. Competition based systems can move toward unification also. When they do, they create a centralized system of power that constantly seeks profit at the expense of others for the further consolidation of power through the removal of

competition via gaming strategy. As long as a population maintains a competitive orientational state, then at scale, a socio-economic system shaped around global economic control will emerge naturally.

THE ARGUMENT OF THE MISINFORMED:

"Competition for market share spurs innovative technologies that lower the cost of producing increasingly amazing technological services to the entire public." ... one might well question this statement.

12.4 Competition consolidates power destructively

NOTE: *With transparency, humans governing other humans becomes difficult. Information [as data] becomes relatively worthless when the source is obfuscated, and hence, the data cannot be confirmed or validated. All adaptive networks validate information packets. If society is an adaptive network, then it is valid to maintain transparency.*

Competition fosters self-interest above all else. In a competitive social power structure it makes logical sense that some groups will eventually rise to extreme wealth and power thereby becoming de-facto "rulers of the world". After all, individuals need to spend money to make money, which means that those with the most money will always have a much easier time making more of it than those with no money. It is hard to "pull yourself up by your own bootstraps" when one can't afford the metaphorical boots or the straps. Therefore, competition generates a kind of economic dictatorship as a mathematical inevitability that humankind has been approaching for centuries and culminates in the formation of a "revolving door" State. Therein market entities compete to position themselves inside the State for their own benefit, of which, regulations and other State resources may be used to reduce the competitive landscape for their own competitive advantage. In early 21st century society, the laws are often written by the corporations, and the lawmakers are playing their role, pretending to regulate while following through with the act. While a group with great economic power is not by definition a "government" in the traditional sense, it nonetheless has the same effect as one - the ability to exercise great power over the lives of a large number of people and subjectively handle (or direct) a large number of resources. With great economic power comes great social power.

In a community-type society, there are no "competing providers" who can restrict the flow of information and the equal sharing of resources; everyone is a potential provider and everyone is a user (i.e., everyone is a "prosumers", a producer as well as a consuming users). In a community-type society, the societal systems are transparently designed by the community of using producers (a true open source society, or open society).

Competition creates the incentive to think of "loyalty" in terms of [personal or in-group] exclusivity and not [global] inclusivity. Such a fragmented way of thinking is unlikely to convey a means of solving systematically generated and structurally reinforced problems.

Money is power [over others]. This is especially true in a capitalist system with a privatized means of production, hierarchical employment, and wage labor. When an employer tells his employees what to do, that is an example of an exercise of power. Generally, the power over specific individuals is a function of wealth discrepancy, information asymmetry, and the victim's desperation.

Politics and markets priority encode the value of competition over cooperation into the social and economic structures of a population. In modern market society most people are excluded from participation in decisions that involve a wide variety of important aspects of their lives. Notably, businesses and governments dictate the terms of participation in society. Individuals inculcated into a competitive-based society rarely learn how to learn, they rarely learn how to maintain a state of fulfillment, they rarely learn the differences between needs and wants, and they regularly become dis-connected from their true intrinsic selves; instead, they are conditioned to accept the belief that competition for infinite want and hierarchical social influence is the goal of life [and that "wealth" comes in the form of material acquisition and power positioning]. When competitiveness prevails, then hierarchies and subjugation flourish [at the expense of all humanity].

When competition becomes structured into a society it tends to form a hierarchical and authoritarian culture based upon domination and control. Economic systems oriented toward competition, and hence, domination (and social control), are significantly distinguishable from relationships based on mutual benefit and accountability. These two orientational directions (or conflicting values) could possibly be represented as continuum.

Is your environment hostile at the social and macro levels? The pressure and stress that come with having to prove your worth daily in a competitive environment generates social hostility, and it is a form of "structural violence". A market-based economic system is structurally violent [in part] because of its inherently competitive nature. In some societies, social class inequality is structured to the extent that some individuals have less of a right to life (as need fulfillment) than others. This unfair and unnecessary structural violence is a major source of "crime" and stress and behavioral conflict in early 21st century society.

As a species, many humans in the 21st century are literally unable to afford their own progress. It is not rational to compete; it is only reasonable to unite in fulfillment. Cooperation presents the potential to create a successful and coordinated survival strategy, and humanity owes its evolution to its pro-social abilities

to work together as a population (i.e., as a community). The necessity to compete leads to the necessity (or incentivized impulse) to gain competitive advantage over others out of fear of scarcity, or real scarcity, in one's own achievement and satisfaction. Trading and gaining without relevance to human needs, ecological sustainability, and truthful social progress is not human progress.

Yes, there is competition in nature, but to organize a group of individuals around the value of competition has serious consequences for the stability and ultimate fulfillment of those individuals. Mutual aid and cooperation within and among species actually does tend to be the rule rather than the exception. And, even when there isn't active cooperation there tends to be an avoidance of active competition. Dominance hierarchies and pecking orders do exist within many species such that an individual in the species has a sense of what his or her place is. These static orders reduce the need to compete with other members of the same species. Migration is [in part] about avoiding competition - if there isn't enough food for all of us here, some of us will go over there so we don't have to compete. The idea that nature is "red in tooth and claw" is an outdated view. And, the expression of a dominance hierarchy and pecking order appears within species with a specific need and decision space; a space much reduced in its awareness than that which humankind is presently capable of working with.

The phrase "survival of the fittest" was never uttered by Darwin, it was uttered by Herbert Spencer, an ultra-right-wing social theorist who corrupted Darwin's thinking to justify withholding "aid" from the neediest people. Instead, Darwin actually said that natural selection means that whoever is best able to adapt to a changing environment is more likely to be around to reproduce. He didn't specify the method of adaptation, which is now known to involve cooperation more than competition.

What do people mean when they speak of "competing and winning" in the market? Who are they competing against and what are they winning? What does it mean to "win" in a socio-economic environment? Therein, who (or what) is being defeated? What are the winners going to do with those defeated adversaries once their victory is complete? What might be the associated behaviors that come with competition at a social level? What is gaming behavior and competitive advantage? What are the potential consequences to a population that accepts competition as the socio-economic basis for society? Fundamentally, all individuals are part of one ecological system of interacting influence.

A social system based upon the concept of competition will inherently generate the experience of scarcity, war, crime & corruption, inefficiencies, environmental harm, and a hostile social environment. And, past a point it will serve as a great hindrance to continued human progress and survival. Competition is inefficient and destructive - it is a force that increases entropy in a system.

The everyone-for-themselves paradigm, which maintains winners and losers, and arises out of a competitive environment, is adverse to a systems approach that recognizes interrelation, and thus, the necessity for cooperation of all elements that make up a system. If one element of a system begins to compete or attempts to dominate another element the system itself becomes unstable and begins to break down. In principle, all components of a system must work together to maintain the whole system. The human form is an organisation of about a million billion cells. These cells are specialised into many different types that team up to form systems. In the human system, the functions of the cells are produced by the cooperative activities of many specialised and differentiated components. Essentially, a community-type society is a large cooperation structure that is made up of individual cooperators.

After reading up to this point some people might state, "well, that all sounds nice in theory, but in the real world, its utopian, idealistic, and unrealistic". These challenges are once again addressed below:

1. Individuals, particularly children, get more than enough experience with competition without artificially adding more. Video games, television, and playful sports are just a few examples. It is the truly cooperative activities that are in scarce supply.
2. In a competitive society it is very helpful to have people reflect on that aspect of society. It is important to present information about competition just as one would present information about substance abuse or reckless driving, so that individuals are capable of recognizing it and thinking deeply about its premises. But, when people in early 21st century society say "society needs to teach children about competition", what they are really suggesting is that society needs to immerse children in competitive activities, which is a very different thing. Said form of immersion is more akin to socializing them to uncritically accept competition as inevitable or desirable. That is very different than helping them to think about the idea of competition, what they are doing when they are competing, and the life ramifications of a competitive social and economic environment.
3. The acclaimed benefits of failure in competition are overrated. People who suggest that competing and losing is "good for you" because it leads you to pick yourself up and try harder next time are individuals who don't spend that much time observing the results of competing and failing, and they seem not to have great memories about their own childhood. The research finds that failure, typically when experienced by youth, teaches youth that they don't have the competence to succeed, and by internalized consequence, they become less

likely to succeed next time. Being unsuccessful, which most people are in competitive encounters, is rarely useful in helping people to become more successful at the activity, let alone more excited about doing it.

4. Even if you disagree and think that failure can be useful. Failure doesn't necessarily entail losing, which is failing at a public activity so that someone else can succeed. Just as winning and succeeding are two different things, so too are failing and losing. There is no evidence that the particular version of failing known as "losing in a competition" provides any advantage in terms of children's ultimate development and should not be equivocated with the "challenge of learning".
5. Some people say that individuals, particularly the youth, "better just get used to competition for society is going to make them do it anyway [when they are older]". Not only does this sound a bit ominous, but what such a statement is essentially saying is that "people are going to do unpleasant things to you later so we have to prepare you by doing unpleasant things to you right now while you are here. Yes, competition destroys self-esteem, yes it undermines relationships, yes it gets in the way of excellence in many activities and it makes people less excited about the activities themselves, but people are going to make you compete later so start suffering now". When said, the statement isn't generally put quite the way it is worded above, but it is not that far from the actual rationale that people invoke.

Fundamentally, it is unwise to write the notion of competition into our conception of self (at any scale).

APHORISM: *Secrecy is security, and security is victory [in socio-economic competition]. Secrecy among a commonly interconnected population leads easily to maladaptive control by preventing the exposure of hidden agendas, and through breeding distrust, suspicion, and paranoia in the world*

13 Intrinsic motivation

A.k.a., Internally motivated behavior, self-determinism theory.

Intrinsic motivation refers to behavior that is driven by internal states or rewards. In other words, the motivation to engage in a behavior arises from within the individual because it is naturally satisfying to you. Intrinsic motivation is a type of motivation based in people's natural interest in various activities that provide novelty, challenge, and other desires. (Deci et al., 2010) Intrinsically motivated behaviors are those that are performed out of interest and require no "reward" other than the spontaneous experience of interest and enjoyment. (Deci, 1975) When intrinsically motivated, people behave freely and willingly with no external or intrapsychic prods, promises, or threats. Csikszentmihalyi (1975) described these behaviors as "autotelic," meaning, as the word implies, that they are self-directed. Intrinsic motivation entails curiosity, spontaneity, and interest. It is readily evident, for example, in the play, exploration, and mastery strivings of children and in the delight that accompanies those behaviors. (White, 1959)

Daniel Pink (2011) popularized the values of autonomy, mastery, and purpose in his book, *Drive: The Surprising Truth About What Motivates Us*. Therein, Pink presents the research that creative thought and action require something of more substance than punishment and reward (i.e., extrinsic motivation). Pink provides evidence that science has known this to be true for almost fifty years, and that in tasks requiring creative and autonomous thinking, incentives do not work at a practical level. In fact, incentives hurt productivity. Reward moves the focus from the 'task' to the 'reward'; hence, their studied hindrance of creative work.

Pink (2011) explores the deep human need to direct our own lives, to learn and create new things, and to do better by ourselves and our world. This need is known as *intrinsic motivation*, and it is found at the juncture of three outcomes: autonomy; mastery; and purpose. Fundamentally, the understanding that Pink arrived at is that humans are capable of reaching their higher potential under conditions (both internally fostered and external structured) of autonomy, mastery, and purpose. Pink demonstrates that true values within humans are not penalty-centred, but rather centred around the notion of freedom-of-contribution.

Autonomy is a vital value. People want to feel that they have the freedom to choose what they do and how they do it. Mastery is an equally important value - to have enough access to information, experience, time, and energy to really feel that one masters and succeeds in resolving desired tasks, and learns desirable things. Purpose involves the idea that there is meaning, intention and sense of intimate relationship in what we do.

NOTE: Consider how habitat design involves

regenerative design and intrinsic motivation involves the regeneration of desire, curiosity, and interest.

13.1 The three intrinsic motivation value sub-coordinates

A.k.a., The three intrinsic motivation sub-values.

The three primary self-directed value coordinates for adaptive fulfillment (in terms of intrinsic motivation) are:

1. **Autonomy.**
2. **Competence** (or **mastery, skilled, high ability**).
3. **Purpose** (or **results**).
4. **Relatedness** and **mindfulness** (or mindful relationships) are a corollary to the prior three.

Together, these values facilitate the structured expression of a self-directed state of motivation within an individual (i.e., intrinsic motivation). These value conditions might also be referred to as the necessary organizational "prerequisites" to [intrinsic] motivation and self-stable internal development. In other words, they are orientationally stabilizing value states for the adaptive self-direction of consciousness and the development of a personality that expresses the qualities of self-esteem and self-efficacy [in its relationships with that which exists].

These values represent conceptual coordinates, and when rendered together, they maintain the potential for maintaining a self-directed and highly creative learning environment. Herein, it is in the desire for autonomy of experience [in the verification of existence], a mastery of the self [through accurate identification], and a meaningful purpose [to consciousness] that mutual coordination [of relationships] and "self-evolution" resides. These values are the progenitors of all true learning and adaptation, and they represent the expression of creatively inquired thought and a desire for constructive action. They are a necessary environmental orientation for the continuance of a purposeful and self-directed community, a community expressly moving toward its higher potential.

The values of autonomy, mastery, and purpose form a conceptual structure that allows [and maintains a decision space] for the free flow of inquiry, integration, adaptation, and decisive action within a larger cooperative system, the "uni-verse".

It is important to note herein that in self-determination theory (SDT) these values conditions are considered basic psychological needs. Therein, basic psychological need satisfaction is assumed to represent the underlying motivational mechanism that energizes and directs people's behaviour. (Deci et al., 2000) Psychological need satisfaction is regarded as the essential nutrient for individuals' optimal functioning and well-being, as water, minerals, and sunshine are essential for plants to bloom.

(Deci et al., 2000; Ryan, 1995) In SDT, three basic needs are distinguished: the needs for autonomy, competence (or mastery), and relatedness (or purpose). (Broeck et al., 2010)

Hence, at the social level of organization these concepts represent values, but at the level of the self (in SDT) they represent basic psychological drives (or 'needs'). Fundamentally, movement toward the fulfillment of these needs (as 'intrinsic motivation') requires a conducive environment [with a specific value orientation]. Together, the organization of the environment and the [e]motive desire to fulfill these needs facilitates community integration and environmental adaptation.

The motivation of individuals among a population could be categorized in the following ways:

1. **Intrinsic motivation (intrinsically meaningful)** - motivation to fulfill human needs and internally set goals. Intrinsic motivation is motivation without the pressure of coercion or extrinsic reward. Intrinsic motivation is self-determined.
2. **Extrinsic coercive motivation** - for instance, "We are doing this, if you don't do this, or you do this other thing, you will be hurt/punished." Coercive motivation is motivation determined by an external authority.
3. **Extrinsic reward motivation** - for instance, "We are doing this, if you do this, we will give you access or money." Reward motivation often includes an a lot of coercive motivation; because, "if you do this, you will get the reward, but if you don't do this, you will be punished with less." Reward motivation is motivation determined by an external source.

People who are intrinsically motivated actually work much harder and smarter than those who are extrinsically motivated, because you are doing some activity for some goal that is directly cared about and immediately rewarding, because it is pleasurable. Intrinsic motivation involves self-direction, empowerment (self-responsibility, behavioral change tools), and socially cohesive cooperation.

INSIGHT: *Community needs people who can think and create independently. Community is a system that facilitates the development and sustainment of these qualities. Here, the idea is to find activities that inspire "you" and that "you" like doing.*

13.1.1 Autonomy

As an organizational [value] dynamic 'autonomy' represents the freedom to choose what "you" do and the environmental availability of having stuff to choose from (i.e., opportunities). Unlike SDT, which refers to

the subjective experience of psychological freedom and choice during activity engagement, the definition of 'autonomy' as a value orientation refers to autonomy as a task characteristic. In other words, is the task freely chosen, and is there independence and discretion by the individual in scheduling the work and [by degree] determining the procedures used to carry it out? Herein, autonomy means allowing others to control how they organize and exert themselves, or work and learn. It is a form of pro-social motivation. In reference to task opportunity, autonomy also refers to whether or not the task is available to the individual desiring to complete it. (Hackman et al., 1976)

Humans are naturally inclined to act on their inner and outer environments [when opportunities are available], engaging in and sharing of activities that interest them, which naturally involve progress toward personal and interpersonal coherence. In reality, we do not have to be pushed or prodded to learn and to act. Learning is a natural and freely expressive process, it does not require a forced or otherwise coercive relationship. Learning is intrinsic to conscious experience, although the drive can become inert under sufficiently adverse conditions [by degree of individual sensitivity to those conditions]. The blossoming and cyclical sustainment of a desire to learn comes from within the individual; it is intrinsic to adaptive organisms.

Autonomy may also be discussed in terms of how to avoid infringing on autonomy, which can be an extremely subtle act. Anytime someone is asked or commanded to do something, then s/he loses autonomy [by fractional degree over time]. An extreme case would be that as soon as someone is asked to do something, s/he becomes agitated and dismissive about doing it — even (or maybe especially) if s/he was already going to do it.

In SDT, autonomy represents individuals' inherent desire to feel volitional and to experience a sense of choice and psychological freedom when carrying out an activity. (Deci et al., 2000; deCharms, 1968)

As a state of the being of the self, autonomy represents an individual's desire to be self-directed - to direct one's own life, behaviors and experiences. It is the felt experience of a sense of volition and psychological freedom. It is a component of self-directed freedom.

Autonomous motivation (or "intrinsic motivation") has proven to promote greater conceptual understanding, enhance persistence at challenging activities, generate higher "productivity" performance, reduce burnout, and increase levels of psychological well-being. In a community it involves the effective organization of *task*, *time*, *technique*, and *team* to maintain an environment where individuals are free for the meaningful. For there to exist any form of meaningful engagement, there must exist autonomy. Autonomy in the expression of an individual's highest creative and exploratory potential, which is essential for optimal well-being in any culture. Hence, autonomy must necessarily include the autonomy to verify the identity of existence for oneself, which means that there needs to be a baseline quality-of-

life that facilitates equal access to learning experiences.

It is relevant to note here that although autonomy, as an intrinsically motivated task characteristic, contributes to feelings of psychological freedom, people might also experience autonomy satisfaction when they depend on others and even when they follow others' coercive requests, orders, and commands. For example, employees (Read: someone extrinsically motivated) may follow-up a "request" from their supervisor (and thus fail to be independent), but nonetheless act "willingly" because their supervisor provided them a meaningful rationale for doing so. (Soenens et al., 2007)

13.1.2 Mastery (or competence)

NOTE: *'Competence satisfaction' allows individuals to adapt to complex and changing environments, whereas 'competence frustration' is likely to result in a sense of helplessness (poor self-efficacy) and a lack of motivation. (Deci et al., 2000)*

Mastery is the urge to get better and better (i.e., improve) at something that matters - it is the opportunity and freedom to build deep competency and expertise, and ultimately, the optimized efficiency of intentional movement. Mastery is an emergent continuum in itself leading from basic competence through to the highest level of competence, 'expertise'. Expertise is complimented by the autonomous expression of the self to consistently inquire and to learn new things - getting better through practice and more refined through discerned openness - constantly evolving and improving.

The need for competence is defined as an individuals' inherent desire to feel effective in interacting with the environment. (Deci et al., 2000; White, 1959) From the perspective of the self, it involves self-development as becoming more knowledgeable and/or skillful. It involves curiosity and exploratory motivation, and it requires that the 'self' actually *do* things and *use* things (as well as experience some degree of challenge) in order to develop itself. As individuals, we develop greater self-esteem through the mastery of (and competence at) challenging tasks, which requires environmental opportunities, internal goals, and social support (Read: social coordination). The drive toward competence and mastery involves the propensity to explore and manipulate the environment, and to engage in challenging tasks to test and extend one's skills.

Herein, outcome expectancies and self-efficacy represent *acquired cognitions* with respect to one's capacities to successfully accomplish specific future tasks. Whereas, 'competence satisfaction' refers to a more general, affective experience of effectiveness which results from mastering a task. Despite these conceptual differences between self-efficacy and the need for competence, both are likely to be correlated at the empirical level. (Broeck et al., 2010)

Mastery also describes the pleasure someone gets from doing what they love and following their passion.

This can be seen when someone is so absorbed in a task that they are in "the zone", or what is commonly known as experiencing a state of 'flow'. 'Flow' is a term used to describe the state of body-mind when time seems to disappear and an individual is immersed fully in an enjoyable task [that movements become near effortless]. At its peak, expertise becomes an empowered state of intentional flow.

Without focus and self-discipline, without entering a state of flow, there is no mastery and no development of a skill (i.e., no "art"). Herein, it might be wise to reflect upon "art" that is displayed and sold for its shock value and the dramatic emotive reactions that it can draw out of a crowd versus are as a skill. When skill is removed from art, then "art" becomes almost patronizing. For instance, the "liberating arts" were originally supposed facilitate a free movement into ever greater states of flowing mastery.

13.1.3 Purpose

INSIGHT: *Motivated people like to get better at things. When people are curious or otherwise self-motivated, they will even do tasks for free.*

Purpose is the yearning to do what we do in the service of something larger than ourselves - to do that which is intentionally meaningful. It represents an understood connection and relatedness to something greater, which arises through the relation of meaning. Purpose provides a context for autonomy and mastery wherein it engages intention and focus.

Purpose addresses the situation that even when we get what we want (i.e., achievement), it may not be what we need (i.e., meaningful fulfillment). Intentions can orient away from fulfillment, and they can orient toward it. A purpose represents a known direction, a direction upon which intention is placed, and an understanding of why it has been placed along that direction. When understanding accompanies intent, then there is likely to exist fulfillment, but when intent is devoid of understanding, then there is likely to be deception and suffering.

QUESTION: *If that purpose which intent is placed upon isn't a higher potential of existence and of fulfillment, then what is it?*

13.1.4 Relatedness

INSIGHT: *Treating people with dignity means treating them as ends in themselves, rather than as simply means.*

The need for relatedness is defined as individuals' inherent propensity to feel connected to others, that is, to be a member of a group, to love and care and be loved and cared for. (Baumeister, 1995) The need for relatedness is satisfied when people experience a sense of belonging and develop close and intimate

relationships with others. (Deci et al., 2000) In any society it is important for people to be mindful of what they are relating to, how they are relating, and why they are relating.

13.2 Intrinsically and extrinsically driven motivation

NOTE: *By working for others [for extrinsic reward] individuals drain their own passions. Therein, pressure from authority is not motivation; it is coercion. Doing something for either reward or to avoid punishment is a form of external social control. Further, to obey or to be punished is not respectful of the conceptually conscious beings that humans are.*

Intrinsic motivation relies on the fostering of existing internal sources of motivation rather than driving motivation externally (i.e., extrinsic motivation). Extrinsic motivation refers to behaviors that are performed instrumentally to attain some specific extrinsic reward, externally desired outcome, or outside behavioral reinforcement. Generally, extrinsically motivated behaviors are ones that would not occur spontaneously and, therefore, must be initially prompted by a reward contingency or other instrumentality. When we are intrinsically motivated we pursue tasks for the love of them alone. With this understanding in mind, motivation may be perceived as a continuum from amotivation (no motivation) through to intrinsic motivation, with extrinsic motivation in between. (Deci, 2004)

One typically delightful example of intrinsically motivated behaviour is children playing. In play, children are often wholly absorbed in activities, experiencing a sense of interest and joy as they manipulate objects and explore new environments (as they discover and work with what they have discovered); therein, children are in a state of flow, which early 21st century society jerks them out of with its structures, institutions, and limiting [cultural] beliefs - through socialization and normalization to conditions which are aberrant to normal intrinsic functioning.

Through the naturally autonomous act of 'play' children learn. Community can be designed to facilitate the emergence of systems that maintain a state of flowing experiential engagement with existence, and it does this [in part] through the structuring of meaningful interrelationships between the lives of participating individuals. Everyone has the capacity to learn through play.

Play represents a mechanism that we maintain throughout our lives, and through which we can come to verify existence and integrate our experiences into ever greater folds of potential exploration and creation. However, this mechanism can become obfuscated. In early 21st century society it is often obscured through internalization of an external conception of limitation, such as when our autonomy has the appearance of, or

has been quite literally, taken away.

Control by external forces (authority-based power over others) deprives the individual of autonomy. The subsequent repression and denial of the conception of a set of discoverable needs (intrinsic drives) further inhibits motivation to cooperatively get needs met.

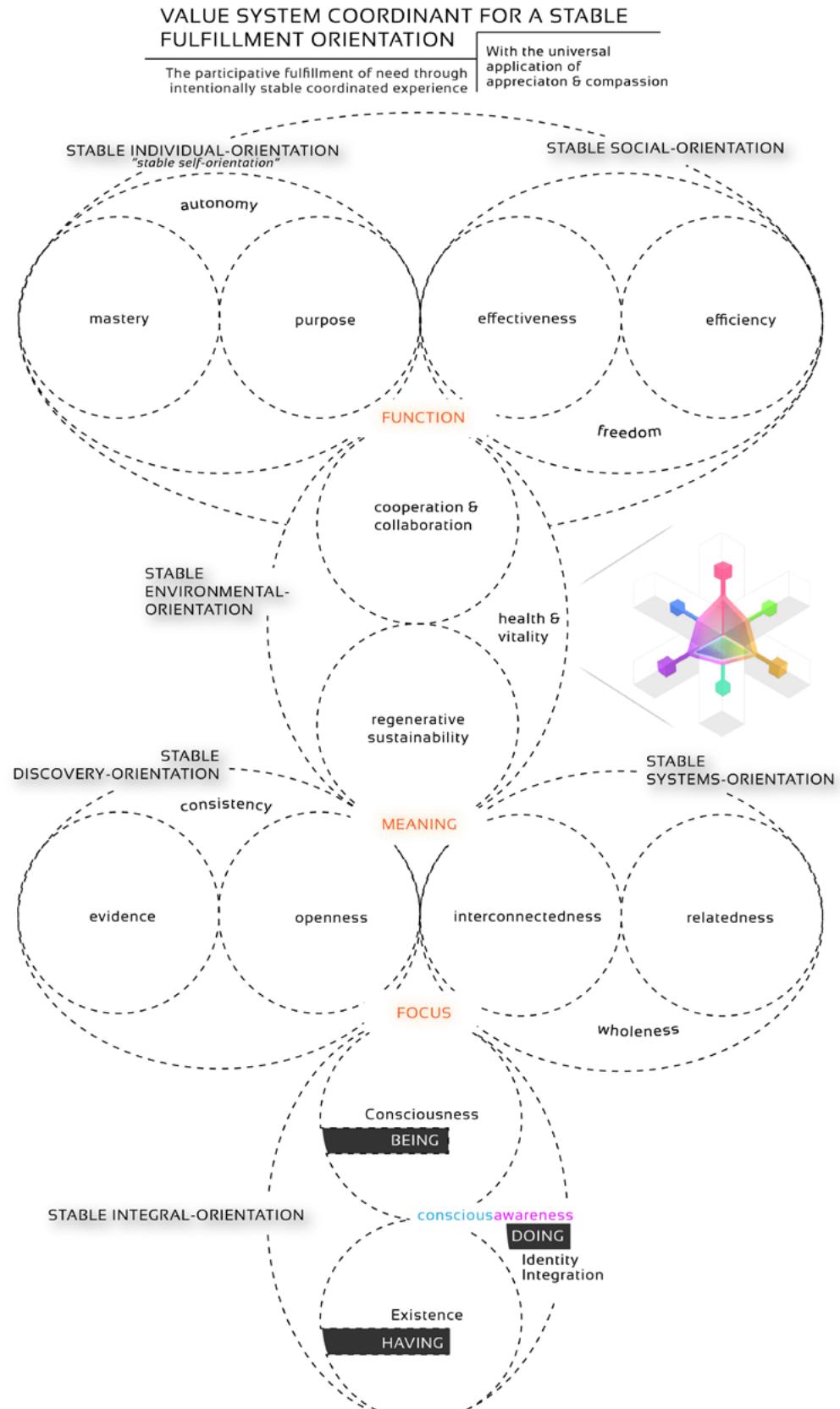
Play the near opposite of extrinsic motivation and reward. Extrinsic reward diminishes intrinsic motivation and creative problem solving. (Deci, 2004) According to the research (Pink, 2011):

- Extrinsic motivators work only in tasks requiring repetitive and regimented mechanical skill. These are technical tasks that could be automated.
- Once a task calls for even a rudimentary amount of cognitive skill, a larger reward often leads to poorer performance.
- Extrinsic motivators, which Pink refers to as "if-then" rewards, often destroy creativity and performance. They are likely to create dependence.
- The key to "high performance" isn't rewards and punishments, but rather it is the individual experience of intrinsic drive - the desire to do opportune things because they have meaning.

Extrinsic motivation, when driven by the classic contingencies of food and financial reward, grades, and arbitrary punishment is often experienced by the individual upon which the contingency is being heaped, as force and control - that is, people feel pressured through the seduction of rewards or the coercion of threats, to do a task. Over time their behaviour tends to become dependent on the contingencies, so they do not do the behaviours if the contingencies are not operative. In other words, when the extrinsic motivator ceases to be present, the behaviour will cease to be present; and, this has extreme consequence in the case of life-long learning. Rewards and punishment in learning (i.e., schooling) essentially de-couple the learning process from desire the natural desire to learn [and couples it to authority]. Wherein, individuals are no longer self-directed and become more obedient to authority.

We do not need extrinsic incentives to develop and "evolve" ourselves. The science clearly shows that extrinsic motivators act destructively toward a host of individually and socially beneficial qualities, not the least of which is that of creativity and efficiency. Extrinsic motivators represent a decrease of efficiency because they are more often than not applied in an environment where information is purposefully withheld or otherwise obfuscated (e.g., schooling).

Unleashing one's passion for their interests is the key to "success", not dangling a carrot and threatening a stick. People are conditioned in early 21st century society to believe that without force there would be no learning and no effortful work toward economic and social "development". Not only does the application of extrinsic motivators show a lack of social intelligence and an

Figure 15. A detailed value system coordinate for a stable fulfillment.

ignorance of our scientific understandings of our own motivations, but it concurrently shows a lack of respect and dignity for those to whom it is applied.

Humans will resent the stick, even when it is threatened, but never used. Carrots and sticks lead to short-term gain (i.e., industry profit) for long-term pain (i.e., ecological stability and healthy functioning). Pure, deep engagement and intrinsic motivation fulfill human beings. Fundamentally, human beings have the potential to enter into a state of fulfillment when they are engaged in activities that are desired.

The harm that a carrot and stick philosophy does is much more impactful than any minor progress it might enforce. It is better to:

1. Put detailed feedback signals in measurement systems (and not in incentives);
2. Focus on what is desired in a way that engenders intrinsic motivation; and
3. Put in place an "approximately aligned" system focusing on fairness, and not on external incentive.

Fundamentally, "toxic external motivators" such as arbitrary threats from authority, financial incentives, grades, or other sticks and carrots, are detrimental to long-term, self-motivated behavior. As Edward Deci concludes in, *Why We Do What We Do*, intrinsic motivation is natural to humans, but it is a fragile flower: it requires an atmosphere that nurtures our needs for autonomy, mastery, and purpose.

As a community, we understand the need for enabling the natural motivation and learning processes of individuals, and thus, empowering their creativity and their curiosity. We understand the need to show each other the tools with which we can all use to improve ourselves. In community we seek to direct our own lives, build deep competency, and develop meaningful connections.

It is wise to remain aware that the values of autonomy, mastery and purpose are not considered in high regard nor even applied in early 21st century society, based at every level on socio-economic extrinsic carrots and sticks.

As a society, do we want the things individuals desire and fear used as levers of control, because that is what punishment and rewards achieve. Punishment and rewards teach acquiescence to power, to the idea that "might makes right". Is that a good lesson for anyone? Who says, "you've shamed and punished me into a more empathetic and diligent mindset." None of us enjoy the things we desire used as levellers to control and social engineer our behavior. And fundamentally, rewards are things we desire being used as levers to control our behavior, some with more damaging consequences than others.

NOTE: *Intrinsic motivation provides momentum for further learning as well as greater confidence in learning. Wherein, the curiosity of*

consciousness drives exploratory behavior.

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TABLES**Table 2.** Value System > Intrinsic Motivation: *The self-determinism continuum.*

	Non Self-Determined		Semi Self-Determined			Full Self-Determined	
	Amotivation	Extrinsic Motivation				Intrinsic Motivation	
Regulatory style	Regulation	External Regulation		Introjected Regulation	Identified Regulation	Integrated Regulation	Intrinsic Regulation
Source of motivation	Impersonal	External		Somewhat external	Somewhat internal	Internal	Internal
Motivation regulators	No intention Incompetence Lack of control	Compliance External rewards or punishments	Ego-involvement Approval from others	Valuing an activity Endorsement of goals	Congruence Synthesis with self	Interest Enjoyment Inherent satisfaction	

Table 3. Value System > Intrinsic Motivation: *Intrinsic and extrinsic forms of motivation.*

Source	Type	Accounting	Societal Structure
Intrinsic	Self Motivation	Human needs	Contribution structure
Extrinsic	Coercive Motivation	Punishment	State structure
Extrinsic	Reward Motivation	Reward	Market structure

The Social Approach of a Community-Type Society

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Version Accepted: 8 June 2020

Acceptance Event: *Project coordinator acceptance*

Last Working Integration Point: *Project coordinator integration*

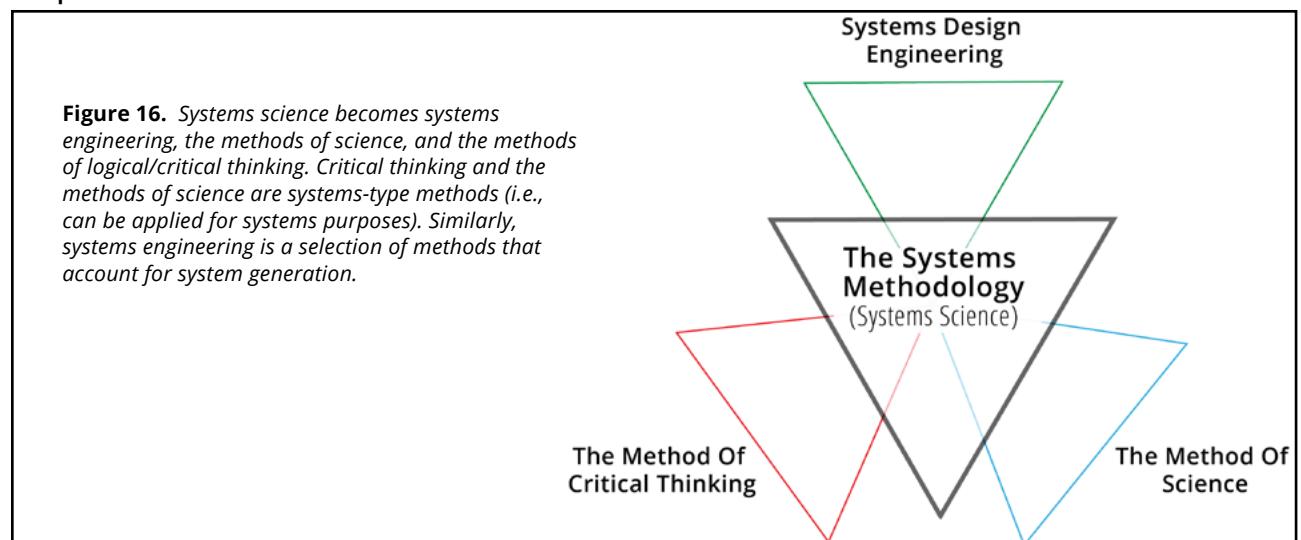
Keywords: social approach, societal approach, social methodology, societal methodology

Abstract

All information with a social reference may be approached in such a way that the result is more information coherence. All directions (solutions) are approached (resolved) through the selection of methods (tools) that are intended to reduce uncertainty and incoherence. Given the totality of the methods available, it seems optimal to select a set of methods that align with a basic patterning language, the systems methodology. There are methods that reduce uncertainty (e.g., experimental science) and there are methods that increase understanding (e.g., rational science). In order to develop a unified societal approach, a unifying set of methods is required. At the individual level there is critical thinking, at the social level there is rational explanation, and at the technical level there is experimental validation. Critical thinking is required to reduce conflict during self-integration; rational explanation is required to reduce conflict during social-integration; and experimental validation is required to reduce conflict at the societal level.

Hence, the necessity to develop and construct a societal-level community.

Graphical Abstract



1 Introduction

INSIGHT: *Through a common, coherent, and verifiable approach humanity can come to better understand itself, and better organize for everyone's fulfillment.*

A community-type society utilizes the following methodology and methods, which are mutually informed and formalized. Together, the methodology and methods detailed herein are known as "an approach" -- they are essentially thinking tools (or, tools for better thinking). (Dennet, 2013) The approach herein describes the way in which a community-type society describes the world and resolves the problems encounter while individuals are acting together within it. This approach is subdivided into three related methodologically understandings (or, tools):

1. The systems methodology (the systems approach)
2. The method(s) of science (the scientific approach)
3. The trivium method of critical thinking (the critical approach)

Together, the approach leads to the discovery and operational integration of patterns of information useful for mutual, global human fulfillment. Wherein, the systems methodology concerns patterns, the methods of science concern discovery, and the critical methods concern integration and unification.

The **systems methodology (a.k.a., systems science, the systems approach, etc.)** is the principal conceptual logical language/linguistic filter through which a population perceives and conceives of reality, and with which it may construct a [creatively synthesized] decision space with the ability to integrate discoveries, deal with uncertainties, and act intelligently upon the real world for everyone's mutual fulfillment. It is through thinking systematically that patterns and relationships appear that allow for an integral approach to action. Systems science is the science of the complexity of a whole in its actual operation; as opposed to science as a reduction of the whole to its parts to see how the parts act in isolation. Systems thinking is the semantic structuring used to communicate geometric thought and manifest geometric conceptions. A systems methodology logically selects for methodical approaches that are systematic in their form - they logically follow systems-based principles. In other words, the two sub-approaches selected for, are thus necessarily, systematic in their form.

The two systemology selected methods are **the method(s) of science** and **the critical method (a.k.a., the trivium method and critical thinking)**, which represent the two primary approaches by which individuals inquiry, acquire, verify, and integrate knowledge [in a systematic form], and through which everyone may all evolve a more accurate and fulfilling semantic structure.

As a population's understanding of the natural world

evolves, so too will its methodologies and methods, and the language through which it perceives and understands itself in the real, natural world. Through the use of these holistic investigatory/refinement processes individuals do not "make their conclusions"; instead, they arrive at understandings by examining the information available, and integrating it in a systematically adaptive and non-contradictory manner. It is this approach that brings coherency, clarity, and focus to a decision space and to action - to how a population designs and re-design systems to fulfill its needs.

Overall, this common approach might be considered an "impartial" approach, for its application diminishes attachment to anyone or anything that emerges as an identifiable diminisher of human fulfillment. When applied as a single unit it may also be said that it is a "person independent" approach, and not an administratively bureaucratic (or "political") approach (i.e., it is apolitical). It is not an approach that relies on a single person or social power hierarchy; instead, it is an approach that maintains an essential alignment with the Community's orientational value system. The approach is basically a universal meta-language that allows people who speak different practiced methods to speak to each other. It is a common ground that allows variation.

The application of inquiry as described herein leads to an accurate clarification of reality, and not attachment to anyone's subjective reality. The methodology and methods represent a means for perceiving greater states of commonality between all individual humans. Here, the population of a community-type society recognizes that clarity is the basis for quality [relationships], in reality. It is with clarity and coherency that one acts with [social] conscience, and without cause for fear, guilt and shame of any kind.

Everyone may live a better life through a better [common] approach to perceiving and shaping the material world. A comprehensive and integrated approach is an essential design element in the re-iteration of a real world community. Humans have been shaping the physical environment on Earth for thousands of years, and have become particularly skilled at it the last 100 years. Humanity can now use what has been acquired and what is known to shape a better and more fulfilling world.

Fundamentally, a community is a lifestyle-based approach [to life]; hence, the totality of the understandings and approaches described herein become necessarily integrated into a life (and lifestyle), which is in part reflected by the organization of a society's social, decision, lifestyle, and material systems. It is always wise to question claims of understanding and utilized approaches, which can be very difficult under some societal contexts, wherein they are [purposefully or otherwise] not made explicit.

The formalized methodical approach described herein is designed to facilitate everyone's fulfillment, while resolving human belief, personal projection, bias and opinion, and conflict through the arrival of

accurate understandings and optimal decision [space] designs that select-out decisions aligned with a stated purpose. The approach detailed herein is a tool for the cooperative creation (i.e., "co-creation") of a regenerative and fulfillment-oriented human community.

There exist a multitude of tools in the world. But, for any given task or situation there are a finite number of tools that will generate a desired outcome (e.g., a higher potential of common fulfillment). Hence, there are a limited number of "right" tools [for any given context or problem]. And, if the right tools aren't in the hands of individuals, then individuals are likely to become someone else's tool, or the tool of authorities. A community needs the right tools in every individuals hands if it is to sustain an environmental system that facilitates the development of individuals' inner higher potential among a community that facilitates or hinders their potential.

Some tools are flashlights and others are maps - some tools help one discover and observe what is there and other tools help one navigate through what is there. Essentially, useful tools provide the ability to navigate freely (i.e., to navigate a territory with freedom because one can see a map). Herein, tools can help to convert even the most painful of experiences into wisdom. And, these tools must be accessible to (or "given to") everyone so that everyone can [literally and figuratively] lift.

Individuals can evolve themselves and self-direct their own lives if they have the appropriate tools. Without tools [and an appropriately designed structural environment] people fall right back into the exact same behavioral patterns to which they had been conditioned and are habituated.

The approach detailed herein might also be considered from one final perspective. It represents the drive toward the state of a clear and coherent mind, a mind without contradictions - a mind capable of navigating a common territory for its own fulfillment. The conceptual-linguistic tools described herein facilitate a state of mind where all the information in the mind is a part of a whole (with little or no contradictions). And, when cognitive dissonance appears a mind must have the tools to investigate it, to open the "gift" [of dissonance] and discover its contents. Cognitive dissonance involves the experience of information that contradicts (i.e., is not / cannot be integrated) with a pre-existing (or "pre-set") worldview. This is why the systems-view is a different type of "paradigm" -- if it is to even be called a paradigm. The systems approach represents a view toward open and active integration through inquired discovery -- it is not a philosophy, it is philosophy.

If a community is to survive and thrive, then these tools must be made explicit. In truth, there are so many aspects to developing as a full human being that guidance facilitates one's fullest fruition (or expression) into a highest potential human. Most people in early 21st century society do not get that guidance, and hence, it is up to them to try and uncover it for themselves. The tools

presented herein provide a structure for informing one's own guidance system so that it points in the direction of one's own, which is ultimately, everyone's, fulfillment.

The approach described herein is ultimately useful in transcending variants of opinion, politics, affordability, or any -isms. Instead, life is understood in terms of living systems that make up an integrated whole. Life is a seemingly infinite regression of nested systems, a seamless unity of which none are "free and independent", patterned throughout nature as [interconnecting networks of information; the "matrix"]. All organisms are systems composed of systems connecting to form systems.

Individuals may follow this approach because they want their internal model of reality to match the actual reality as best as possible. This is important because every belief someone has affects many other beliefs which are also had; hence, the saying, "I want to believe as many true things and as few false things as possible." Herein, individuals need both parts of that statement. Beliefs inform values, which inform actions, which have consequences for oneself and for everyone else [in society]. If society is operated based upon a flawed model of reality, then individuals are going to make bad decisions, and reap the consequences of that across the society.

1.1 Methodology versus method

The terms 'method' and 'methodology' are sometimes used as though they were synonyms – they are not. They may be similar in that they are tools in the form of processes and filters through which objective reality is perceived and acted upon. However, the two words carry two separate and distinct meanings:

- 'Methodology' is the study of methods and is the rationale, philosophical assumptions, veracity, or logic underlying a process and the selection of a method(s). Adding the suffix "-ology" to a word implies the underlying logic or logos of a word. When it is added to the word 'method' it implies the underlying logic and selection of a method. Logos is Greek for "logic of" (e.g., biology, psychology, methodology).
- A 'method' is a specific process or set of techniques for accomplishing or approaching something. Thus, a method is an ordered way of doing something, a process or procedure. Strategies for gathering data and means of testing hypotheses are methods, not methodologies.

This passage from the American Heritage Dictionary (1992 edition) clarifies the difference:

In recent years ... "methodology" has been increasingly used as a pretentious substitute for "method" in scientific and technical contexts,

as in "The oil company has not yet decided on a methodology for restoring the beaches." This usage may have been fostered in part by the tendency to use the adjective "methodological" to mean "pertaining to methods," inasmuch as the regularly formed adjective "methodical" has been pre-empted to mean "orderly, systematic." But the misuse of methodology obscures an important conceptual distinction between the tools of scientific investigation (properly "methods") and the principles that determine how such tools are deployed and interpreted — a distinction that the scientific and scholarly communities, if not the wider public, should be expected to maintain.

1.2 The importance of organization

INSIGHT: A common ground, consensus reality, must exist for the organization of a community-type society.

Organization creates an infrastructure for the facilitation of individual and social development toward a higher potential state of fulfillment. Therein, organizational tools can facilitate integration and adaptation. In concern to information, organization refers to placing information into a visual structure. It leads to the ability to process data (or experience) in a useful way. This is particularly important at the social level. A community-type society involves everyone in the society sharing a similar model while participating constructively together for mutual fulfillment. Therein, a consistent method[ology] is productive for dealing with and organizing information and activities.

Both a methodology and a method are a type of model. A model is a structured means of storing and working with information. Models are useful for integrating information and identifying connections. Therein, structure aids in handling larger and more complex information sets. Structures with more coherency extend a populations potential. And herein, appropriate tools facilitate in the freeing of oneself from illusion and artificial limitation.

Social organization and re-organization enables effective social cooperation and positive social change. Therein, organizational differentiation is the unbundling and re-arranging of activities within an organization. And, integration is re-grouping and re-linking them. The need for integration arises in the face of environmental complexity, diversity and change. The need for organizational differentiation enables flexibility and adaptation.

Many organizations in modern 21st century society, even those that appear to act beneficially, divert the mind from seeking and understanding a more truthful (Read: real world) position, to instead, support their particularly limited positions. Organizations turn "evil" when the organization starts to serve itself instead of serving all. The most notable examples of these forms

of organizations are public relations firms, political strategists, all forms of advertising and marketing, lobbying firms, charities, special interests groups, the media, etc.

1.3 Unity of approach across society

Unity is simply a natural outcome of increased interconnectedness. Having a society that is essentially alike in its social direction, values, and approach is not a good and useful thing, if not a necessary component of a functioning interrelationship. It is valuable to have a common approach to systems that could benefit humanity's common fulfillment in a common existence. Among community, it is possible to observe both the uniqueness and interconnectedness of every individual. And at the social level, it is possible to observe the unity by which socio-technical problems are approached and resolved.

A unified approach is required to sustain a common navigational trajectory across all of humanity. A single way thinking and of approaching information is essential to make everyone more successful across the [societal] team/group. A community-type society utilizes a common structural approach, a common semantics, and common kinds of models. This commonality allows for an efficient means of communication across members, and facilitates the common understanding of anyone's work. When there is a common understanding surrounding anyone's work and its application to society, then work is also traceable back to a purpose or structure.

A systems thinker looks at all of the pieces of an engineered object, and not just one piece. If a system's engineer is wrong, then people may be hurt, and or, die (or at a societal level, people may suffer unnecessarily). It is possible for engineers to produce faulty engineering and to operate socio-technical objects and technologies in a faulty manner. If an engineer does not have the design right, or operation right, or is not really objective to all useful information, then the system that the engineer is building will have a higher likelihood of failing or operating unexpectedly. There is one thing humanity ought to be certain around, and that is the engineered societal system that it has built itself within. A community-type societal approach facilitates humanity's certainty about its societal system as it conforms to a set of expectations about the cause and effect nature of a natural [law/reality] system.

INSIGHT: Similarity may be beneficial, and contrast and variety may lead to growth and expansion. Therein, dissonance is acknowledged in its ability to produce a movement toward resonance and change [if approached appropriately]. And, harmony is acknowledged in its ability to reduce conflict and amplify fulfillment.

1.4 Approach avoidance

INSIGHT: *One will never fully discover who one is, or one's potential, unless one continually re-arranges one's thinking to accommodate new evidence through new experience.*

Procrastination is a form of approach avoidance [complex] wherein someone wants to do something but is avoiding doing it. However, forcing someone to do something, and then, when they become lax in doing it, claiming that they have a "procrastination problem" [and labelling it as such], is disingenuous.

Although identification facilitates contextualization and may lead to greater clarification (and better decisioning), "labelling" can have its own tyranny -- labelling can be disabling. In truth, individual identity is partially fluid and responsive to the circumstances of which it becomes aware. It is a reflection of an individual's experience in and at the moment. Herein, labelling can become a false identity (e.g., "my town", "my county", "my State", my "team") and create layer upon layer of illusion and confusion.

Yet, there is a body of knowledge that views the world systematically and adaptively, and where labels are known to have the great potential for misdirecting people from perceiving and thinking systematically -- for following human constructs out of alignment with truth as opposed to following the further emergence of natural evidence. What is wanted as a mutual approach, is a clear perception that is being dealt with is a system, and not with bits of systems.

2 The systems methodology

A.k.a., The systems approach, systems science, systems thinking.

The systems thinking methodology (or systems methodology) is a perspective, a specialized language, and set of cognitive tools through which it is possible to view the world and come to comprehend how parts of a whole relate to and influence one another. It is sometimes also called 'systems theory', the 'systems worldview', a 'solution-orientation' and the 'systems paradigm'. Systems thinking is a way of understanding reality that emphasizes the relationships among a set of parts, rather than the parts themselves. Based on a field of study known as 'system dynamics', systems thinking has practical value in describing the natural world, and it is a requirement in the engineering of functional technologies. The systems methodology includes a specialized language and an approach to modeling and problem solving that recognizes that problems cannot be solved in isolation and apart from their impact on the rest of the system; and that the attempt to craft isolated solutions that ignore existent identities and interrelationships only leads to greater problems elsewhere. The systems approach results in a depiction of the underlying knowable information structure driving a problem [involving the system and its environment]. An emergent systems approach facilitates human understanding and development of what is possible, to serve human fulfillment and to caretake the ecological lifeground.

Systems thinking is concerned with understanding and interacting in ways that are structured upon the principles and concepts of the systems "paradigm". Every paradigm structures itself along its own principles and concepts.

A "paradigm" is an interlocking set of ideas that seem to support themselves, claiming to refer to the way things are truly ordered and organized [in reality]. A paradigm is represented by the dimensions of a context (or "field"), as limited by parameters that inherently predict one's perception of reality within that context of experience. A paradigm is generally a definition of one's perception of reality according to its limitations. Wherein, perception can be expanded and constrained. Some paradigms exist in a less aware state, a constrained state of perception, and behave in a manner that reinforces that state [of limitation]. In these cases, paradigmatic tools often become weapons for use against one's own true fulfillment. The participants in a paradigm, who do not recognize systems thinking, are unlikely to know and to understand that they are in a paradigm. When "you" grow up within a paradigm, there are some very fundamental things about that paradigm that become imprinted upon "you". "You" become influenced by and the product of those ideas. Those concepts become the grid – the framework, the reference – through which "you" operate and, at some level, assume to be right.

Systems thinking considers the similarities between systems in terms of a set of common systems concepts, principles, and [contextual] patterns. In systems thinking context matters. The systems methodology is a language, a "mindset", for understanding how things work that extends beyond discrete and isolated elements to look for patterns and underlying relationships. Figuratively speaking, "it is a means of connecting dots". Implicit in this worldview, this rationale, is the understanding that interrelationships form into living and emergent ecological systems, which are responsible for the manner in which the natural world operates. At the planetary level, the level at which humans populate the planet, the systems methodology perceives the Earth as one finite, dynamic and integrated living system-design.

A systems approach is a synthesis that intends to model the way the world actually (i.e., factually) works. Herein, the systems methodology gives a way to see through chaos and understand complexity by exploring the properties, dynamics, and interrelationships of [ecologically] nested systems.

All questions about the universe are asked within the bounds of a set of understanding of the universe's organization. Humanity currently perceives the universe as organized at the highest level, like a system, and thus, the methods that are used to answer questions about the universe, and lives within it, follows a systems-based approach, which is a paradigm (if it is to be called such). When the statement, "Tell me more about the universe and the principles [scientific/technical], concepts, and patterns of which it is composed", is proposed within the bounds of systems thinking, then the response is a series of emergent systematic processes (i.e., the methods of science) by which the observer can come to actually know more about the universe and its principles. Similarly, when the statement, "Tell me more about how the universe may be more approximately and certainly observed", the response is another systematic process (i.e., the method of critical thinking). Critical thinking exists to resolve (or remove) contradiction and clarify discovered relationships, and thus, improve alignment with objective, universal reality. Both of these sub-system methods are selected for by the logic of the systems methodology, and they enhance the predictability of the outcome(s) of decisions - they facilitate a more certain [system] state-dynamic of existence and make everyone more comfortable with any uncertainties. They are applied to increase human certainty of the world and human fulfillment within the world, which is seen as an emergent system.

Uncertainty often breeds fear, inhibiting an informed response and leading to hasty reactions. It is possible to clarify and remove uncertainties by applying a method(s) for discovery, dissonance removal, and integration. A consistently verifiable method leads to greater consistency of thought and action in life, and eventually to a consistent socio-economic process for organizing humanity's highest fulfillment.

We can only concede to the obvious: that just about

everything in the world [where a relationship exists] would seem to be some sort of system. And, this understanding transforms our perception; it becomes a universal worldview. What is the difficulty with having a homogeneous worldview toward everyone's higher potential well-being and human fulfillment in a "universe" of expanding knowledge? This is "big picture" thinking; this is the integration of all aspects of the self; this is thinking "outside of the box" or "lateral thinking"; it is a form of universal creativity and the dimensional understanding of patterns. This capacity resides in everyone, it just requires a [more] truthful (and honest) environment in order to emerge as an approach to the organization of society.

"Why questions about objects called systems cannot be answered by the use of analysis. Answers to why questions are called explanations, and the product of explanations is understanding. Science produces no understanding, it produces knowledge and verification. Because the product of analysis is how things work, never why they work the way they do, a new way of thinking was needed to provide explanation, and therefore, understanding. Explanations always lie outside of the system being analyzed, never inside it. Analysis has you in the system, identifying how it works and providing knowledge, but not understanding. Synthesis provides explanation to the behaviours of a system."

- Dr. Russell Ackoff

To understand any system, including the system of systems thinking itself, one must understand that an information supra system (or "supra-set") cannot be defined from one of its subsystems (or "sub-sets") -- it is logically impossible. In 'systems thinking' this is an axiomatic principle. The subset does not have the information inside of itself to define the superset; the subset is a creation of the superset. A subset is only a partial component of the larger set.

Systems engineering is the core application of the system approach that focuses on how to design and operate complex systems; systems engineering concerns itself with component parts and also with the whole system in order to ensure certainty. As such, it is sometimes referred to as a holistic approach because it considers the whole.

INSIGHT: *The balance between overestimating a problem and underestimating a problem involves systematic critical thought, which requires detachment from belief and presumption about the nature of the system.*

2.1 What is a system?

NOTE: *A system is unifying by its very nature; a system is a unified structure of parts.*

A system is a network (set or group) of connected, interacting and interdependent components (elements or parts), including their relationships and qualities, which work together for a purpose, and form an integrated whole. In other words, it is a functional, physical, and/or behavioral related group of regularly interacting or interdependent elements; a group of elements forming a unified whole. Each of the interrelated components of a system has a clearly defined [conceptual] boundary that works toward the attainment of a common [system's] goal by accepting inputs and producing outputs through an organized and structural transformation process. Therein, 'feedback' is data about the performance of a system. And, 'control' (or 'logic') is the component that monitors and evaluates feedback and makes any necessary adjustments to the input and processing components to ensure that a proper output is produced (i.e., an output aligned with the system's goal(s)). A system accepts inputs, over which it has no direct control, and transforms them into outputs. In the simplest terms possible, systems are used to process signals [from an 'environment'] to modify or extract information.

The components of a system cooperate for the overall, mutual objective of the whole. A system is observed as a triad of [axiomatic] concepts: *interconnectedness, relatedness and wholeness*.

Systems can accomplish things that would be impossible if the same elements were put into random relationships, or no relationships at all. It is the wholeness, the relatedness, and the interconnectedness of design that the systems approach is recognized and we become capable of modeling our community and our world with greater accuracy and fewer logical [systems] inconsistencies. In our community, we define variables, and none can be defined more than once. Equations must be unambiguous and less capable of being "interpreted". Units of measure should be on both sides of the equation. And herein we see that the benefit of a model is that it can be refined to make the structure of the system that it models more realistic, robust, and in alignment with a goal.

All systems are parts of larger systems, and every system is defined by its function in a larger system [of which it is a part]. Every system is contained in a larger system, and its role of function is what defines it. For example, in early 21st century society a car is part of a society's transportation system. The transportation system is a system for transporting people and resources safely and efficiently from one location to an intended destination; and, it functions in a relationship with the social system (which conceives of it) and the economic system (which produces it) of that society. Systems thinking is a universal process for understanding how component parts relate to each other within the whole. A system is [by part] a whole.

It is from the axiomatic concepts of systems (wholeness, relatedness, and interconnectedness) that a series of systems dynamics forms the basis of every existent system. In the real world, there is a complexity

of these relationships.

The concept of wholeness is important. If the forms in the background of the world were not coherent, rational and connected, then the visible, actualized world would be chaotic. But, the visible world isn't chaotic; it is "lawful" (or principled, ruled). It is rational and appears to follow "one discoverable mind". Wherein, reality is an objective absolute that [at least] exists as a whole, and knowledge is gained through resonance and experience of reality itself [without self-delusion]. There is a standard for reality - there is a system of reality. And herein, our perception of reality can be worked with through the application of logical reasoning to thinking in whole systems.

Every system (or "designed object") can be divided into three high-level, integrated ontological categories. In object design (Read: the design of objects), the three categories are generally: Function (F); Behavior (B); and Structure (S). In systems design, the three categories are generally: Structure (S); Process (P); and Function (F). The two sets of categories are basically equivalent with the noted understanding that 'processes' appear to observation as 'behavior'.

Hence, the design process for a system must involve these three concepts:

- **Structure:** The architecture of the system designed to transform information for a purpose. The structure is the components of the design object and their relationships. A system is a structured form of organization.
- **Process:** The occurrence of an operational transformation (or event). A process produces a behavior [for a specific function]. The behavioral process(es) represents the attributes (or "qualities") that can be derived from the designed object's structure. A system is a form of organization that includes at least one process.
- **Function:** The objective [purpose or goal] for the transformation within and overall existence of the system. A system is a functional form of organization.

As a functional form of organization a system is not just a collection of random things; it is an interconnected set of parts (or "elements") that is coherently organized in a way that achieves or fulfills something.

Every system [as a concept] involves the following four functional properties:

1. **Property (it is essential):** An essential property of a system is that it cannot be divided into independent parts. Instead, its property [as a system] is derived out of the interaction with its parts and not its parts taken separately. This is

another way of stating that a system is a single whole; or, a system inherently involves the concept of wholeness.

2. **Function(s) (it is critical):** Some functions are critical in a system. In an automobile, the functioning of the motor is a critical function to its operation within a transport system. The functioning of the sound system and windshield wipers are not essential to the basic functional operation of an automobile.
3. **Parts/Elements (of the system):** Every system involves three distinct parts: inputs; processes; and outputs. These parts are connected via some internal logic. Systems are surrounded by an environment (a supra-system). And, functional [living] systems include a feedback mechanism for the adaptation of the system to a dynamic environment. Environments form the context within which any system exists, and energy, influence, and signals might be able to flow across the boundary of the system from any environment to alter the balance of any part of the system.
4. **Behavior [geometrically structured]:** A system represents a geometric structure [of thought]. Herein, behavioral traits are grown from the dynamic interplay of [systems] states, which are sub-composed of processes known as 'process states'. Buckminster Fuller defines synergy as the "behavior of whole system unpredicted by the behavior of their parts taken separately" - more recently this has become known as emergence (or "emergent behavior"). Geometry is the study of structure, and the relationship between objects (and points of perception) within space. Fundamentally, the function of a system cannot be fully known until the structure is known.

Every system involves a set of [at least] three conceptual components that form its first principal dynamic. The three components are:

- **Boundary** - refers to the structure within which a system accesses a resource. The boundary represents the "borders" of the system that define where access, and controlled action, can be taken. In the Decisioning System specification this is referred to as "access rights".
- **Access** - refers to the use or access of a resource. Access reconciles the relationship between a system resource and a system boundary. Access represents a relationship between the identification of a functionally needed resource and the resources processing through a structure within the system.
- **Resource/signal** - refers to an element which is

available within the system boundary and which enables a transformation in the system to occur -- it is that which has the potential of being accessed by a systems component.

Most complex systems and all living systems involve a series of systems dynamics. These dynamically (i.e., changing) relationships interconnect as parts of a system, which produces an overall behavior. For the purpose of iterative modification to our community's habitat these 'systems dynamics' are used for the modelling, simulation and control of a complex and living community system. Herein, we model our reality, we test and we simulate to more greatly align the next design iteration of our community with our highest potential expression of fulfillment. In order to do this as a living system, we need corrective feedback: we must correctly know the full structure of the system, we must correctly understand its behavior, and we must also correctly access signals within our boundary in order to efficiently move resources into positions of greater fulfillment. Essentially, 'systems dynamics', as a term, defines those relationships between structures in a system and relates them to the system's behavioral results. Notice here that the axiomatic concepts of systems form the potential for a system dynamic. Broadly speaking, the term 'dynamic' means (or, is a synonym for) the term 'active'. In a sense, critical thinking represents a 'dynamic of thought' that is capable for following (or referentially retracing) an active environmental dynamic (or "active environmental information in a real world").

Technically speaking, a **feedback loop** is a system structure that causes output from one node to eventually influence input to that same node. Feedback loops are a necessary dynamic [principle] of complex, living systems. Such systems have feedback loops that allow for self-renewal, self-correction, and self-organization (in an environment): observed as the healing of a cut or the organizing of organisms in nature. Living consciously requires a willingness to embrace constructive feedback (i.e., critical feedback). We may be born into conditioning, but the responsible thing to do is to learn how to think and discern for oneself, and to come to one's own conclusions. The concept of 'feedback' implies a loop where information of some kind is fed back into the system itself. Wherein, feedback presents the possibility of changing state and "re-orienting" within a larger environmental system; whether it's data in a computer or the sense of a change in the temperature, feedback is a mechanism for responding and adapting to an environment. Feedback allows for the effective re-orientation of a system.

Through access to information about the result of outputs in an environment, a synthesized correction can be made to the structure of the system so that its next output orients the system differently. Feedback maintains the potential for a *probability (or possible causality) orientation* - the way in which a system (or organism) orients to its environment as it concerns

information involving the initiation and regulation of processes, states, behaviors and actions. Functional and living systems are responsive [through feedback] to their environment. This type of feedback is known specifically as 'negative feedback' (or 'corrective feedback'), and it is necessary to stabilize a system for corrective operation in its alignment with a goaled direction.

For example, in , people see a problem, decide on an action, expect a result, and believe that is the end of the issue. The figure illustrates the framework within which most discussions are debated in the press, business, and government. In early 21st century society, the act of voting or buying a product might equated as a good example of this.

Problems leads to actions that produce a result that creates future problems and actions. There is no beginning or end, except for individual physical lives. Humanity lives in a complex system of nested feedback loops. Every action, and every change in nature, is set within a network of feedback loops. Feedback loops are the structures within which all changes occur in nature, and we can come to know these structures and engineer through these structures, or we can do otherwise, unwisely.

In the simplest possible feedback control system there are two symbols/parts - a stock, and a flow. The stock is an accumulation, or integration, or level (to choose terminology from different fields). The flow changes the amount in the stock. The flow is determined by a statement that tells how the flow is controlled by the value of the stock in comparison to a goal. All systems, everywhere, consist of these two kinds of concepts—stocks and flows. Such a statement, that there are two and only two kinds of variables in a system, is powerful in simplifying our view of the world. People in early 21st century society familiar with accounting statements, as in annual reports of corporations, will recognize the two classes of variables. A financial report is presented on two different pages—the balance sheet and the profit and loss statement. All numbers on the balance sheet are stocks representing accumulations that have evolved over time. The profit and loss statement represents the flows that cause the stocks to change. There is no comparably important third page, only the page representing stocks and the page representing flows. That structure of an accounting statement represents a fundamental truth about all systems. Water in a bathtub is a stock; the flow of water changes the stock. When "you" see (signaling information from the environment) the bathtub is full (goal) you change your relationship to the bathtub tap (flow) to shut off the movement of water into the tub-like stock of water ... because "you" see it is full and that is your goal. The system's variables here are the flow of water into the tub and the perceived amount of water in the tub at any moment in time.

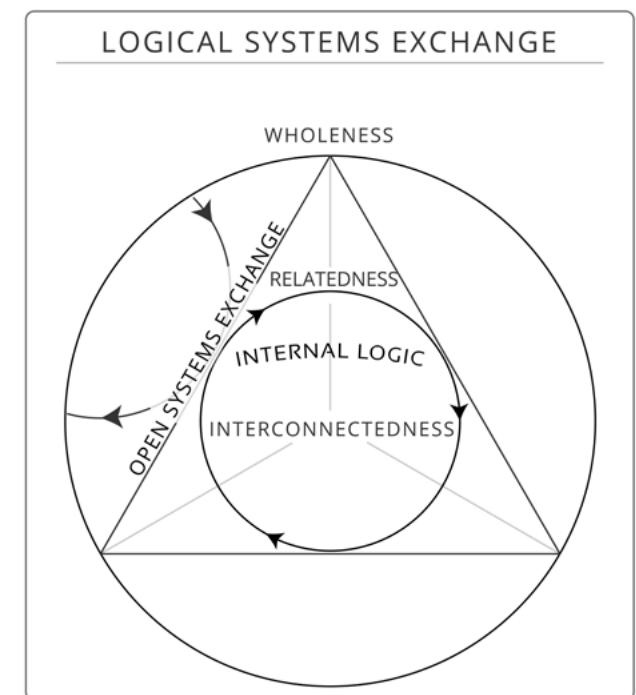
The real world is made up of a complexity of nested loops. It is important to recognize that simple loops have serious shortcomings and may be highly misleading. The truths learned from simple systems are often

completely opposite from the behavior of more complex systems. The very idea of 'feedback' concurrently puts implies the notion of transience - that life is always changing and that the most important 'probability constant' is change itself (i.e., is the information system's next iteration).

Systems thinking maintains that the reconciliation of these concepts of flow and stock come through the concept of transience (i.e., the iteration of consciousness), that life is always changing and that the only constant is change itself. Our collective practices and outlooks have always undergone change as new awareness and abilities come forward through the recognition of this transience, it is important to be real with ourselves that present awareness, ability, and outlooks will be altered or entirely superseded to some degree at some point by new knowledge and ability, as our long history of culture and technical changes clearly shows up. By momentarily reconciling we have a space to align our decisions within nature and in the nature of our understandings so that we may more accurately adapt our models and service systems.

A person understands filling a bathtub with water. But, if we go to a system that is only five times as complicated, then intuition fails. As bio-physiological consciousness, we can only hold so many relationships in our mind at a given time ('working memory'); hence, we might quite easily and incorrectly presume a basic feedback loop when a much more complex one is somewhere present and influencing behavior (or "the emergent movement of a stock"). Since the real world is a complexity of feedback loops and our ability to hold relationships is limited in our mind by some degree we

Figure 17. Axiomatic systems concepts.



do the following: we test and simulate and record and share so that we may accurately model and engineer the emergent orientation of our community. In community, our decisions (and hence, actions) are based on these models. In community, we make models explicit, we seek to discover inconsistencies, we determine future implications, and we feed-back information to improve our models toward our purpose as a community.

Although all living systems follow the foundational principle(s) of systems dynamics, not all systems are equivalent. Individual systems have their own behavioral characteristics as a by-product (or result) of their structure and their interrelated functionality. The principle design dynamic of this relationship says that:

- Structures sculpt behavior patterns.
- Functions produce results.

All complex systems produce these effects. And herein, the dynamics of a complex system form a foundation for the emergence of potential. Knowing the dynamics of a system gives a creator greater creative potential in the system. By connecting the dots "you" gain understanding; through understanding you can predict results via probability and reduce to the selection of a decision most probably aligned with a set goal. The modeling of these feed-back systems relationships, in our community, into an emergently understood model allows for [formalized] specificationing of decisioning (i.e., a decisioning system).

The specific information and its arrangement in a system's decision space, once processed into a static state, will produce a probable behavior[al characteristic] -- the structure of a system determines its behavior (i.e., a system's structure causes its behavior). More precisely, the structured processing of information through the system produces a probabilistically [stated] behavior -- information to state, state to a probability patterning of behavior. Understanding these structural interrelationships is necessary to understanding system behavior. To change a system's gross behavior, change its structure. System behavior results from the effects of reinforcing and functionally directing processes. Structure is a (or the) reinforcement mechanism.

System behavior is by definition behavior that is unpredicted by the behavior of its apparent parts; which isn't to say that the behavior can't be understood, but it has to be modelled as a whole [as much as technically possible] to gain a more accurate picture, a more precise map, model, or "territory".

System behavior may be predicted and designed through models and simulation (as in, simulation of the underlying structure and component processes and relationships of the system). A simulation model will simulate the interaction of system elements over time.

Living system's interface and exchange information with their environment; they are structurally open systems. Herein, the system's approach doesn't rely on any one leader or social class; it is open to the emergence

of new and more accurate information; it doesn't have an empowered social hierarchy, which would inhibit the adaptive emergence of the Community's systems.

Efforts to alter system behavior without changing its underlying structure (e.g., patchwork) may create short-term improvements, but produce more long-term problems. We must think long-term, strategically (and iteratively) if we are considering problems as structural elements of a system. The elements of an adaptive system are modelled in Figure 1-40 opposite.

Feedback provides information about the effect of changes made in an environment. The 'feedback dynamic' creates potential. That potential means that there is also probability in the [information] system - with change there is a probable effect (or result). If there is a probable (or probably influenced) effect and consciousness is present (as SIGOR), then there is a 'decision'. Feedback is a mechanism by which we adapt our decisions to our environment by choosing the next complete iteration of a state of dynamic design.

Complex systems capable of change have a natural desire to change for their better, to suite their needs and to better adjust to and through their environment (i.e., evolution without an end). Evolution is open ended. As a community, we desire to evolve toward states of lower entropy, for we have observed all that it accords, such as a more thought responsive and loving environment. With this understanding, we can create states of the world that fulfill our needs more effectively and efficiently. And, structures that make us more functional, designs that give us a bigger decision space, systems that enable us in the physical world to better survive and thrive, consciousness that is moved toward cohesion and love and away from disorder and fear.

Complex living systems are not chains of linear cause-and-effect, but complex networks of interrelationships involving a spectral continuum of cause-and-effect. Therein, a systems approach is ideal for solving complex, ill structured problems.

In a dynamic there exists the potential for 'synergy' [where there is a plurality of potential directions]. A 'synergy' is the complex behavior of whole systems unpredicted by the behaviors of any of the components of the system (it is another word for the concept of 'emergence'). Herein, 'syn-ergy' is to 'en-ergy' as differentiation is to integration [in the mathematics]. "Syn" stands for synchronization (or "withness" and "togetherness"). "En" stands for "force" [of initiation]. And, "-ergy" is the ability to do something, to do "work". In other words, syn-ergy means to do the work of integration, and en-ergy means to do the work of observing difference[s in a signal]. In figurative terms, through self-initiation we can do the work of integration. Herein, critical thinking [as a component of the systems approach] is a principle tool for integration. Hence, as a tool, critical thinking may help us understand emergent behavior. 'Synergetic capability' is the processing of using a howl to predict the functional "behavior" of the units [of the whole].

Systems range from simple to complex. A high-functioning system continually exchanges feedback among its various parts to ensure that they remain closely aligned and focused on achieving the goal or purpose of the system.

If any of the parts or activities in the system seems weakened or misaligned, the system makes the necessary adjustments to more effectively and efficiently accomplish its intended and purposeful goals. A pile of sand is not a system. If you remove a sand particle, you still have a pile of sand. The sand has no greater decisioning process than to respond to the probably technical principles by which its structure, and hence, behavior is determined. Alternatively, as an adaptive system, consciousness has the ability to modify in response to environmental signals, which provide information about a probability space. In modification by consciousness there is re-orientation by some spatial direction.

In systems thinking, **open systems** maintain processes by which they exchange information with their environment. These processes allow for the adaptation and evolution of the system. In computing, 'open systems' are capable of interoperating so that mutual efficiency exists between them. Mutual efficiency refers to the optimization of energy expenditure by all systems in a relationship. This might otherwise be known as a 'homeodynamic potential'.

The essential characteristics of systems include:

1. A system is made up of related and interdependent parts, which form a [view as a] whole.
2. Systems have boundaries.
3. In a system the input is connected to the output through a process.
4. A process functions for a purpose.
5. A system has order and sequence in its process.
6. A system cannot be considered in isolation from its environment, its supra-systems and subsystems.
7. Systems have specific purposes within larger systems.
8. Systems can be optimized by "economizing" resources, in particular, resources that are scarce.
9. In the real world, systems are optimized through experience, experiment, verification, and integration.
10. Inputs and processes can be maximized for optimum value-state generation. In a *democracy* the authorities manage these things for "your benefit". In *politics* opinions manage these things for "private benefit". The system of the community is transparent for all of our benefit.
11. A system which is in equilibrium will change only if some type of energy is applied.
12. A system's parts must all be present for a system to "effectively" carry out its purpose optimally [or at all if considered in terms of 'criticality'].
13. Systems have a structure, which is a stable parameter of the system. Structures impose limitations on a system's processes, and they generate a probability-determined decision space.
14. Structures can change. The change of structures can be designed. Designs can be more accurately informed by the fed back [resonant] information from the design's change in effect to an environment.
15. The structures of a system limit its [functional] capacity. There is only so much that can be done to increase capacity or modify the characteristics of a system from within the system itself, beyond that the structure must be re-designed. In the system there are parameters; and if it is a living or otherwise adaptive system, then there is the ability for consciousness to select a decision within a diversity of probable decision spaces.
16. A system's parts must be arranged in a specific way in order to carry out its purpose - structure and organization matters.
17. Systems maintain their stability through feedback and internal structural adjustment to processes. In other words, systems change in response to feedback. Systems maintain their stability by making adjustments based on feedback.
18. A basic [characteristic] principle of systems is that "you", as consciousness, cannot in full detail describe and understand a supra-system from the knowledge contained only within the components of its sub-system. As was mentioned earlier: there is not the information. This is because complex systems in their whole and related structural form have the characteristic of 'emergence'. An automobile has a different function than any incomplete or otherwise related (i.e., put together) set of its parts. Just looking at the parts in any individual form will not tell you (without a pre-existing model) how the parts of a car come together to perform a useful function, transportation and the extension of our function of locomotion [to a larger decision space].
19. If you are going to describe a supra-system you have to have at least one assumption that goes out beyond the system until you experience the whole of the system itself. In the real world, individuals have to experience a system to understand the system (or have experience of the system to have a model of it). As others have said of humankind, we will change [our values and our ways], our systems, "when we see and experience a better way". Community represents an opportunity to facilitate life enriching and usefully adaptive

experiences [toward fulfillment]. Now, it might be interesting to note here that if consciousness were actually what this reality-system that we are necessarily experiencing was composed of, then we have to experience our own existence (which some people incorrectly equate with 'subjectivism') if we are to adapt and develop the potential of our consciousness. Herein, consciousness experiences limitations in existence, which generates a probable decision space and the ability of a consciousness to change the decision space within parameters. In other words, if the statement, "consciousness is the system" is true, then the statement "we have to experience via our consciousness the system to have understanding" is concurrently true. This is a fundamental understanding of the adaptive behaviors of systems in the physiological sciences -- that we as humans have to experience to understand. Even the adoption of language is an experience.

20. Designing a system with multiple processes is an *engineering challenge and involves the process of engineering inquiry.*

The efficiency mechanism is inherent throughout the systems approach. We might see how a very different economic system might result from the application of systems thinking at the socio-economic level of a community. We are living systems in continuous exchange with life-resource on a finite Earth. Wherein:

- **Effectiveness** is the degree to which the goals of a system are achieved. How do the results of our design decisions align with the goals of our fulfillment, our common life-grounded needs?
- **Efficiency** is a measure of the use of inputs (or resources) and processes to achieve outputs.
- The **performance** of a system refers to the systems effectiveness and efficiency.

2.2 Technological systems

NOTE: Question: *What is the most important part of any system? Answer: The part that is not working as expected.*

Every system that is capable of being perceived (or sensed) in an environment has a technical relationship. In a sense, it could be accurately equivocated with a technology (if the system is not just conceptual, but can be verified by experience to exist). Technology can be described as anything with utility and function. The human body, for example, is made up of various technologies, each executing specific functions. A tree is made up of its technologies, its roots pull in water from the soil, channelling it up its trunk to its

branches and its leaves, which in turn collect sunlight for energy. There is an inherent technical ordering, and use of technology in nature. Language is a technology, clothing is a technology, molecules that modify human consciousness (e.g., DMT, dopamine, tryptophan) might even be considered a technology.

2.3 Dynamic complex systems

"As above, so below". [What we see at any scale will inevitably show up at another.]
- Hermes Trismegistus

A simple analogy for a dynamic complex system is a single-celled organism, schematically depicted in Figure 1-42 below. The organism is conceptually distinct from its environment by its shared qualities; we are naming it as a system. What we see in this system is a porous cell boundary that allows the exchange of materials with the surroundings; it is an open system. The cell consists of many interdependent parts that interact to create the behavior of the whole cell; its parts exhibit interconnectedness, and together they generate an 'emergence' [of behavior]. The parts (as "constructors") have the ability to come together as needed and perform various tasks; it is self-organizing - in an information system the parts that construct might be referred to as 'constructors'. The cell is constantly sensing signals from its environment(s) and adjusting to signalled changes by modifying its internal dynamics (temporally known as a 'state'), which is composed of a set of interrelationships; it is recursive.

Peter Medawar said, "reductionism is the belief that a whole may be represented as a function (mathematically speaking) of its constituent parts, the functions having to do with spatial and temporal ordering of the parts and with the precise way in which they interact." Some people forget that it is not always easy to know *a priori* [experience] what the appropriate level of reduction is for any given scientific problem. The solving of complexly dynamic problems takes systems thinking and not reductive science by itself.

Methodological reductionism describes the idea that complex systems or phenomena can be understood by the analysis of their simpler components. Conversely, holism is the idea that a complex system can only be understood by taking into account the interaction of its parts, and that by reducing the system down into its component parts "you" will obscure understanding (e.g., emergence and feedback).

Reduction[ism] without holistic observation divorces itself from the observations of those who are afflicted by it, whereupon those who reduce refuse to reconcile their observations with reality. Science without a continued and consistent observation of the whole is to be rejected for it is, itself, a rejection of the logical application of the method in the first place. It is unfortunate that this leads some people to reject science outright without recognizing the necessity of science in-context. Some

contexts simply have a probable likelihood of producing science that is untrustworthy, which is regardless, as understanding [for us] requires experience. And, without an observation of the whole [in-context] it is easy to pass blame, and particularly, to blame the "victims" of a larger, systematic problem - ignorance by convention.

Taken together, the properties of *openness* [to an environment], *interconnectedness* [of parts], *recursiveness* [as the flow of information], and *self-organization* [as a function] result in what is called a 'complex adaptive system'. The complexity of the system causes its overall behavior to be "organic" in nature, which means that its behavior unfolds over time; it is emergent. "Emergence" is a phenomenon that only occurs in the presence of every system. To quote Jaewon Kim,

"At the core of [emergence] was the thought that as systems acquire increasingly higher degrees of organizational complexity they begin to exhibit novel properties that in some sense transcend the properties of their constituent parts, and behave in ways that cannot be predicted on the basis of the laws governing simpler systems.

- Making Sense of Emergence (Kim, 1999:3)

Here, we are begged to realize by our experiences within an existent system that we exist because of a larger ecological system, which has a lifeground that services all fulfillment. All ecological systems have a lifeground. Actively acknowledging our lifegrounded needs and essentials, is likely to bring them forward into a momentary decision space where they maintaining their emergence as a central primary focus to our society. We return to these core guiding requirements of what sustains us, and from there, priority resolution becomes clearer, eventually giving way to a more valid life focused social systems. From the lifeground we

acquires universal human values in combination with prior lifeground awareness, which stands above all divisions and [subjectively] relative viewpoints to bring a unity to our perspectives, worldviews, and our design (and production) services.

"The world we have made, as a result of the result of the level of thinking we have done thus far, creates problems that we cannot solve at the same level of thinking at which we have created them - we shall require a substantially new manner of thinking if humankind is to survive."

- Albert Einstein

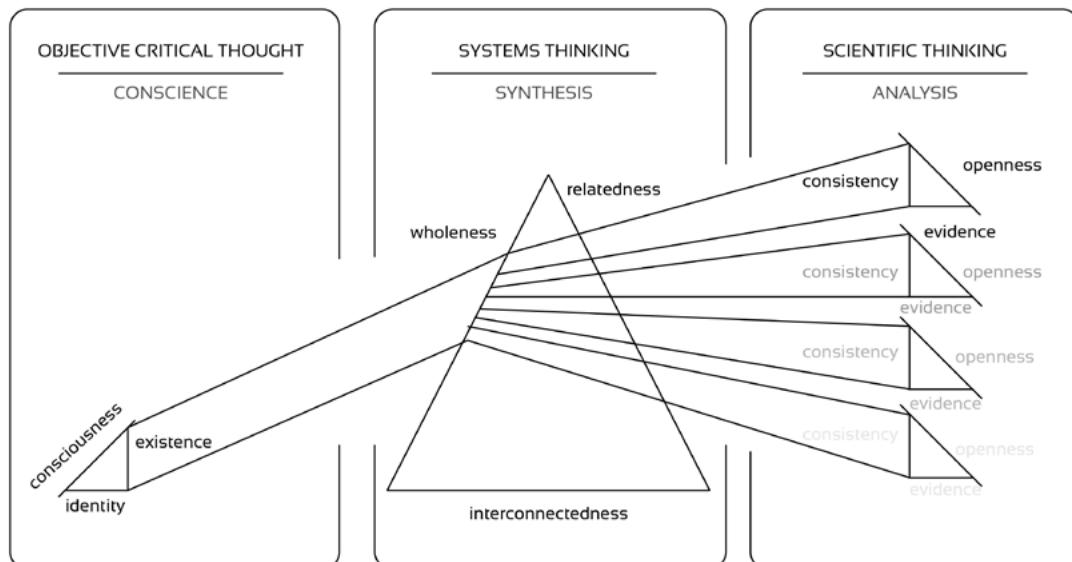
2.4 The systems approach and the analytic approach

NOTE: *It is important to adapt understandings to the evidence when it presents a probable certainty of a different information model.*

The following is a discussion of the systems approach in contrast to the analytic approach; with the additional note that an integrated approach is necessary for the sustainment of community.

The systems approach is fundamentally different from that of traditional forms of analysis, and analytical thinking. Traditional analysis focuses on separating the individual parts or components of what is being studied; in fact, etymologically the word "analysis" is a transcription of an ancient Greek word meaning "to break up into constituent parts". In contrast, the systems approach focuses on how the thing being studied interacts with the other constituents of the system – a set of elements that interact to produce the emergence of [at least] a behavior, of which an element of the system is a part.

Figure 18. Illuminated refraction of systematic, scientific, and critical thought through a prismatic structure.



The systems approach focuses on relationships, multiple outcomes, holism and boundaries, the environment, the larger system (source), controlling logical processes, and feedback. This means that instead of isolating smaller and smaller parts of the system being studied (a "reductionist" approach), the systems approach works by expanding its view to take into account ever larger numbers of interactions, which are then verified through the controlled analytic approach. Thus, a systems approach accounts for interdependent sets of variables, as opposed to the analytical approach (via reduction), which is more effective at handling independent sets of variables.

"Why" questions about objects called systems cannot be answered by the use of analysis. Answers to why questions are called 'explanations' and the product of explanations is understanding. In the 1950s society became aware that science does not produce understanding, it produces factual knowledge. The product of analysis, of the scientific and the analytical approach, is how things work, never why they work the way they do. The systems approach provides a [universal] contextually related explanation, and thus, understanding. Explanations always lie outside of the system under analytical study, never inside of it. Analysis takes an observer inside the system where knowledge is acquired and verified, but not integrated by its identifiable interrelationship to a larger whole. Understanding involves the integrated accumulation of knowledge through systems thinking.

Analytical thinking is a powerful tool for understanding the parts of a situation; it is just not designed to convey a complete understanding of how those parts work together. Synthetic thinking (i.e., synthesis) is the reverse process of analysis. It is a tool for making sense of and for understanding interactions - understanding how things work together. However, Synthesis needs analysis - how can you find the similarities across [apparently] different things if you haven't listed the "different things" first?

Essentially, synthesis refers to [a conceptually integrating consciousness] seeing how things work and are composed together. "You" take the object "you" want to understand and ask, "what is this a part of?" An individual first identifies the containing whole of which the object is a part. For example, to understand an automobile, you must know that it is a part of a transportation system; it functionally extends human locomotion in some useful manner (it is a part of a society's geospatial service system known as "the transportation system"). An individual must account for the whole system to understand the function of a "car". What is a transportation system? What is the locomotion system [in a human]? Finally, someone disaggregates the understanding of the containing whole by identifying the role or function for which it exists in a larger whole [structure]. It is important to note herein that each part is only of limited value without the other.

A systems approach uses synthesis to combine separate elements in order to form a coherent whole

and provide explanations for the behavior(s) and emergent properties of a system. Every synthesis is built upon the results of a preceding analysis, and every analysis requires a subsequent synthesis in order to verify and correct its results. Without verifying reality and examining it comprehensively, we delude ourselves into fantasies (we might only see basic systems, and not complex ones).

Herein, synthesis into formalization is not a form of socially controlled uniformity. A systems worldview is not a set of taboos; it is a way of organizing an ever expanding understanding of the universe. The systems worldview is an "objective worldview" that maintains information alignment with an emergent understanding of reality, not our perception of reality as seen through an ideology. Systems thinking is not a form of ideological thought; it is not an "-ism".

A complex intentional community requires an integrated, interdisciplinary, and systems-based approach to solving problems. Systems thinking can be defined as an approach to problem solving that observes "problems" as parts of an overall whole system - behaviors, functions, and structures are identifiably interrelated. When individuals are unaware of how things influence one another within a whole they become incapable of approaching problems from an integrated perspective, leading to errors and flaws in their thinking and solutions. Herein, we recognize the value in a systems-based approach to understanding and guiding the adaptation of our total information system (social + economic + ...). We understand that all elements of a system must work together to maintain the whole - whole systems design re-forms community toward fulfillment. The traditional disciplinary boundaries are artificial, and they narrow our focus so that we miss fundamental and systematic connections to the world.

It is relevant to note that systems thinking also goes by several other more contextualized names: strategic thinking, solutions thinking, structured thinking, future and forward thinking, long-term thinking, high-level thinking, lateral thinking, lifecycle thinking, and design thinking. As well as, synthetical thinking and systemic thinking. The term "systems thinning" is simply more comprehensive.

Note that the understanding of 'systems thinking' can be more difficult to intellectually integrate than the method of 'analytical thinking' by individuals in early 21st century society. There are multiple reasons for this, most notably: (1) the modern schooling system only gives a moderate introduction to analysis and often confuses critical thinking with conditioning (i.e., they apply conditioning and call it critical thinking); (2) systems thinking is either not taught or not fully explicated in early 21st century society's institutions and industries which profit profusely off a lack of systemic integration [of services]; (3) the thinker may be dealing with interactions that are not necessarily visible to the eye; (4) in complex systems, particularly living systems, the interrelationships are dynamic rather than static, which

makes pattern recognition necessarily more complex - complex systems interactions may change regularly and affect each other differently each time they do so. Hence, "dynamic thinking" and "lateral thinking" are necessarily subcomponents of synthetical thinking.

NOTE: *Systems thinking is highly dependent upon pattern recognition and pattern coordination - being able to identify, organize, and integrate patterns.*

2.4.1 Itemized differences between analytical thinking and synthetical thinking

Simplistically, systems and analytic thinking can be replaced with the concepts of compositioning and decompositioning. Wherein, de-compositioning is reasoning from the whole to the parts, and 'compositioning' is reasoning from the parts of the whole to the whole itself.

More completely, the two thinking methods may be differentiated as follows (note, the same concept is conveyed below in three different manners):

1. Analytical thinking enables an understanding of the parts of an object. Synthetical thinking enables an understanding of how those parts work together to form an emergent behavior (i.e., why they work the way they do?).
2. Analytical thinking breaks things down into their component parts. Synthetical thinking finds the patterns across those component parts. It connects the dots. It requires a refresh of the model [of the system] to more greatly integrate new and more accurate information, and to remove apparent contradictions of its logic in the process of integrating. There is a *delta iteration* in the system (i.e., the system changes in time and space).
3. Analysis involves the identification of differences. Wherein, a 'critical analysis' [in part] involves the idea of "versus" (or "vs.") - to put two ideas in opposition to one another so that you can claim one of them correct. Synthesis concerns the finding of similarities. In other words, synthetical thinking is the intentional finding of repeating patterns (or common "themes") across a system (object or situation). Although analytical thinking enables us to find those repeating patterns and common themes too, it doesn't do so directly (or as effectively) as it is more focused on identifying differences rather than similarities.

2.5 The forms of systems thinking

Although somewhat unnecessary, the forms of systems

thinking (or systematic thinking) could be differentiated between [for the purpose of greater lateral understanding]. To a large degree these distinctions are superfluous and the terms 'systems methodology' and 'systems thinking' account for all possible distinctions. Together, these "distinct" forms of thinking facilitate consciousness in processing experience about systems by synthesizing information for insightful comprehension toward the arrival at systematic, and hence, systemic design solutions, and more efficacious thought and action. Herein, tools that encode these understandings [at every scale] are useful.

2.6 The systemic thinking process

NOTE: *Creative thinking is a form of systems thinking; it is the relating/creating of things or ideas that were previously unrelated.*

Systems thinking is not the death of creativity; it is instead, an opening into the flow state of creativity.

Systemic thinking is the process of synthesis, and it is described quite basically by the following steps:

1. List the system elements.
2. Group similar elements together and describe what each group has in common.
3. Find the common theme(s), the repeating pattern, the supra-type(s).

2.7 Learning systems

A systems approach entails an environment where learners explore the interrelationships within a system, looking for useful patterns and verifying related identities for oneself, rather than memorizing isolated facts. Functionally healthy young children are naturally good systems thinkers, most likely because their learning has not begun to become fractured. In their eagerness to learn, they bring all that they know to their learning and are willing to explore boundaries in search of understanding. Everything has the potential of being related and relevant. It is unfortunate then that their thinking and learning experiences become increasingly compartmentalized as they progress through the modern schooling system, which is designed to move them into the market as trained professionals (the schooling system's stated goal).

Herein, we realize that the very infrastructure of any community is most effectively sustainable through 'interdisciplinary teamwork' at the systems level, for it is representative of the group dynamics a system "team" at scale: teams are open environments of socially cooperative participants (i.e., teams share and cooperate); teams have functional goals in the application of effort; and they act in common through some form of logical coordination. It is here that we may understand

that teams naturally facilitate the learning experiences of others in the team because they understand that they have a functional relationship together and that the structure of that relationship will be improved by any individual members own improvement. By becoming 'interdisciplinary teams' at the 'systems level' we are likely to facilitate each other's self-development in experience of the system itself.

When investigating a phenomenological relationship one might ask:

1. What is the relationship?
2. How does the relationship function?
3. When was the relationship observed?
4. Why is the relationship present? In order to answer why you have to look at the supra-system and ask how.

2.8 Modeling, simulation and computation

Through descriptions it is possible to form simulations and improve understanding. To the extent what "you" simulate ends up looking like the real thing "you" can gain tremendous insight into how what "you" see came to be and how what "you" see can be controlled. Through simulation comes greater clarity of understanding and greater potential for control. In large part, the dynamics (relationships, rules) of any physical or conceptual systems can be modeled and simulated. Over time, modeling and simulation allows for ephemeralization (as in, procedures that allow for doing more with less input). More completely, modeling and simulation provide better information, and over time, better information allows for the doing of more [tasks, activities, etc.] with less [resources, energy, etc.].

A 'model' visualizes patterns of information flowing through a system. A model is necessary for service design practice, and for the engineering or operating of any system. Much of design practice comes down to two models:

1. A model of the current situation.
2. A model of the preferred situation.

Examples of models include:

- Site maps, charts, application flow diagrams, and service blueprints.

Simulation is the imitation of the operation of a real-world process or system over time. The act of simulating something first requires that a model (or theory) be developed; this model represents the key characteristics or behaviors/functions of the selected physical or abstract system or process. The model represents the system itself, whereas the simulation represents

the dynamic operation of the system over time. Simulations are predictions rather than observations. A 'decision space' is a calculated simulation. Science provides observations and the systems methodology generates simulations, which are then re-tested against observation. Processes are simulated to see whether the particular simulation leads to (more or less) the same behavior that is observed in reality (or in experiments). Empirical observation, simulations, and experiments are all valid methods that need to be combined.

Fundamentally, all systems have dynamics (influences and processes) that can be modelled and simulated. Some dynamics are static, and others vary by input. A 'living system' is a system that changes [internally] over time in response to inputs. At each instant of time, a living system is in a specific state determined by the probabilities of prior states. The 'state' describes how the system is at a given time. The 'state space' refers to the totality of all the states the system might "take on" or be capable of "becoming". Alternatively, in a 'memoryless system' (or 'static system'), the outputs depend only on the present values of its inputs. In other words, memoryless systems do not depend on any past input. Whereas, in a dynamic system the outputs depend on the present and past values of its inputs.

A "reason" is the initiation/start of a model of reality. Until you have established that you can learn something about the universe the word reason no concept (i.e., no meaning). One of the functional abilities of the brain is model forming. The brain has a functional ability to form models of the world. Forming models about reality serves a functional purpose, a social purpose, a decision purpose, a material purpose, and a lifestyle purpose, leading to the operation of functional services systems that really work for all of humankind.

2.8.1 Real world models and computers

Real-world models are systems, characterized by rules, that capture (mirror or pattern) how aspects of the real-world change. Through the application of a model, rules can be used to understand and to control state changes in the real-world. Using models, rules often describe state changes in the form of 0 and 1:

0 = Old system state (prior state; earlier iteration of environment) - how parts were interrelated before applying the rule.

1 = New system state (output state; next iteration of environment) - how parts are interrelated after applying the rule.

Or, 0 may represent the current state, and 1 may represent a probable (e.g., planned) future state.

Properties of the world as described in terms of:

1. Observation - Natural[ly observable] units (of sensation). Understood through physical measurements.

- Rules involve observation of sensation.
2. Quality of being useful - True or false, or some degree of complexity therein. Understood through visualization and experimentation, as well as computation and simulation.
 - Rules involve logic (conceptual patterns) and arithmetic (mathematical patterns).
 3. Direction conceptualization - Value orientations [when/where arranged by humans]. Understood through socio-technical life experience.
 - Rules involve socio-technical interrelationships within a given environment.

Note that these properties are effectively the direct outputs of any societies economic system. Through the economy, services and objects (sensations) become available (accessible) to the population, wherein the arrangement (configuration) of the population in interrelationship with an environment of services and products orients the population toward some definable direction.

As humans understand more about the world, their models become more unified and integrated. Further, their ability to use materiality to facilitate their understanding and control over the world is likely to increase as models become more accurate and technologies become more capable.

A digital computer, for instance, is a technology that allows for directly automating, extensionally, pattern processes. Digital computers are physical logic machines made of electronic binary circuits that literally embody (are the patterned representation of) rules of logic. Computers directly encode those logic rules that are used for making models and understanding models. In other words, computers perform computations in the form of executed programs. Programs encode rules from models, written in programming language(s). Programming languages are based in logic and arithmetic, and therefore, can be used with computers (informational-material encoding and operating platforms).

2.8.1.1 Modeling

Haber (2015) clarifies modeling as the process of making explicit one's knowledge and assumptions about a certain system through the generation of a representative replication. By using this replication, instead of the actual system, a model provides users (researchers, etc.) with a synthetic environment that can be used to predict (test, experiment, etc.) without implications on the original system (Drogoul et al., 1994). This is especially important if experimenting in the actual system is impossible or to be avoided due to moral, methodological, or safety reasons (Goldspink, 2002). But, modeling also makes it possible to investigate the working of systems that do not actually exist in the modelled state. Therefore creating models may even allow for predictions about

possible system performance (Epstein, 2008; Bandini et al., 2009). Investigating the effects of modeling choices in the replicated system is called simulation. Unlike analytical models, simulations are not solved, but run (executed); and, the changes of system states can be observed at any point in time. This provides an insight into system dynamics, rather than just predicting the output of a system based on specific inputs' (Siebers et al., 2008:1).

2.8.1.2 Real world computations

A software program maps the logic and arithmetic rules that models are composed of to a form that a computer can use. The execution of the program can extend the modeling abilities of humans and provide more useful data. The iterative systems model described herein, involves: real-world phenomena, the building of models and predicting of behavior, the executing of models in computing systems. Models, programs and computers are all connected by logic, arithmetic, and ultimately, mathematics.

Logic exists for arguing (analyzing or reasoning) about claims (information) being true or false. In mathematics, a proof is a formal demonstration of a formula that is always true (i.e., theorem). Therein, axioms are base true formula. Then, rules of inference prove theorems from axioms and prior theorems.

Calculations can be done on formula. The mathematics can be thought of as computation, and the formula are software. For the software to exist there must be some object, hardware, that does the calculation. Calculation requires a tool to perform the calculation. Note here that tally sticks (notches in stick or bone) are one of the earliest known material encoded calculation tools (they are also thought to be where the Roman Numerals came from). A tally stick is a physical system, the same as a goat herder with a population of goats are a physical system. Each time the goat herder lets a goat into another field, s/he notches a stick. In the end, there are as many notes on the stick as there are goats in the next field. In other words, accurate information about the real physical world has been encoded into the physical world, which may then be shared by those who understand its meaning (i.e., pattern of each notch representing one goat and a different field). This computing tool can then be used to count and check the number of goats transferring in total between fields, and eventually, a user could use the system to control the transfer of all goats between all fields. Imagine the concept of resources in place of goats and the concept of economic sectors in place of fields. Using highly complex digital computing systems (of which tally sticks were an early version of) it is possible to count, check, and control for the allocation of all resources transferred between all economic sectors at a global level. Tally sticks work as an information processing (calculation tool), just as computers do, because they are all physical systems (i. E., the goats, resources, sticks and computers are all physical systems), which consciousness is capable

of understanding through a physical interface. The relationship between the physical system of goats and fields is preserved as an carving (engraving or encoding) on a tally stick. All maths is essentially a matter of making small physical systems or tools that model the world directly (as a one-to-one relationship). Then, an abacus is a more complex and useful computational physical tool. The, a computer is an even more complex and useful computational physical tool. All of euclidean geometry is a set of rules, which may be physically visualized by a physical drafting tools. Even a slate and a chalk in digital or physical form is used to do the operations and show to another that the operation has been done. The process is that a conscious observer observes the state change of an abacus or slate, the conscious observer remembers a rule that causes that state change, the conscious observer then acts to move beads in the abacus, or to write something down in the case of the slate. In this sense, a computer is a unification of maths, memory, and the sequencer in a physical object, or objects. And, prior to the digital computer, this is what a computer meant, it meant a person who knew maths working with a slate or abacus like tool who remembers states and executes rules.

It was realized by Turing and others that machines (i.e., mechanization) could be used to do computations (replacing human mathematicians), if a machine could be built that (i.e., the following is all that a mathematician does):

1. Could detect some number of [physical] symbols at a time.
2. Have finite internal memory or state.
3. Have a set of rules in read only memory.
4. Has a read write memory to record calculations.

Turing proposed an actual machine that used purely mechanical procedures that could do the same process as a human mathematician. These characteristics are the characteristics for a universal computing device that can perform any computation that anyone can do, including a mathematician. Fundamentally, computers can be applied to computations that correspond to something that exists in the real world, and the real computations are always done with physical devices. The effectiveness of mathematics is always the effectiveness of a computational procedure for modeling some part of the real world (e.g., the number of sheep leaving a field, or, the number of resources and their trans-fer/-formations between economic sectors in a habitat). A procedure is a set of rules that are expected when used to lead to the same answer or result.

3 The methods of science

A.k.a., The scientific approach, scientific thinking.

We value the method(s) of science in its ability to provide validity and to evolve our knowledgeable understanding of the world. The methods of science refer to a body of processes (or techniques) of investigation of natural phenomena. This is accomplished through the most modern methods of questioning, observing and learning, measurement, testing and experimentation, and integration, applied to the acquisition of new knowledge, correcting previous knowledge, and demonstrating the validity of a particular understanding. These iterative understandings may be useful in solving problems involving our common fulfillment. The method(s) can be applied at the social level for the purposes of social concern. The specific purpose of science is to expand our knowledge of our shared reality; it facilitates an understanding of our shared environment. At a practical level, science is a useful standard [tool] for better understanding our real world. And, through more accurate information we arrive at more accurate decisions. Science is about model (pattern) creation and model (pattern) validation. Model creation involves the rational scientific method, and model validation involves the experimental scientific method.

Science is the intellectual and practical activity encompassing the systematic study of the world through observation, experimentation and intentional discernment. There are many ways to see the world, such as through: politics, belief, tradition, superstition, money, science, systems. When someone looks through the lens of a 'systems worldview' the method of science is not artificially restricted in its application; it can also be applied to the social system, to the economic systems, to the learning systems, and as a method to more greatly clarify humanity's understanding of itself. There is a natural feedback system built into physical reality, and it is mirrored in the human brain and in consciousness itself.

These methods of science are used to discover more about the natural world and its cause and effect relationships. And, their explanations are tested using sensed and causally controlled evidence from the natural world; wherein, their explanations are understood through visualization. Evidence of a theory ought not convince people of the validity of a theory without accompanying understanding and direct, conscious life experience. Evidence of causality is experienced as conscious sensation, observations and measurements that facilitate the understanding of a natural [law] phenomenon - evidence is contextually sensed data. Causality is about feeding forward of the awareness of systems so that they may be understood and intentionally evolved. Causality takes place in time, so causality is necessarily a temporal process. Scientific causality is that which can be visually and experimentally explained; whereas, engineered causality is that which

can be visually simulated and constructed to be operated.

Causality is the means humanity uses to perceptually "source down" (i.e., look down and more closely) to that which is trying to be understand, to the true root origins and causes of human issues and natural phenomena, so that humanity can correct, re-structure and re-orient its systems [toward synthesized patterns that more certainly cause our well-being and overall fulfillment]. The courses-of-action we do or don't take are naturally based upon [to a large extent] whatever we establish as the cause of something, so developing a shared working approach (i.e., scientific inquiry) toward the understanding of causality can be influential not only in finding optimal solutions, but in getting on the same direction as a global population. Herein, our effort is directed toward uncovering to the root causes to social and ecological problems, as it is easy to become lost or stop short of where the problems really lie.

The methods of science have their basis in the field of empirical research and rational inquiry. Research and inquiry lead to the discovery of knowledge. It is the way we find out what works best; it is partially how we progress. The scientific method is [in part] about correcting previous "knowledge" using a method based upon gathering measurable evidence via repeatedly tested hypothesis against the benchmark of the natural world to "prove" validity. Ideas are valid to the extent that there is sufficient information and cause for the probable certainty of the idea's validity. We can test our changes to our environments to see if we get the results we expect; which we add to the base of understanding from which we develop fulfillment. And, by devising better tests we can refine our theories. The scientific method never proposes "truth"; instead, it continually seeks it through empirical observation and measurement upon the benchmark of the reality we all share. Truth becomes a process of factual refinement. Herein, truth is a process - a search for a consistent empirical regularity. The beauty of the "laws of nature" are that they still remain "true" whether you believe them or not. Practically speaking, this is why we must use "nature's laws" to inform and guide our community. Yet, no laws are ever broken when science encounter a new discovery. In science, the "truth" is discoverable and emergently knowable.

The scientific approach has gained credibility because of the success in the approach in improving our everyday lives. The credibility was the result of adherence to a multi-step process of discovery and validation. People often mistake the individual steps, the tools or methods of science, as being sufficient to indicate that the approach is scientific. That is simply wrong. You can read all of the scientific literature to come up with an inspiration for a theory, but you have not completed the experimental scientific process until you have designed an experiment to provide reproducible, unbiased data to support the theory. You can do all sorts of calculations with equations and computer models, but you have not completed the scientific process until the results of predictions are verified by unbiased observation. You can

do all sorts of clinical and epidemiologic observations, but you have not completed the scientific process until you have performed a prospective trial. You can do all sorts of decision analysis and mathematical logic, but the scientific process is not completed until the procedure is prospectively tested.

Nature is fact[ual], it is truth and reality, it is inherent and objectively discoverable through observation and experience. "Source dynamics" (or the technically dynamic principles of which nature is systematically sourced) are existing conditions that are binding and immutable. They are the deterministic component of "creation" (i.e., the creation of a potential in an decision space). There are real limitations in this material reality. The evidence exists in the real limitations that consciousness bumps up against and senses (Read: identifies sensorially). Hence, there are "design problems" because there are limitations; there are real limitations in this technical reality. Consciousness cannot simply imagine flight and have its body respond to the thought by flying up into the air [as might occur in a lucid dream]. Yet, knowledge, in truth, starts with imagination and curiosity, and it involves a structured process of inquiry that maintains the ability to re-orient toward that which exists. Thus far in known history humankind has been using this thing called 'language', it is a technology for describing that which exists. And, what is society describing with this technology but problems with solutions in our fulfillment [to varying degrees].

In its most general sense, science involves: *observation, identification, description, experimental investigation, and theoretical explanation* of phenomena. Experimental evidence is evident to all observers who have the ability to sense it (process it as a 'signal') and "witness it".

Essentially, the scientific method(s) allow us to measure the effects of our models of reality, and to improve them so that we know more about how to fulfill our needs and maintain alignment with our purpose. If we identify our needs and make them objective [to some degree], then science will be able to provide data toward their optimized fulfillment. Essentially, scientific work is about discovering increasingly accurate descriptions of reality and applying the results for mutual technological benefit [via synthesis into a model that we use to commonly orient society toward greater fulfillment]. Scientific models provide information in the coordination of decisions toward all forms of progress. And, all knowledge we gain through the use of the scientific method remains emergent in our modelled understanding of nature. Wherein, nature represents the design patterns of the universe. Essentially, everything is just science to the universe. And fundamentally, we are scientifically reliant on the processes that take place on this planet and provide for our life needs.

Science is an epistemology, it is a way of knowing (or, coming to know). Science is a method that transcends ideology and personal belief in its acquisition of reliable information of how the world really works. It attempts to create predictable models of feedback that are

rigorously examined, tested, and replicated until an emerging "consensus" develops and the principles thereof become a part of our technically oriented community. The overarching aim of science is that of 'self-correction' and 'standards of evidence'. Wherein, the "scientific consensus" is about the replication of experiments that agree with each other and lead to an emergent scientific truth that is understood. Science is not done via consensus; consensus is the result of doing science. In science, consensus becomes the emergent expression of a verified logical argument.

The "scientific feedback mechanism" is the experience of observing the results of a specified behaviour or controlled processes. It is a feedback mechanism that all living organisms have to greater and lesser degrees - humans have always had it. Repeatedly controlled evidential observation (scientific knowledge) leads to a pattern of experience re-organized into a model (theory) reflecting the total phenomena. Science may be generally divided into that which is hypothetical, theoretical, and empirical (as in, an objective physical experiment). Science is [in part] the search for [identifiable] patterns in nature (Read: the world around us) through which models are created to help us to understand, to explain, and to design. A model is a structure that depicts an understanding of how something works. It is the way in which we think and talk about something [so that it makes sense].

In application, science involves the emergent discovery of universal principles that may be applied to social concern to create better living and better science [for humanity]. Therein, nature's way provides an example. Science involves a method of inquiry into nature specifically designed to derive predictable technical principles from an existent system while accounting for all known influencing variables that can be accounted for given what is known. Note could be rephrased to state "... to derive predictable laws of existent properties". Principles are synthesized out of experience, which are then used to make a test of an invention that is developed into a comprehensive strategy (e.g., "economy"), which if left uninhibited will alter humankind's patterns [without its awareness]. Within a community-type society, the population considers a comprehensive fabric of mechanics so that individuals, and society at large, alter their patterns with awareness.

Science becomes both a body of evidentially verified knowledge that reflects the current understanding of the world as well as a set of processes for *discovering, verifying, and refining* that knowledge.

INSIGHT: *Valuing knowledge did not come from science, science came from valuing knowledge.*

Essentially, science in its most pure form is the unbiased search, the open inquiry, for natural explanations for all phenomena (i.e., all behavioral signals); and as observational sensory evidence it has the following attributes:

1. **Consistent** - internally and externally consistent; unifying conclusions.
2. **Repeatable** (replicability) - the same types of situations/actions lead to the same results.
3. **Correctable** and **dynamic** (re-evaluation)- changes are made as new information discovered.
4. **Empirically testable** and **falsifiable** (falsifiability)- based upon controlled and repeated **experiments** and **evidence**; includes observations, predictions, and controlled verification.
5. **Parsimonious** - careful and sparing in proposed entities or explanations; Occam's razor. Note that being parsimonious can be useful, but it can also be an impediment to understanding a complex and dynamic system. There is also the saying, "Be careful with Occam's razor, for it can cut you".
6. **Progressive** (integratable) - achieves all that previous theories have and more; accurate and non-contradictory integration.
7. **Tentative** (emergent) - admits that there may be more to know rather than asserting certainty, emergent.
8. **Useful** (applicable) - describes and explains observed phenomena with a rational mechanism, and may be applied toward function optimization and human extensionality (i.e., technology).

The constants of nature are precise and knowable, or at least probable approximations of them are, and the universe is clearly highly self-regulating or we wouldn't exist.

The methods of science (e.g., the scientific method) are primarily an analytical approach to the acquisition of knowledge and to problem solving. A correct analysis, and eventual solution, requires accurate and factual knowledge. Science is the only known way to produce reliable and verifiable knowledge -- knowledge that is verifiable and is accurate to that which has happened. The analytical approach separates a whole into its constituent parts in order to study the parts and their relations independently. However, science is unique in that it also involves the verification of its own methods. The methods of science are transparently fed into the new refresh of our current model of reality, which represent an unbiased approach to the most developed theory. Once we experience a signalled frequency, then we can begin the process of isolation. The more we can control the isolation of the signal, the more closely we are targeting the source of the signals frequency.

In general, the application of the scientific method involves controls - controls on the conditions of the experiment and under which a given phenomena takes place. Manipulation of the environment in an experiment provides a way to minimize the number of alternate explanations for the data and increases the likelihood of arriving at the correct conclusion. In many experiments, a "control group" is a form of such control

[about the source of a signal]. Herein, it is relevant to note that 'observational studies' find *association*, and non-controlled observational data generates *correlation* (as opposed to *causation*) and they cannot be used to draw scientific conclusions; yet, such data can be used to facilitate the formation of a hypothesis. Whereas, highly controlled studies can be used to draw resulting statistical conclusions.

The application of the scientific method necessitates critical thinking and reasoning. Critical thinking involves [in part] the questioning of assumptions as well as the removal of contradiction through the application of analytical and logical thought to determine greater accuracy in the verification of identity. The questioning of assumptions is necessary for the method to duly fulfill its purpose. Herein, scientific reasoning involves the concurrent application of abstractions or symbols in formal relationship to variables or dimensions within the context of probability and proportion.

The purpose of science is not that of duality, or "paradoxical non-integration". To say that science is "true" or "false" is a mistake of language, since it is not the sort of thing that can be true or false, but a set of methods for testing ideas against how things really are, not a claim, a belief system or an ideology. Black and white thinking eventually turns into belief. Belief is the enemy of adaptation because a belief is an imposed limit, not necessarily an actual limit. There is something fundamentally different about being "open to a possibility" and "believing in it". When "you" believe "you" are no longer open to new information. If you "believe it", then you are no longer open for "it" to be different, and you don't have to collect any more data on "it"; essentially, you have become attached to "it" [without evidence for it]. Science is void of arbitrary restrictions to the acceptance of a set of results as evidence; it does not have attachments in its transparent usage. In science, everyone is on the same side. In science, if someone corrects your thinking, then they make you a better individual, a better "scientist". And yet, it is important to remember that science, as a tool, is always applied in-context.

In any society, the question must be asked, What is the environment within which "science" is said to exist? Is the environment within which science exists conducive to arriving at the best conclusions and the most accurate information? Therein, does information about the world have a monetary cost? Is information in society potentially useful for competitive advantage over others? If you want to understand anything will it cost you something? Fundamentally, the cost of information (i.e., information costing money) has social consequences, the principal of which is as a structural limiter on human potential for social understanding and cooperative development. Some forms of social and economic organization incentivize the skewing, manipulation, and obfuscation of data.

In scientific discovery, argument and progress come from a place of openly inquiring. Thus, those who hold

beliefs will be frustrated by science because they are not open to questioning and discovering more accurate understandings.

The scientific method presents an opportunity for us to discover through our individual senses the "laws of nature", the technical principles of reality, for ourselves. Scientific discoveries discover more about the rules of the larger system of which we are a part. And, a systems methodology has the potential of telling us *why* the "laws" are what they are. In community, we use the technical principles of nature as a template for our adaptation [to the total environment]. Our [in simulation-encoded] designs are based on our emergent scientific understandings, that which has been demonstrated [to facilitate and align with our fulfillment].

INSIGHT: *The constituent parts of every system exist in a world of cause and effect.*

3.1 What is science?

APHORISM: *The science of today may be disproven by the science of tomorrow.*

The purpose of science is to create hypotheses, but also to destroy them. Science is explanation so that other people can understand. In the literature, the word science has many definitions. Those definitions include, but are not limited to:

1. Science involves observation, identification, description, experimental investigation, and theoretical explanation of phenomena.
2. Science is the systematic study of the structure and behavior of the physical and natural world through observation and experiment.
3. Science forms predictive, and hence, useful models of utility about reality.
4. Science is the systematic building and organizing of knowledge in the form of testable explanations and predictions about the universe.
5. Science is understanding objects and mechanisms in a physical environment.

In science,

1. There are things which exist, and have been verified.
2. There are things which exist, and have not been verified to exist.
3. There are self-contradictory entities, which cannot exist.

In general, science is a process for discovering and codifying an understanding of how objects function and interact with one another. Those objects must exist somehow in the real world (i.e., they must have some real embodiment). Science is referred to as an objective

process, in part, because science is concerned with real world objects that may be commonly sensed and understood by humans. Fundamentally, in science, there is a lot to be learned from investigating all possibilities; though all possibilities may not be capable or desirable to be explored.

In general, science is a process for discovering and codifying an understanding of how objects function and interact with one another. Those objects must exist somehow in the real world (i.e., they must have some real embodiment). Science is referred to as an objective process, in part, because science is concerned with real world objects that may be commonly sensed and understood by humans.

Science is about modeling and predicting the behavior of nature, not what nature is, essentially, because science is a method in the system of nature. By modeling and predicting nature, inside the natural system, organisms can create technology that extends their own functionality. Science is a method for predicting and modeling behavior. Modeling appears innate to entities with the capability of integrating an adaptive response to an environmental stimulus. As a process of discovery and integration, science may inform the construction of models and tools that facilitate the efficiency of self-directed creation within a physical "thought-responsive" space. When we do science, through discover to self-integration, our understandings lead to new creations.

Scientific facts are determined by evidence (in experimental science) and visualization (in rational science), not consensus. Both evidence and visualization are a form of verification. Science is the way we know how nature works.

Science is a self-correcting process (the self-correcting process for the systems engineering). And yet, It is possible during scientific discovery to build inaccurate findings on previous inaccurate findings, compounding the inaccuracy. Full retraction of inaccurate findings is easily to reduce this effect.

Science, done properly, is bounded by a set of rules and practices that help to distinguish reality from fantasy, objectivity from subjectivity. The ruleset that composes this physical reality does not change with time (i.e., the laws of physics do not change with time). However, our understanding of this reality system may change with time as we discover and learn more about it. The laws of physics remain the same across all frames of reference.

The world operates via rules, which means it is predictable to some degree; it is independent of culture and language. If people share a blueprint or standard, it has uniform interpretation among those people. There is no cultural way of building something to technical specification, there is an engineered, mathematical and technical way. Science is about learning about the ruleset, and unless someone thinks s/he knows everything there is to know, s/he is going to learn something new in time and have a change of mind.

In the early 21st century, there is huge amounts of [research] money, prestige, power, and social influence

associated with scientific publishing and consulting. When there is socio-economic vested interest, there is highly likely to be manipulation. Further, amid valid science, it is easy to create an environment of confusion by paying off just a few spokesman.

Humanity can use scientific study (i.e., the scientific study of the world) to harmonize humanity's behavior with nature. Science is an important part of an emergent social system. An established system is unlikely to see a value in science, because one of the advantages of using science to approaching humankind's problems is that it advances humankind. Those who apply science without market and authoritarian filters are unlikely to hold onto old, outdated, falsified ideas and concepts. Established systems do not seek advancement or evolution. In an emergent system there are no final frontiers.

3.2 Scientific evidence and decisioning

Not all information is useful for decisioning. Repeatability is one of the criteria for determining whether a test is useful. If scientists and engineers can't get close to the same results, then the information cannot be relied on it for taking decisions. Evidential information has some associable certainty, and is the primary type of information used in decisioning.

However, it is important to note here that certainty can be a barrier to open mind exploration of ideas and experiences; certainty without some degree of openness to new information, blocks someone from seeing and observing the real. When someone has certainty s/he may fail to test and visualize reality, which would otherwise reveal his or her misunderstandings about reality.

The types of evidence (Read: information useful for decisioning) include, but may not be limited to:

1. Pattern language (systems logic, rational reasoning with a visual mechanism)
 - A. The rational scientific method (rational science)
2. Sensory observation of object or process (experimental control, differential reasoning with a statistical/mathematical mechanism)
 - A. The experimental scientific method (experimental science)
3. Visual survey of object, object motion, or the result of an informational operation:
 - A. Identify user demands (user issues with fulfillment, user accounting).
 - B. Identify evidence of available resources (resource accounting).
 - C. Identify evidence of knowledge, skill, and technology (team capability accounting).

All experience occurs within consciousness, and consciousness can have awareness of itself and its surroundings in a physicalized reality where socio-

technical interconnection is possible, and therein, self-discovery and evolution. Evidence provides useful certainty when constructing individual and social vehicles to navigate a common and emergently discoverable environment. Evidence is necessarily experiential by consciousness. Conscious can derive inaccurate conclusions from the experience of evidence; evidence can be misinterpreted. Yet, nothing is more powerful at delivering "proof" than firsthand, conscious experience.

If an individual's experience is the method of proof, then reality can be:

1. **Understood and communicated** between
 - Conceptually - for example: $2+2=4$; a dog's fur is white.
 - Visually - for example: those two objects together; that dog's fur is white.
2. **Experimented** with
 - Experientially - for example: I am experiencing more of that type of object [of which there were initially two]; I am perceiving that a dog's fur is white.

3.2.1 Evidence

MAXIM: *What can be asserted without evidence can be dismissed without evidence. Therein, denial without evidence retards scientific inquiry.*

In a community, the veracity of claims to knowledge cannot be determined by whether something is told to all, many, or told to none. The community must use at least unbiased evidence and corroboration; logical reasoning; and complete transparency with the scientific methods of observation and analysis.

What is the alternative to accepting a claim on the basis of sufficient evidence in support of it? Two logical alternatives exist: (1) accepting a claim with insufficient evidence supporting it; and (2) accepting a claim without any evidence supporting it whatsoever.

All technical truths about our common reality have the potential for eventually being verified or demonstrated. If a truth cannot be reliably demonstrated, then this is solely due to our current limitations. A truth may also be an element of a greater truth, a larger system [of understanding], so the realization of truth is always evolving.

The question then becomes: is there anything that demonstrates or tends to prove that evidence is necessary for rationally accepting claims of truth? And, what evidence is there for supposing that claims to knowledge need evidence in order to be rationally viable as a factor in orienting and deciding? The evidence is three-fold:

1. The nature of human consciousness;
2. The nature of knowledge;

3. The nature of reason.

Let us examine each of these individually, keeping in mind the definition of 'evidence'. According to one common online dictionary (2012), evidence is "that which tends to prove or disprove something; ground for belief; proof." The Oxford English Dictionary (2012) defines 'evidence' as: "testimony or facts tending to prove or disprove any conclusion". Social proof is evidence so strong that someone can't statistically or reasonably deny it, because it is commonly/equally computable, visualizable, and/or able to be pointed at.

In regard to the nature of human consciousness, the very fundamental fact that consciousness is consciousness of something [a self-evident] has pervasive importance to the present area of inquiry. It means that consciousness needs an object, and it is this object which conscious activity beyond the perceptual level of cognition (i.e., conceptualization) identifies and integrates into this grand phenomenon known as knowledge. The objects of awareness inform consciousness so that our consciousness has content, has awareness of something. Without content to be conscious of, there is no consciousness. Consciousness with nothing to be conscious of is a contradiction in terms. Since consciousness needs an object, any activity which consciousness performs must have an object – whether it is in the form of direct perception or inference based ultimately on direct perception. The object(s) of awareness inform its activity with the content it requires to act on in the first place. Consciousness is conscious of its surroundings [by degree] and it can discover the nature of reality and identify it by an objective process (if such a process is revealed and selectively integrated by the conscious). Consciousness inquires into and discovers evidence of a true existence.

In essence, consciousness refers to the phenomena of awareness, irrespective of who/what is being aware of who/what/when. Imagine for a moment, trying to study anything, without implicitly acknowledging the existence of the phenomena of awareness. Imagine trying to explain the causes of sensation (which is merely the awareness of a stimuli), or perception (the awareness of not just individual stimuli, but of other existents based on the integration of multiple stimuli), and finally concepts (let's just call this awareness of complex patterns among many existents), without first integrating and using the concept "consciousness" (which identifies the fact that awareness exists, has as its object an existent or more, and is dependent on time - but that's it, it identifies nothing more). Here, it is through mindfulness and introspection that we develop our self-awareness.

When we know ourselves, then we may exchange information with "other" selves, accurately (i.e., *usefully*; through *precise* coordination and through *knowledge*). Through the accurate exchange of basic information about objects in the surrounding environment, we can come to more coherently create toward our fulfillment (as opposed to individual achievement at the expense of

our fulfillment).

In regard to the nature of knowledge, we must keep in mind that, just as consciousness is consciousness of something, knowledge is also knowledge of something. Knowledge of nothing at all is likewise a contradiction in terms. Knowledge must have an object, and it is ultimately our awareness of objects which provide the basis of knowledge as such. In reality, knowledge is earned by the cognitive effort of the mind which possesses it. The content of objective knowledge is the facts of reality. This ties in directly with the proper understanding of the concept of objectivity, which is defined by objectivism: "To be 'objective' in one's conceptual activities is to volitionally (i.e., through will) adhere to reality by following certain rules of method, a method based on facts and appropriate to man's form of cognition" (Peikoff, 1993:117). If what one claims to "know" is not based on facts gathered by "a method based on facts and appropriate to man's form of cognition," then it is not legitimate knowledge. Facts that inform knowledge are the evidence that provides knowledge with its objective content. Consequently, without evidence to inform one's knowledge, what someone may call "knowledge" is not fact-based, and thus it is not really knowledge at all.

In regard to the nature of reason, consider first of all what reason is: "Reason is the faculty that identifies and integrates the material provided by man's senses" (Rand, 2011:20). Without "the material provided by man's senses," there is no content for reason to identify and integrate. Reason is a conceptual activity, and conceptual activity requires input (i.e., evidence) from reality, beginning with perceptual awareness. Concepts are formed in part by isolating and integrating objects which a knower perceives in the world around him or her. Thus, evidence is a non-negotiable part of rational knowledge – knowledge with a logical connection to the real world.

As a concept, reason is defined as the neuro-cognitive processes that identify and integrate the material provided by a human's senses. Reason integrates perceptions by means of forming conceptions or abstractions. The ability to reason provides the human organism with a larger decision space than other organisms on the planet; a decision space that has the potential to include knowledge of the complexly systematic and technical nature of reality, which provides the ability to consciously caretake an environment. This "faculty", reason, allows for the emergence of strategic planning and other survival-oriented process[ing] strategies.

Since reason is a distinctive tool of survival for the human organism, a process or method is needed to discover when reason is being utilized "properly" or "improperly", in alignment with reality and with verifiable human fulfillment. The concept of logic provides for this. Logic is the nested central process and method of all proper reasoning. Logic is defined herein as the process of non-contradictory identification. It is a creative process by which a consciousness identifies and relates to things

[interfaced with] in reality in an integral (as unifying) way. For example, A is A, A is not non-A. A thing cannot be itself and not itself in the same way in the same respect for that would be a contradiction. Logic provides the potential for identifying non-contradictory relationships in a unified reality. And, there are no contradictions in a unified, objective reality; there are just errors in understanding and integrating the perceptions of this reality. Thus, the task for individuals, for our minds, depending upon our level of development, is to understand reality in a non-contradictory way [through the process of logic] so that we can commonly devise ways of deciding and creating that accord with the reality of our existent needs, rather than opposing them.

To integrate and effectively explore reality individuals must examine the real, relational conceptions that drive their behaviors. Logic, as the artistic expression of non-contradictory identification, is a way to understand concepts as they are related to each other and to reality; and hence, as they relate to the fulfillment of real human needs. Evidence is gathered in the form of data

In all three cases, the nature of human consciousness, the nature of knowledge and the nature of reason, evidence (i.e., factual content gathered from reality by an objective process) is vital to accurate human cognition and fulfillment. These are the evidences, as intimate to the human mind as they are, underwriting the epistemological proposition that evidence is necessary for rationally accepting truth claims. Starving the mind of evidence will not produce knowledge of reality. On the contrary, it will only scramble the mind and turn it loose in a fantasy-world of its own partial creation as it surreptitiously borrows from the very realm it seeks to reject.

Something which must be borne in mind is the fact that an arbitrary claim is one for which there is no evidence, either perceptual or conceptual. (Peikoff, 1999:64) Such a claim has no tie to reality and "has no relation to man's means of knowledge" (Ibid.). Evidence ties knowledge to reality, making what we know, "knowledge of reality". Our only cognitive contact with reality is perceptual awareness. Conceptual structures are informed by the evidence of the senses, and ideally formed according to the strictures of an objective process, and consistent with the norms of rationality, are objective. The only alternative to this is to abandon objectivity in preference for faith and belief, which lead to the bypassing of reality systems that are unpredictable in their orientation toward human fulfillment.

Today, emotional thinking often drives the beliefs that people hold. What is a belief? The word 'belief' represents a concept. This concept has the distinguishing characteristics of a mental process by which someone has integrated something, with an element of faith that may or may not be based on the facts of reality. It is something for which there is not sufficient evidence to accept as true[ly in alignment with existent reality]. There are overwhelming multiplicities of beliefs in people's minds today that are not based upon the facts of reality.

JOURNALS AND PEER REVIEW

Scientific journals (i.e., publications) select what they want to publish. And in general, they are known for not publishing research that they are either uncomfortable with, outright disagree with, or that contradicts the ideas being put forward by their funders/sponsors. Yet, 'publication bias' shouldn't cause one to reject science; it should cause one to be especially careful in their verification of all science done by industry, for competitive entities are likely to engage in gaming strategies, many of which mask propaganda with the moniker of science.

In the market, releasing content early can affect a scientist's ability to publish in a journal. In the market, the process of getting knowledge to the public and into application is often slow and broken. Frequently scientists don't want to share potential discoveries with the public until they are sufficiently vetted. Journals have historically reserved the right to vet discoveries and tell the world about discoveries. Some scientific journals will reject work if the author(s) have discussed, spoken of, or released snippets of the work prior to submitting it to the journal. A tweet or podcast could upset the journals. In other words, journals can reject a scientist's work simply on the basis that it is not novel anymore. Alternatively, some journals embrace pre-communication and encourage pre-published releases of snippets in order to attract interest and facilitate their decision of what to decide to publish based on public interest. Journals can change the direction of study for decades because of a few key decisions.

In the market, there is intellectual suppression. Throughout the history of science famous researchers who eventually created entire new fields of science initially found it nearly impossible to publish their research. Some didn't succeed for years, even decades. The scientific community ignored them, but eventually they were heard; eventually they conquered the suppression, but only after a major fight. The journal editors rejected their papers because the new research results were in conflict with "common knowledge" (a.k.a., the scientific majority); they were too eccentric. Yet, the 'eccentric' ideas were right, and common knowledge was not. In many cases, nobody conspired to silence these revolutionary researchers. Editors and fellow scientists simply assumed that the eccentric papers were misguided.

It is wise to constantly ask ourselves, "Do I have the foundational understanding (i.e., expertise) to evaluate the claims that people around me are making?" In community we all have the opportunity to verify findings, which are discovered transparently and available for [re-]view by everyone. Yet, the market system [with its orientation toward competition, profit, and social status] "poisons the well" of its peer review contribution system. In the market there is a saying, "publish or perish". In other words, there is incentive for scientific misconduct in order to solidify professional careers and reputations, or further business pursuits. A "risk factor" is a condition that increases risk. Money is a risk factor for corruption, and it furthers the likelihood of corruption. In the market it is important to ask, who funds the "science"? Therein, the reason for altering data is simple: It's called job preservation. Yet, at another level, data might be changed to induce fear so that a dominating organization can assert more control (or, continue to exert control). Without transparency and informed verifiers data can be easily "processed" for monetary gain and social power. In community, instead of trying to falsify and influence, we just work with what we have.

The peer review process is designed as a check against fraud, poor quality research, and other issues that arise when journal editors are determining whether to publish a paper. In theory, the editor passes a paper to another researcher in the same field who can then check that the research is factual, relevant, and sufficient for publication. In practice, in a competitive market environment, this process is filled with bias and is not straightforward. The peer review system is rife with issues and abuse.^[1]

Sometimes the data is not false, but it is contextually misleading, because it pertains to population that is incorrectly presumed to be the whole population/the population in its natural environment. Such as studying cells in a 2d matrix versus their function in an organismal 3d dynamic space. The data about cloistered cells is not incorrect, but it would be misleading to apply it to cells in a symbiotic and dynamic 3d environment. Similarly, data about animals in a zoo is not incorrect, but to then apply such data to the behavior of animals in their natural environment would be misleading. Seeking to understand something by studying it in a separated environment, disconnected from its natural environment is not the best way to study something. Published peer reviewed literature often fails to flag studies with inaccurate conclusions because the data originate from findings with inaccurate contextual application. Hence, someone could be reading literature that is peer reviewed and appears solid, but would be invalid when applied to a different, possibly more natural context. When generating finding through the identification and analysis of the method context is essential.

NOTE: *A lack of research does not mean there isn't an effect. In other words, a lack of data does not mean that there is no effect.*

1. Bellus, J., Plumer, B., Resnick, B. (2016). *The 7 biggest problems facing science, according to 270 scientists*. VOXMEDIA. [\[vox.com\]](http://vox.com)

The same applies to opinions. Fundamentally, to achieve a world where people treat each other with conscience and maintain an authenticity in their communication, then we must begin to view our world from a logical and objective perspective [and which may be tied with empathic language, such as non-violent communication (NVC)].

Without the proper understanding of the nature of concepts and the process by which they are formed, all these points will be lost, and those who follow such fractured thinking will continue to press divisive debating schemes as though there were no alternative because one has not stopped long enough to examine such matters objectively and according to a rational and informed understanding of how the human mind operates.

3.3 Science in context

APHORISM: *contempt prior to investigation condemns you to permanent ignorance.*

Just because it hasn't been scientifically proven doesn't mean it has been disproven. Science is a description of the way the world works. No lifeform can behave independently of the way the world works. The more greatly we understand the technical principles of reality, the better we can design in the world. Politics sees science as a product that can be bought and sold.

In the market there is a business model to how science is done. Opinion stands in contrast to a scientifically deduced conclusion. Herein, self-integrating systems evolve by putting their ideas and biases to a test, compensate for our biases by putting our ideas to the test.

Curiosity allows us to direct our intentions and actions toward knowledge and understanding. Science presupposes that there is a regular order to nature and that there are technical principles underlying all natural phenomena. It assumes that these principles are, to a large degree, constant.

Faith quickly eliminates the need for any object, evidence, fact, argument, or experimentation. Industry has a very dirty practice of hiding all of the literature outcomes that don't conform to their profit-oriented expectations. A funded science is not a free science. When you get a grant from industry you are essentially working for that industry. Research ends up in the favor of the funder.

3.3.1 Science is a self critical and productively skeptical method

APHORISM: *"Science cannot solve the ultimate mystery of nature. And that is because, in the last analysis, we ourselves are... part of the mystery that we are trying to solve"*

The users of science are the community population and the InterSystem team engineers who apply science to

technological development of an information-based habitat service system network.

Science doesn't operate on consensus. The "so-called" scientific consensus is a statement: a scientific majority opinion that is widely disseminated and publicized. It is somewhat misleading: the collective judgments, positions, and opinion of the community of scientists in a particular field of study. Consensus implies general agreement, though not necessarily unanimity (i.e., majority opinion). It is a misnomer because the idea of "consensus" means "everyone agrees"; there is no dissent in consensus if it is consensus. It means the agreement of every participating individual upon a certain conclusion or claim. But, suddenly it has come to mean a majority opinion or claim, where if a few people dissent it is still being called a consensus, changing the word consensus to mean "a majority". This creates a confusion in terminology (or trivium grammar). Yet, scientific consensus gives society a place to start.

The Semmelweis effect/reflex demonstrated that hand-washing reduced the likelihood of death during birth. Similarly, Louis Pasteur is a metaphor for those who reject new information when it contradicts established norms, beliefs and paradigms that are embraced by the consensus. Ignaz Semmelweis went to a mental institution and then the grave in the dissenting camp, even though he was eventually proven right under the environmental conditions of his time.

If there is a consensus that translates into a practice of disregarding hand-washing as important, when someone with an alternative practice comes along and can compare their results to the practices that come from the consensus.

A lot of discussions which may be productive and educational are being stopped in their tracks because of this misunderstanding of an extremely powerful word, "consensus".

In a community-type society, instead of consensus, all evidence is within the reference of different explanatory frameworks, until verified visually, either physically or by some visual model, and then, it is still within an experimental framework, but it is now in an integratable category called verified, or visually understood (i.e., truly understood, repeatable).

There are many instances throughout recorded human history where "scientists" have said something is impossible, and then later, science has shown that it is possible. The "institution" of science is laced with situations where those who "break the mold" and try and push the edges of that which is being normalized get threatened and attempted to be destroyed politically, socially, professionally, and economically by those within the scientific institution. Some common examples throughout history include: Michael Servetus; Galileo Galilei; Alfred Wegener; Albert Einstein; Nikola Tesla; Alan Turing; Pons and Fleischmann; John Mack; Helmuth Nyborg; and Peter Duesberg.

It is important for everyone (i.e., essential for every stakeholder) to see (or have available to see) the entire

body of work around scientific research. The whole that you produce a study, you publish an abstract, and then, when people want to see the full text you say, not without payment, which implies that you are either lying or your research is flawed, or the research was conducted with the desire for profit or social status in mind, and thus, cannot be trusted and must be replicated.

Science is more than a body of knowledge, it is a way of thinking; a way of skeptically interrogating the universe with a fine understanding of human fallibility.

3.3.2 Science in context of claims about reality

APHORISM: *The greatest level of proof is direct proof through experience.*

Any claim to science must be examined with the societal paradigm that originated it. The scientific process can be biased or compound false results. The scientific process is corrupted by the profit incentive (i.e., it is corrupted by business). What information can be trusted when entities in participation are incentivized to withhold and obfuscate information that could be used as a competitive advantage. Business has eroded our sense of trust in science while reducing the incentive to share growth oriented experiences that attune us more greatly to the nature of an emanating, iterating, and iterating reality. Fundamentally, just because something (e.g., an action) isn't proven by science, doesn't mean it isn't valid. It is useful to be skeptical, but to identify as a skeptic can be intellectually disabling. Skepticism can quickly become dismissal without discovery. Skepticism based on ignorance is unhelpful and possibly dangerous, but skepticism based on science may be appropriate.

INSIGHT: *If individuals are not able to ask skeptical questions, to interrogate those who tell them something is true, to be skeptical of those in authority and in experts, then either, they are up for grabs to the next charlatan who comes by, or there is a structural power hierarchy for control of individuals.*

3.3.3 Scientific reductionism

A.k.a., Science without systems science.

Historically, designers have used the scientific method in an attempt to explain, predict, and control social, economic, and environmental transformations in the real world. In general, the traditional scientific method uses analytical thinking to handle problems, and follows certain major steps:

1. Reduction of complexity through analysis.
2. Development of hypotheses.
3. Design and replication of experiments.
4. Deduction of results.
5. Rejection of hypotheses.

In the context of design, the use of the traditional scientific method often leads to the following problem-solving process:

1. Define a problem.
2. Reduce the problem into sub-problems.
3. Find solutions for each sub-problem (sub-solutions).
4. Aggregate all sub-solutions in an overall solution that addresses the problem as a whole.

Without the application of systems thinking, a design approach that only applies the scientific method leads easily to reductionism. Reductionism refers to the belief that describing phenomena on one level (i.e., fundamental parts) allows the deduction of explanations from a higher level (i.e., entire system). In other words, reductionism believes that by reducing (disassembling) everything to its fundamental and independent parts, that the whole system can be explained -- the property of the fundamental parts deduces the behavior of the whole. Reductionism combines the description of the behavior of the fundamental parts to explain whole. For instance, it is highly unlikely that the traditional scientific method alone (i.e., without systems language) can solve for the future consequences of present actions (e.g., sustainability issues).

Historically, science without systems thinking leads to the ineffective handling of complex real-world problems, due the lack of understanding of the characteristics of the system currently in place and the inability to acquire sufficient knowledge (and certainty of knowledge) needed to address the real-world [root] problem. At worst, the unanticipated side effects of not perceiving a problem as systematic generates solutions that may create new problems, which confound and complexify the situation. For instance, a personal transportation solution intended to be environmentally friendly by offering technical improvements in energy efficiency may result in side effects, such as an increase in the number of vehicles, an increase in energy consumption, and an increase in miles travelled (Greening, Greene & Difiglio, 2000). To address such a scenario, the integration of systems thinking into design approaches is required.

Note that the reductionism critique of science as applied to social concern is not fully justified, because an honest and objective inquiry that starts from the analysis of the parts must still consider their interdependency to the whole through some principles and axioms. In order to reduce the likelihood of reductionism, systems sciences approaches human needs and social problems using methodologies, tools, and techniques that are associated with a systems language.

3.3.4 Science and service

We already expect science to inform the decisions we take in concern to the use of technology. For instance, we expect that science has been done when we use a bridge, interface [in a controlled manner] with an

information space (i.e., smartphone / ayahuasca), and travel in a technological form of locomotion (i.e., car, train, plane). If you use these services, you expect that someone has figured out how to design those things so that they function as intended and are not dangerous to you.

Science may be applied to facilitate the resolution of an inquired decision space where discovery is necessary. By applying the methods of science to discover more efficient and more regenerative ways of aligning with our goals and standards (i.e., "values"), individually and collectively (i.e., together), we can produce more fulfillment (i.e., more of that which we intend). In community, we appreciate each other's evolving interests, even if they are not marketable.

Ultimately, for science and engineering to be useful, they must look at the entire body of evidence. When unadulterated by the need to gain some kind of market advantage over a competitor, or simply for the sake of profit, science works as a feedback mechanism for improving ones understanding of the surrounding world around by means of testing, observation, visualization, and the adjustment of what is known based on a resulting experience.

3.4 What are the methods of science?

There are two core scientific methods (i.e., the methods of science):

1. The experimental scientific method
2. The rational scientific method

3.4.4.1 The experimental scientific method

A.k.a., The scientific process, the experimental scientific method, the experimental method.

The method of experimental science:

- Through observation, experimentation, measurement, collection of data, calculation, and interpretation experimental scientists reveal progressively better answers to how the universe works.

Therefore, the experimental scientific method can be generalized to:

1. Make observation.
 2. Ask a question and state assumptions.
 3. Form a hypothesis or testable explanation.
 4. Make prediction based on the hypothesis.
- Predictions come from models, the results of which are just as good as the model itself.
5. Test the prediction.
 6. Iterate: use the result to make new hypotheses or predictions. Interesting observations lead to further investigation.

7. Revise conclusions (theories, hypotheses) based on all available data.

Here, if someone cannot test it, then it is not science.

3.4.4.2 The rational scientific method

The method of rational science is:

1. Step 1: Hypothesis (synonym of assumptions) - a document containing:
 - A. Objects
 - B. Definition
 1. Initial scene/first frame(s)
2. Step 2: Theory (explanation) - A theory is only an objective explanation, for the purpose of understanding:
 - A. Mechanisms
 - B. Causes
3. Step 3: Conclusions - A synthesized result of the integration and association provides valuable results for decisioning:
 - A. Interpretations
 - B. Corollaries

Here, if someone cannot visualize it, then it is not science.

3.4.4.3 The first two methods combined into a single method

A combination of the rational and experimental methods of science might appear as follows:

1. Question (hypothesis) or assumption
 - A. Objects - shapes qualify as objects. All objects in the universe have shape; shape is the only universal property of all objects. Concepts do not have shape; only physical objects (as opposed to concept objects) have shape. Something is that which has shapes, and nothing is that which does not have shape.
 - B. Definitions - objects qualify as definitions. Math goes here.
 - C. Initial model of facts - models/explanations of existence qualify as facts. Math does not go here.
 - D. Explanation (theory) of model - having sufficient understanding of mechanism (dynamics) of existence that it can be controlled. Mechanisms are the how, are that which is explained. The explanation needs to come from a physical mediator, otherwise it is not a physical theory. Note that to explain something to someone else, math is not required.
 - E. Existence (experience) is an object that has location (position).
2. Test (controlled feedback)
 - A. Design and test object(s) to study control of

- A. existence given by initial model.
- B. Build predictably useful objects (i.e., technologies).
- 3. Integrate
 - A. Iteration of definitions
 - B. Iteration of model of facts
 - C. Iteration of explanation (theory) of model

3.4.4.4 *The experimental scientific method in greater detail*

The experimental scientific method can be viewed in greater detail:

1. Observation and description of phenomenon. The observations are made visually or with the aid of scientific equipment.
2. Formulation of a hypothesis to explain the phenomenon in the form of a causal mechanism and/or a mathematical relation.
3. Test the hypothesis by analyzing the results of observations or by prediction and observing the existence of new phenomena that follow from the hypothesis. If experiments do not confirm the hypothesis, the hypothesis must be rejected or modified (i.e., go back to Step 2).
4. Establish a theory based on repeated verification of the results.
5. Develop new technology based on the theory.

Herein, what scientists are most often looking for is a layer of efficacy in their procedures, and for many scientists, efficacy means [an emergent] truth.

3.4.4.5 *The rational scientific method's information sets*

The primary real-world (a.k.a., ontological) societal information sets include:

1. Object = physical, spatial, material
 - A. Object - That which has shape. All objects in the universe [of potential objects] have shape. All spatial objects have shape. What doesn't have shape is a concept. Between one or more consciousness, an object is that which you point to. An object is not that which we can touch and see; an object is that which has shape. Some objects cannot be touched or seen (electric and magnetic disturbances, waves, ropes). Spatial objects are pointed to physically (or referred in talking, writing, and visualizing).
 - B. Synonyms: thing, anything, something, body, physical, entity, finite, spatial, matter, substance, surface, medium.
 - C. Axiomatic properties of spatial objects: distance, location, motion, and material composition.

- D. 'Nothing' is that which doesn't have shape. Synonyms for 'nothing' include: space, vacuum, void, nothingness.
- E. Some objects can be detected by the senses. The senses are also an object. Organisms interact with spatial object through their physical body.
- F. A true [spatial] object has to stand alone and is made of a single visualizable (i.e., "point toable") piece.
- G. An object is not matter, is not resistance, is not a force; an object is not matter as the measure of resistance to a force.
- H. Static objects are actually concepts/principles, since an 'object' (matter) is always changing from one form to another, they are exclusively manifested, or "visualized through time". The object must be defined prior to defining anything related to motion (i.e., changing or visualized). Visualized requires a second object; someone has to do the visualizing, someone has to do the touching or changing. No verb can be included as a criterion for the definition of object.
- 2. Concept = abstract, mental, meaning
 - A. Concept - a word that evokes or embodies two objects, or two words treated as objects.
 - B. Abstract does not equal object. Equating an abstraction to an object is commonly known as reification, as in, to make something (which is possibly not real), real in mental cognition-behavior as a real-world object; money is the most common example of this. Authority is another high-level example.
 - C. Informational object (concept; conceptual) - That which has meaning. All conceptual objects have meaning. What doesn't have meaning is an spatial object.
 - D. Axiomatic properties of conceptual objects: definition, property, usage, and informational composition (composition may be explanation, language, or vision).
 - E. Informational objects are expressed in the following ways: vocal (talking), write (writing), draw (visualizing). Informational objects may reference other information objects or spatial objects.
 - F. A concept is a mental shape; an informational object.
 - G. A true [mental] concept stands alone and represent a unique thought pattern.
 - H. Organisms interact with conceptual objects through their mind (mental body).
 - I. Consciousness is the explanation of informational causes and mechanisms [by

- consciousness].
3. Science - Rational explanation; explanation of the real-world between one another for [conscious] understanding. Whereas concepts describe, rational science explains.
 - A. Physics is the science that explains how the world works. In physics objects are pointed to (pointed out) and concepts are defined (Informationally bounded). Physics is the explanation of physical causes and mechanisms [by spatial objects].
 4. Engineering - Certainty development (knowledge for socio-technical understanding) - is the science of engineering how systems work.
 - A. Society is the science of engineering how human systems work together.

3.5 Experimental and rational science

APHORISM: *Correlation is not causation, But when you have substantial amounts of evidence of correlation, you'd better take the possibility of causation — or at least, interrelation — very seriously.*

Experimental science is a description of the way the world works, and if you don't know the way the world works, then you are no going to be able to correctly describe some things occurrence. Herein, it is important to remember that experimental science is a method for sampling reality.

Rational science is an explanation of the way the world works, and if someone doesn't know the way the world works, then one is not going to be able to correctly understand some things occurrence.

The language of rational physics is illustration; the proposal has to be able to illustrate a mechanism (a rational physical interpretation; something that can be visualized). Alternatively, the language of experimental physics is statistics, math. Certain aspects of reality can be symbolically defined in mathematical terms. Therein, calculation is a mathematical process of comprehension.

It is important to note here that science (experimental or rational) is not the reality system itself. Science is not reality itself, and therefore, may not be capable of being used to fully explain reality (if it is a larger system). Instead, science supports consciousness in discovering more about the system within which it exists. A system can only be understood by its existence in a larger system. And hence, science by itself cannot lead to the full understanding of consciousness; instead, that requires first-hand conscious experience.

3.5.1 Experimental science (the experimental scientific process/method)

MAXIM: *Things are of scientific interest mainly based upon their capacity to be observed repeatedly. Therein, to observe regularities, "you"*

might have to look through something regular.

Experimental science is the systematic study of the universe through experimentation. An experiment is reproducible if experimenters can run the same experiment and get the same results at a later date. If an experiments is truly revealing some fundamental truth about the world, then that experiment should yield the same results, under the same conditions, anywhere and at any time. Interpreting results through experimentation and observation. The scientific method calls for the elaboration of a predictive model of the system under study. The model should reproduce the existing experimental results and should be predictive regarding future experiments. By performing these experiments we validate the model, or refine it to a better model that captures more facts about the system. Science works by studying problems in isolation. In science, if you want to show that a model is wrong (i.e., doesn't describe reality). All you have to do is make a prediction from that model, and then show that it doesn't accurately describe reality. Reality is the ultimate judge.

Science exists to help us predict so that we can design the improvement of the quality and fulfillment of our lives. Science is self-regulating because studies are repeated. Experimental science is working out what is likely and probable to happen.

In experimental science, correct prediction means that there may be some degree of understanding.

In experimental science, theory is a framework of testable predictions that accounts for all known evidence and can account for more evidence that is not yet known. The essential process of science is to duplicate the science and try and find something wrong with it.

Falsifiability means that there has to be some way of proving it wrong in order for it to be right. To be falsifiable in a physics viewpoint there has to be a physical experiment that shows (or verifies) the model, and could possibly show that the model is wrong. Experimental science often misses the assumptions that rational science is the foundation of rational science.

In an experimental scientific paper, the author is supposed to state:

1. What information was available.
2. What was done.
3. The results/conclusions from what was done.
4. What are the limits and the problems still left to be resolved.

Science is building and organizing knowledge in the form of testable explanations and predictions.

Three fundamental assumptions-these are axioms, we cant know them for certain:

1. The universe / reality exists. Currently we cannot have an observation independent of anything else

- that the universe exists.
2. We/individuals can learn something about reality.
 3. Models with predictive capability are more useful than models without. There are two categories : things that have predictive capability and things that do not. Science asks, does this model have predictive capability. If it does, then it is robust. If it is really robust, then it is called a theory. Theories are things with a high degree of predictive capability.
 4. The brain is a pattern recognition, model forming system.

Science can only explain why things are the way that they are if there is an observed causal progression, a "history" (an information trace in an environment) that caused them to become the way that they are - an iteration. Hence, scientific explanation requires verification and necessitates hypotheses that are vulnerable to falsification. Notice that the concept of falsification is based on the assumption that all facts are physical, because a physical experiment is required. A 'theory' is not a 'theory' if it cannot be tested. There must exist some experimental signal that can be triggered and observed.

The [experimental] scientific method assumes that a system with perfect integrity and optimization yields a singular extrapolation within its organization that one can test against observed results. Where the results of the test match the expectations of the scientific hypothesis, integrity exists between the cause and effect of the hypothesis by way of its methods and measures, which create a space of probable certainty. Where the results of the test do not match, the exact causal relationship delineated in the hypothesis does not exist.

The scientific method cannot accomplish anything if the phenomena being explored with it are not consistent by means of 'reliability' and 'verifiability'. It is important to bear in mind that validity and reliability are not an all or none issue, but a matter of probable degree. Fractional measurement is an important part of the scientific process, and therein, the two main measures in science are 'reliability' and 'validity':

1. **Reliability** - a measure of the internal consistency and stability of a measuring device. Measurements are reliable to the extent that they are repeatable and that any random influence which tends to make measurements different from occasion to occasion or circumstance to circumstance is a source of measurement error.
2. **Validity** - an indication of whether the measuring device measures what it claims to. Validity is the extent to which an instrument measures what it is supposed to measure. The question to ask is "how valid is this test for the decision that I need to make?" Or, "How valid is the interpretation I

propose for the test?" We can divide and classify the types of validity into *logical* (or *non-empirical*) and *empirical*. Scientists distinguish among different types of validity, and different disciplines refer to the same type of validity using different names, which sometimes can create confusion about what type of validity is being assessed.

- The validity of ideas is not subjective. The question of validity will be valid until the end of time, because the emergent nature of knowledge causes consciousness (and the information systems it creates) to change its understanding of every phenomena, given newly available information.

Science is not based upon the consensus of others' opinions. Our values and beliefs do not exist in a vacuum, and as such, they have consequence on the rest of the world; therefore, it is of paramount importance that we continually update our values (and beliefs) as our abilities allow us using the tools available to us. Science is one of those tools that allows us to see past opinion to create more reliable and valid models which we may use to more greatly orient ourselves toward a higher potential of fulfillment.

The scientific method is a common systematic procedure used in science. Science is procedurally implemented. It consists of 4 tasked actions (or "steps") [performed by a "procedural construction entity"]:

1. **Observe reality:** Making any kind of measurements about a particular behaviour or effect within reality.
2. **Generate hypotheses:** Coming up with several different theories about why this behaviour is observed. For this the scientist looks for similarities between known phenomena and this newly observed effect.
3. **Extrapolate:** The most likely hypothesis is selected, refined and a blueprint for an experiment is designed which can be used to verify predictions on what kind of behaviour is to be expected under a particular set of initial conditions
4. **Verify theory** in a repeatable experiment: In order to verify the hypothesis an experiment is performed in order to check if the expected reaction to certain inputs fits with calculated output of the theory. It is important that these experiments are repeatable.

Herein, "labelling" improves (or, allows) for probing capability within a navigable environment. The right kind of strategy will prevent "you" from missing things as "you" navigate with the tool as 'science'. "Labelling" is a navigation strategy that is necessary for the facilitation of integration [at scale]. However, the labels themselves must be corrected for by [the integration of] evidence.

Although "labelling can be disabling", it is also necessary to subject that very thought to integration.

The methods of science involve a systematic process of inquiry by which we "prove" or "disprove" our perspectives and evolve our knowledge and eventually our technologies. Fundamentally, the function of science is to produce better explanations - the drawing of increasingly appropriate connections, and information validation. The methods prevent aimless wandering that occupies time and resources without validating anything for its benefit.

The scientific reasoning process has been used in combination with other "naturalistic knowing processes" (e.g., shamanistic and other intentionally and introspectively mindful communication forms) used by many types of organizations across historic time to develop knowledge bases and build up an understanding of their environment.

The scientific method enables progress in a desired direction by discovering and clarifying phenomenal regulations in reality. When engineers design systems-based solutions they desire the most updated scientific view to work with so that they have the information to arrive at optimal design decisions, to generate the most informed solution for a specific function. Engineers design for 'function'.

We recognize the emergent nature of knowledge, and therefore, any knowledge we gain through the use of the methods of science is also in emergent in our awareness. Findings as a result of following scientific methods are always subject to review, replication, and scrutiny. And, as logical ideas emerge they are accepted or rejected on the basis of empirical evidence. Yet, not having evidence for something doesn't mean that it isn't relevant or unimportant. Even the definition of a human being has changed over the centuries and is still changing as we learn more.

We understand that things do not have to be shown by science in order to be true. Many things were obviously true and real before science discovered, modelled and questioned them. Science is simply an effective and natural way of collecting knowledge, testing theories, and discovering how things work. Yet, without questions (i.e., inquiry) there is no science. If questions are not asked, then scientific knowledge does not advance.

Nonetheless, is not "the only way". At a personal level, direct conscious experience and observation, void of science, and engaged in pure mindfulness, are other valid means by which we gain personal knowledge of our world. Therein, ayahuasca and DMT (as biochemical information technologies), like science, are a structural tool for confronting one's own presuppositions about oneself, others, and universal reality. Fundamentally, experience provides the potential for verification and greater certainty. Self-verification and re-verification are excellent (even, necessary) filters for accuracy.

Science, however, involves rules of alignment. It is a more socially specialized tool of investigation than just observation and direct experience (which are also

part of science). Science is a designed investigation into the rule set that we are all bound by. Scientific thinking will emerge and flourish naturally if a conducive environment exists. Even children do have the ability to think scientifically as evidenced by Cook et al., (2011) and Mcshanahan (2011).

Scientific theories are not necessarily absolutely true, but they are by far a closer approximation to reality than speculation. If a measuring system is inconsistent it cannot be used as a working hypothesis. The very fact that computers and smartphones work as well as they do is because the scientific system has functional usefulness to humankind.

Science is not about "proof", science is about evidence. Instead of using the term "proof", one might say that the evidence is so far beyond chance, and very likely not to be artifacts or mistakes, that for all intents and purposes, the phenomena are real and the theory has a high degree of verifiable accuracy. Science is fundamentally based on evidence. Proof is for mathematics and logic, which science uses as tools. The filter of logic describes a phenomenon and the scientific method provides independent verification. The scientific method depends on reason to deduce some conclusion(s) about the experiments and discoveries that have been made about how nature works. Herein, abstraction leads to reason, without which we cannot explain how a discovery may be useful or dangerous.

Mathematics is a fundamental means of description in the universe. Scientists use tools (mathematical and physical objects) to establish probable associations (or relationships) between variables in the real world. Statistics is one of these mathematical probability tools.

Logic and mathematics require proofs. Experimental science has a requirement for evidence. And, science uses logical identification and integration, which involve logical proofing. However, the concept of 'evidence' leaves room for uncertainty and probability. Proof does not (i.e., deductive logic does not). In science there is always uncertainty. We haven't discovered every aspect of reality, so we are left with probabilities of that which exists and "probable futures" of that which may exist.

Science involves the idea of theory - the idea that not everything is yet known, emergence. In all scientific results there is room left for uncertainty and probability. Asking for proof in science is silly. It is nearly impossible to "prove" anything. Science does not produce proof(s), it produces and requires evidence. That "my" conclusion could be wrong is 1 in 10000, an assessment of error in an experiment. The assessment of the error is the bounds around the problem. Science does not come from observation (i.e., empiricism) by itself, for alone observation cannot demonstrate causation. Observation shows spatial proximity, but not causation. Causation is revealed through the integration of evidence from controlling (or "focusing") experimental inquiry (i.e., the scientific method) into usefully universal (or "fulfilling") theoretical models.

It is important to point out here that even the most objective and unbiased scientific research can have inaccuracies (or "be wrong"); human researchers are not infallible. Scientists track their identifiable errors (or even, potential errors). They identify statistical values that highlight the reality of an occurrence as opposed to chance. In statistics, this is called "significance". There are 'significance values' that facilitate the credibility of the results of an experiment.

Science asks fundamental questions about what are known as 'phenomena' - a fact, occurrence, or circumstance observed or observable:

1. How does a phenomenon emerge, develop, and disappear? (~ the Aristotelian "material cause")
2. What form does a phenomenon take and why? (~ the Aristotelian "formal cause")
3. What is the system within which the phenomenon operates? (~ the Aristotelian "efficient cause")
4. For what purpose, goal, or intention does a phenomenon function? (~ the Aristotelian "final cause")

Abstracting from Aristotle's writings, the four questions above generally fit his notions of material, formal, efficient, and final causes (or causation). However, they are not meant to be strict interpretations. In order to achieve progress in a discipline, one should always go beyond (i.e., develop, extend, build upon) the writing of others (not treat them as completed works that require the strictest adherence).

What matters in scientific research is:

- Whether the conclusions drawn from an investigation are appropriate for the methods used and outcomes reported.
- The quality and coherency of the research, not where it is published.
- The cogency and import of the criticism, not where it is published.*

**Many peer review associations receive funding from industry and/or States, and have less than transparent ties to industry and/or States.*

A **hypothesis** is a proposed explanation for a phenomenon. It is a *testable* proposition explaining the occurrence of a phenomenon or phenomena, often asserted as a conjecture to guide further investigation. In science, a hypothesis allows for the focus of attention (and inquiry). It is a tentative explanation derived from limited evidence in order to start another investigation to explain an event, phenomena, or mathematical model. It is also known as an "educated guess", as there is no assumption of truth involved. A hypothesis can be a single proposition or be made up of several propositions which will trigger a set of scientific experiments to provide evidence. If a proposition contains some component

that defies testing or detection, then the proposition is not a scientific hypothesis. A hypothesis must also be 'falsifiable'. That is, there must be a possible negative answer (i.e., it must be possible to disprove or refute with evidence). Socially intelligent humans can consider a hypothesis and withhold 'belief' for 'evidence'.

For a hypothesis to be a scientific hypothesis it must be testable via the scientific method. In other words, falsifiability defines the inherent testability of any scientific hypothesis. Scientists generally base scientific hypotheses on previous observations that cannot satisfactorily be explained with the available scientific theories.

Hypothesis are subjective. That is why they must be tested against objective evidence. The only interpretation of the evidence is whether or not it contradicts the hypothesis. Any subjective implications based on the experimental data would require further testing.

Hypothesis testing is the critical thought process in the scientific method; assumptions must be tested. And, the two potential errors when testing an assumption are: first, rejecting the null hypothesis (H_0 , original assumption) for the alternative (H_1 , #1 assumption), and second, not rejecting the null hypothesis.

Even though the words "hypothesis" and "theory" are often used synonymously, a scientific hypothesis is not the same as a scientific theory. A scientific hypothesis is a proposed explanation, a 'hypothetical model', of a phenomenon that still has to be rigorously tested. In contrast, a **scientific theory** has undergone extensive testing and is generally accepted to be the accurate explanation, or 'theoretical model', behind an observation. It is a coherent set of propositions that explain a class of phenomena, that are supported by extensive factual evidence, and that may be used for prediction of future observations [through the restructuring of information based upon their principles]. It is formed out of a statistical preponderance of corroborating evidence. A 'working hypothesis' is a provisionally accepted 'information set' proposed for further research. A 'theory' usually includes several different hypotheses - each of which must have withstood all attempts to prove them "false". A scientific theory explains observations and laws by providing the mechanism [of action] that makes them work.

Every experimental scientific theory begins with certain premises or assumptions; from that conclusions are derived or deduced, and then, experiments are designed to test the conclusions or predictions of the theory in a real world. If conclusions match theory expectations /predictions, then the theory remains, and if not, the theory changes. If, however, the conclusions are not deduced from the premises validly (as in, they don't contradict), then the theory is wrong (partly or completely). Also, the conclusion could happen to be right, but the process of reasoning that gets to that conclusion is wrong. Theories are either rejected or corrected. A correct theory accounts for what is observed.

A theory must also be falsifiable in order to be

valuable. If a theory is not falsifiable, then it is not scientific. Someone has to be able to do an experiment to show that what is being claimed is or is not true.

A scientific theory is the confirmation of not only that which is known, but also of that which is unknown. All theories maintain the claim that, "this theory is what we know under these conditions up to this point in time". Theories leave open the idea that at some point in the future one might discover new information, new realizations, and new conditions that one is currently unaware of. A scientist speaks the truth when saying, "Maybe we don't know everything, but this is what we do know up until this point".

A 'fact' is an undeniable observation intended to accurately describe an object or event. Facts add up to theories. In other words, theories make use of facts. Theories tell us not only what will happen, but why. They're created to describe facts and relationships between facts. They're used to predict facts and to explain facts.

Take note if you do not know this already, but there are no longer any "laws" in science. All the things they told you were "laws" in school, scientists now use the word "theory" for them. "Laws of nature" are now "theoretical descriptions of regularities" in nature. No laws are ever broken when a new discovery is encountered.

A theory is a model that identifies, as accurately as currently understood, the patterned regulation of phenomenological space. The application of the concept of patterning, as a "representation of something simpler", to phenomena is a useful way to model the world. Objectivity makes no claim of permanence. The only thing science presupposes is the existence of coherent, consistent, and continuous relationships.

Every scientific model principally involves the questions of whether the model is accurate and enables the prediction of what is going to happen: does it explain all the things you know that happened, and does it explain everything that people knew in times past? If the model works, then it is a good theory, but it is always provisional. As soon as you start to believe you know everything and you have "all the edges tied down", you will [if open to it] discover a new or contradictory relationship. Good scientists always leave their models "open ended" and are always open to learning more, so that they might improve their models.

Scientific results are only limited by the questions asked and the universal boundaries in which they are asked.

No matter how strongly a theory is supported by empirical evidence, it is always theoretically conceivable that one day, some data will come in that will force the scientists to modify or even eliminate the theory. Even if the scientists are 99.99% certain that the theory is "true", it is philosophically incorrect to say that it is 100% true and to call it the Truth with the capital T.

Yet, 'truth' is that which has undergone the actuality of occurring. It is that which has occurred and is occurring. Scientifically speaking, it is the collapse of the wave

functions of possibility into actuality. There is possibility that exists in the present moment and in some future moment that wave function of possibility, of all the things that are possible in the now at some future point will collapse to become that which actually has occurred in the past and are occurring in the present.

All individuals with common sense instruments and conceptual minds have the potential of observing the same existence. Two people look at the color red: One person can point to it and the other can say, "that is the color red". Hence, science is based on the correspondence theory of truth, and it is why the scientific method works. The correspondence theory of truth is the view that truth is correspondence to a fact. Truth is concurrent with that which is. That which is can be verified to be so through experiment. Science relies on repeatable experiments for verification. And, when a controlled experiment is completed all observers to that experiment observe (or sense) the same actions and relationships (or at least they have the potential if their own sensory and cognitive instruments are functionally operative). In other words, all who see the experiment can correlate that observation; so that is "true".

3.5.2 Rational science (the rational scientific process/method)

APHORISM: *Absence of evidence is not evidence of absence.*

Rational science is about explaining, not studying. The rational scientific method is about explaining rationally. Scientists don't just study, they must explain.

Rational science is a body of rational explanations, and a rational method, which is itself an explanation. Rational science is explaining physics rationally. What does "rationally" mean? It means that:

1. Only objects can be moved.
2. Concepts cannot be reified.
3. Concepts cannot be moved around like objects.

For example, wave(s) is a concept; there is no physical object called 'wave'. A "wave" is a process occurring to some medium. The concept "wave" describes the process occurring to that medium. Similarly, mass (weight) is a concept that cannot be moved around; instead, the object that has the attribute of a mass (weight) is that which is moved. In other words, rationally means that physics can only be done with objects, where concepts are possible descriptions of processes, and concepts cannot be moved around. What is rational is that concepts are not moved around. Here, science is defined as rational explanation. The only precise form of explanation is visual, so a rational explanation must be visual (at least). Visualization starts with objects and ends with simulations. There has to be the conceptualization of an object, first, before motion [of objects] can be conceptualized. In physics, what would there be to study without an object? In order to do

physics, there needs to be an object, as a premise. Only objects can perform motions. Concepts, which are not objects, cannot perform motions; in part, because they are already concepts that are in motion (i.e., they are dynamic concepts, verbs).

The golden principle of rational physics is:

Physics requires an object; physics cannot be done without an object. Because, physics is the study of the physical, of objects.

Every word in the dictionary can be divided into two categories:

1. **Object:** that which has shape.
 - Synonyms for object include: shape, surface, thing, matter. For example, a bat is an object, a ball is an object, a tree is an object, a table is an object.
2. **Concept:** a word that invokes or embodies two objects.

There are two branches of rational science, physics and philosophy.

1. Philosophy is concepts, reason, and purpose.
2. Physics is objects, causes and mechanisms.

Philosophy requires a concept. A concept is a word that embodies two or more objects. In this sense, concepts do not exist (existence in the real-world is physical presence = object + location).

Philosophy is the search for a global optimum modeling function. Wherein, fields are defined as parts of questions that lead to this modeling function:

1. What exists
2. What can be known
3. What is the nature of truth
4. Ontology
5. Epistemology
6. Metaphysics - the systems which "we" have to describe the world [of "things"].
7. Ethics/morality - what should we do. Ethics is the principle coordination of conflicts of interest under conditions of shared purpose. To share a purpose with others in society.
8. Epistemological question, What is the [strength of the] confidence in the statement (claim, belief, etc.) as related to the evidence in support of it, applied recursively.

3.5.2.1 What is the axiomatic chain of understanding in rational science?

All rational statements have at least an "object".

Object

noun

1. That which has shape.

2. Something is that which has shape.

Nothing

noun

1. That which does not have shape.
2. Nothing is that which has no shape; space is nothing, space is without shape. Irrational statements are nothing; i.e., about that which does not have shape.

The axiomatic chain of rational physics search operations includes a specific order of definitions:

1. Object - that which has shape. Physics is first and foremost the study of objects. Physics cannot be done without an object. The definition of an object must be identified first. The definition of object is the axiom. Shape is the only universal property (or attribute) that all objects have.
 - There are not 2D objects and 3D objects; there are just objects.
2. Distance - separation between objects.
3. Location - set of distances.
4. Motion - two or more locations.
5. Exist - physical presence.
6. Concept - invokes two objects.
7. Matter - objects that exist.

Thereafter,

1. Volume - region occupied by an object.
2. Mass - the process of weighing an object. Mass is a dynamic concept. Mass is determined through weighing.
3. See and touch - these invoke another object (a sensory system).

Exist

noun

1. physical presence is (object + location);
- Physical - that which has shape (1 object);
- Presence - that which has location (distances between 2 or more objects).

That which has physical presence is that which has shape and location [relative to all other objects in the universe]. In science, the questions must be asked, what exists independent of the observer? If the observer is removed, what exists? Fundamentally, object and location exists independent of an observer.

It is only possible to talk about the existence of objects in rational science. It is ordinary speech it is possible to talk about the existence of concepts. For the purposes of physics, it cannot be said that 'information', 'love', 'intelligence', or 'effect' exists. Rational physics is the science of existence.

The word 'exists' belongs exclusively to physics:

1. Exist: physical presence
2. Exist: physical [object] presence [location]

That which exists (i.e., is in existence) is anything that is physical. Something which is physical cannot be an concept; it has to be an object. Per this criteria, something which exists must have shape and location the set of distances to all other objects in the universe for it to exist as a tangible object.

There are intangible objects also. Not all objects have location. There are objects, like triangles, which have shape, but not location. Hence, those are objects that do not exist, because exist is object + location. The only property all objects in the universe have is shape. That which is physical, is that which has shape. That which has shape may not be visible or touchable by an organism. Shape is what characterizes an object, not seeing and touching. Intangible objects are physical objects, but cannot be touched. Tangible objects are physical objects, but can be touched. The noun is the object, the thing. Shape is the first pattern(s) of universality. There must be a physical interpretation, and to understand a correct physical interpretation there must be a physical mechanism.

None of the following criteria can be used to define the word, "object" (because, its does not equal a standalone shape):

1. See - Tangible objects can be seen, but there are also intangible objects that cannot be seen.
2. Touch - touch is a verb (motion, a change in sensation). Touch requires two objects to come together and "touch" (the external object and the sensory system).
3. Mass
4. Volume
5. Motion
6. Made of
7. Temporal
8. Subject
9. Noun
10. Color
11. Exist
12. 3D

For the purposes of physics, a noun is that which has shape (only). If it does not have shape, then it is not a noun. For instance, orbit is not a noun, privacy and anonymity are not nouns; instead, these are verbs. A noun is only some thing that has shape, which is the definition of an object. Only objects can be nouns in rational physics, because only objects can be visualized as having shape.

3.5.2.2 Language and rational science

In rational physics, every word in the dictionary can be classified as either an object or a concept. Objects are

pointed to. Concepts are defined. A concept is a word that invokes or embodies two objects or two words treated as objects.

In rational physics, the following concepts are verbs (in the ordinary speech of the 21st century, they are considered dynamic nouns):

1. Change
2. Charge
3. Displacement
4. Distance (travelled)
5. Circle
6. Energy
7. Field
8. Force
9. Geodesic
10. Information
11. Itinerary
12. Manifold
13. Mass
14. Orbit
15. Orbital
16. Infinity
17. Motion
18. Movement
19. Number
20. Time
21. Trajectory
22. Wave

In rational physics, the following concepts are verbs (in the ordinary speech of the 21st century, they are considered static nouns):

1. Angle
2. Circle
3. Center
4. Edge
5. Line
6. Location
7. Particle (Quantum)
8. Point
9. Position
10. Continuous (and regenerative)
11. Space
12. Universe
13. People, children, forest, school (of fish).

The issue of whether or not something is a noun is significant, in part, because it determines which adjective/adverb is to apply. If there is wrong axiomatic classification (mixing nouns and verbs), then wrong qualifiers will apply (adjective/adverb). Both objects and motion can be qualified:

Adjectives qualify nouns (qualifying objects & concepts)	Adverbs qualify verbs (qualifying motion)
Infinite	Incessant
Infinitesimal	Constant
Continuous	Perpetual
Straight	Rectilinear
Perpendicular	Parallel

Qualifying objects, concepts, and motion.

1. If qualifying an object or concept, then call it an adjective.
2. If qualifying motion, then call it an adverb.

Spatial concepts include:

1. Distance - separation between two objects.
 - A. Synonym: may be 'location'.
 - B. Distance only exists between two objects.
2. Location - the set of distances from one object to all others (the set of objects; set of distances).
 - A. Synonyms: matter.
 - B. Matter - Set of objects that exist. Matter is not synonymous with object.
 - C. Event - location with human involvement.
3. Exist - physical presence (object + location). Exist is an object that has location.
 - A. Synonyms: Existence, presence
 - B. Physics is the science of existence.
 - C. Some thing exists which matches the definition of existence.
4. Motion - two or more locations [of an object].
 - A. Synonyms: change, verb, motion, animation.
 - B. Motion is change. Motion is two locations, and not a change of location (as in, a change in an object's position/location over a given period of time)

There are not experiments in rational science; experiments are for technology development. Instead, rational science requires rational thinking on the part of the individual "scientist", the product of which is individual understanding. In actuality, a better visual understanding of the object[ive] mechanism.

In physics, there is no physical object called number. Number is a count of something. In rational science, the word number means "to count". In the language of a rational science, number is conceived of as a verb and not a noun. A specific number is an adverb on counting (e.g., 1 counted, 7 counted, 43 counted).

The language of technology is math. The language of physics is universal modeling (visualization). Math describes and physics explains. Rational physics does not involve the testing of anything. Rational physics involves cognitive understanding. Technology is not rational physics. Technology what tests, and is tested to

work.

Mathematics is a language of quantitative adverbs. It only describes, qualifies, or modifies motion. Take any mathematical equation and the only thing the equation is doing is describing some kind of motion; it is providing the location of a point or a value. the Mathematics doesn't deal with objects (as in rational physics), even though it talks about mathematical objects (i.e., mathematical objects are not the same thing as objects that exist [in reality, physics, etc.]. Additionally, mathematics can only describe, it cannot explain. There is no science of mathematics since mathematics is a language. Math is a language, math is not a science. Physics is the science, and math is a language. Math is not required to understand how the world works. An equation [mathematics] is a description. Here, there is no such thing as mathematical physics, instead math is a language used for describing, not a means of explaining a mechanism.

Geometry is the foundation of mathematical physics, wherein:

1. The point is the building block of geometry.
2. Geometry is the study of shape and size.
3. Geometry is the branch of mathematics whose primary subject is spatial relationships and shapes of bodies. Geometry studies spatial relationships and shapes, while ignoring other properties of real bodies (density, weight, color, etc.).

3.5.2.3 Explaining

A.k.a., Explanation, theorize, theory.

An explanation of physical phenomena contains:

1. The causes (Physics) or reasons (Philosophy) underlying a phenomena.
2. How (mechanisms as physics) or why (purpose as philosophy) a consummated event happened. An explanation deals exclusively with the past.
3. A theory is an explanation, and a hypothesis is an assumption. In experimental science, a hypothesis is a theory that has no evidence, or it's a speculation, a speculative theory. An explanation in rational physics must include an object as a physical mediator. The mediator has only 1 criteria, and that is, shape. Vacuum, space is a synonym for nothing (i.e., that which does not have shape). The antonym to vacuum is shape (i.e., something). Illustration (visualization) ensures there is no mis-interpretation. Objects can be visualized, and through visualization, clearly understood and communicated among a population.

The rational scientific method does not use the senses

(i.e., does not use vision, hearing, smell, taste, or touch). Instead, it uses the brain (i.e., individuals have to use their own brain; they have to think for themselves). Science explains objectively so that others understand, not so that others believe.

Before causality can be established scientifically, a mechanism [of action] must be established.

APHORISM: *The interested describe, the wise explain, the curious search.*

3.5.2.4 Describing

A.k.a., Description, mathematics.

A description of physical phenomena contains:

1. A listing of attributes/properties of a physical object or concept.
2. In science, adjectives describe objects and adverbs qualify or characterize motion.

Descriptions (grammar) are different than explanations (mechanism, cause). Descriptions precede explanations:

1. A description is a listing of properties.
 - A. A concept is a description. A description is a listing of properties. A chair has four legs, is brown. It fell at a 9.8m/s. Explanation reveals causes and mechanisms for phenomena. In other words, something happened and you are going to understand, say how it happened and why.
 1. A mathematical equation is a description, and not an explanation.
2. An explanation is revealing causes and mechanisms for phenomena.
 - A. Something happened, and the explainer says how it happened (meaning, not a description, but why did it do what it did and not something else).
 - B. The best way to explain any mechanism is with language, visual or verbal/textual.

There is a difference between technological advancement and comprehension (i.e., wisdom). Individuals, and society, can advance technologically, but not advance equally in comprehension. For instance, a society could have the knowledge to produce magnets, but not comprehend how magnets function. A society could produce something highly complex as seen in nature, but that doesn't mean their (1) explanation of it and comprehension of what it is, and (2) how it works, is accurate or even close.

Science exists to explain the natural world. Engineering exists to take these discoveries and construct a more fulfilled and thought-responsive environment.

INSIGHT: *Rationality is understanding, evidence is experience.*

3.5.2.5 Reification

Reification reveals a problem in the noun structure of the English language. Most English speakers are taught that a noun is a person, place, or thing. But, that claim is not true if a "thing" is defined in a particular way. For something to be a thing, it has to be an object and have shape. There is no thing that can be pointed to and say, that's "humility". These concepts are about the relationships between things, and not, the things themselves. The problem is that in English that distinction is lost. When this distinction is lost, discussions and decisions become are more likely to be challenged and conflicted, because there is no meaningful distinction about objects and concepts that relate objects. This means that there are thousands of English words that people argue over for which there is no way to solve the argument, because there is no thing to recourse to (i.e., no thing to point to, to course correct to, etc.). Through reification, the relationships between things are treated as things in themselves with their own properties, independent of an evaluation, and all the while missing the things which are actually in the relationship.

Without something to point to the word can mean whatever you want it to mean. And, people start to think they really know what these ideas mean, as though, something which is only a concept, only a relationship has a set of attributes like a physical object, a spoon, for example, has a set of attributes. The concept only has no attributes that the individual subject doesn't give it.

Many reified words have very clear noun endings that mark them as reifications; they end in -ty and -cy, -tion, -ence, etc.

There are relationships between things. To make love or intelligence or happiness, democracy, economics. These words at most specify relationships between things. But, to make something that describes a relationship only into a thing itself is reification. The noun structure of English confuses these two and treats them the same. People then have arguments about all sorts of subjects that are not things that exist at all. Reification can be useful if the reified is defined in terms of real nouns, but if not defined in terms of real nouns, then communication can be very confused.

Why are experimental science and rational science different? Because, experimental science uses predictions. A prediction is a description. If a prediction comes true, then the description is accurate. However, the description is not the explanation.

A lot of things that people in early 21st century society treat as real spatial objects are not real spatial objects; instead, they are concepts that people have reified as spatial objects (i.e., physicalized, concretized, as in, they have made them [in their minds and decisioning] into something spatial/concrete, and they treat them as if they are a real spatial thing). People then start treating

these abstract objects as real by moving them around in space, squashing and stretch them, performing spatial operations on them, yet fail to realize they are social constructions of which participation in is hindering contribution. Herein, for many people, money is the simplest of examples. Money is a concept, an abstraction, but people walk around with paper (cash), metal (coin), or digital currency on them and call them money. People transfer money between each other, and financial institutions produce and sequence money. But, money is not an object that exists; instead, paper is produced and electricity is powered through systems and all the while humans are trusting the use of the abstraction known as money to their socio-technical relationships.

3.6 Science is universal and self-correcting

INSIGHT: *Most people act as if they had a private understanding, when in fact the verifiability of existence is common to all. Science, as an approach, facilitates orientation, navigation, and self-correction. Through the application of science we correct ourselves.*

The great virtue of the methods of science is that they are universal and the knowledge that they discover is universally applicable. When practiced in their purest and least bias form, one organization's or community's science is not different from that of another.

Traditional biases and erroneous loyalties in science generate skewed data and misinformation, and they must be overcome for science to actually be "science". The methods of science have at their very core the notion of asking questions and challenging assumptions. Even if they are the establishment's own assumptions. Importantly, the functional usefulness of science does not call for scientists to manage society. Instead, we as a community transparently apply the methods of science to the social system for the benefit of all in our community.

Status quo practices are qualified against our objective reality through the frame of reference we know as the methods of science. The core mechanism of which is self-correction. **Self-correction** involves a process of *testing, logical calculation, hypothesis generation, and theoretical integration*. The repetition of experiments under variable and controlled conditions facilitates the informing of self-correction. The self-correction attribute of science enables the evolution of our awareness. Life is a path of constant self-correction; anything that limits our ability to self-correct, such as beliefs, limits our self-evolution and our social-navigation.

In many ways the scientific method is simply a technocognitive tool for the testing of ideas with evidence. The expectations generated by a scientific idea and the actual observations relevant to those expectations form what may be known as the scientific argument. The elements of the argument are always related in the same logical way, but those elements may be assembled in different orders. The three elements of the scientific

argument are: observation, idea, and expectation. If the expectations are observed, then the "argumentative idea" is more likely to be accurate. If the expectations are not observed, then we are less likely to accept the idea with a clearly identifiable rationale. A scientific theory then becomes more greatly informed.

The fact that the building you are in hasn't collapsed is some kind of evidence that we have been able to come into harmony and understand some kind of natural physical law or rule that is described as a regulation of reality that exists beyond our control and is common to all of us in this shared experience. It appears that we can either be aligned and in harmony with nature (as we emergently come to understand it through the scientific method) or we can fight it to our personal and social disadvantage (we can deceive ourselves).

In science, highly understood and consistent regulations that are well verified become "fact". If a lot of assumptions are needed to prop it up then it isn't a fact. Almost any theory can fit if there are enough assumptions present. One in a billion is the functional standard for the applied scientific principles to our everyday technology. Your smart phone device wouldn't work if you had error rates of more than one in a billion. Technology is the transition between the edge of what is known and things that are known well enough so that society is able to make technological devices.

A 'technical principle' is a verified regularity in probabilistic reality, in nature - a simple scientific model [simple as elegant, not simple as simplistic]. Here, reality is understood as involving the concept of a discoverable and verifiable set of "technical relationships". In other words, reality is a system of "technical relationships". These relationships are synonymous with the term "scientific". Science allows for alignment and harmonization with nature, through integrated corrected feedback applied toward adaptation at an individual and social level. The scientific worldview is a neutral worldview. It is the application of an approach. It can be applied in the context of an useful purpose and identifiable set of needs at a systems level.

The more we discover of existent systems the more informed our common creations will become.

We continue to learn throughout our lives. There is no recognized phenomenon that isn't undergoing a constant change of definition as the evolution of knowledge continues. Thus, truth itself is an emergent distinction in its resemblance to reality. Science cannot show us what truth is, but it can show us what was true and might be true with a degree of probable accuracy.

Imagine everyone arriving at their own individual decisions based upon information that is accurate and equally shared (a type of social equality). The only consensus that has ever met global consensus is the scientifically verifiable; everything else is opinion or a personal model. Individuals may be "entitled" to their own opinions and beliefs, but they are not "entitled" to their own facts among a common pool of verifiable information used for orienting and fulfilling a community

(Read: a common society). Scientific consensus is very different from the consensus in social, political, and other more general uses of the term. The scientific consensus is not an opinion reached by a group as a whole, but a sufficiency of corroborating evidence to structure the arrival at an verifiable position. Scientific consensus is evidence driven and it is "realized" or "arrives" when the evidence is strong enough. The scientific consensus is something that emerges once enough data and evidence are compiled to support a particular model or conclusion. In early 21st century society, the consensus is typically established through scientists convening together at conferences, the "literature" production & publication process, peer review, and sometimes surveys. Sometimes "position papers" are issued to communicate what the scientific consensus is. It is important to note, however, that it implies general agreement, and not necessarily unanimous agreement.

What is a 'scientific consensus' if it is not a form of formalized agreement framed upon a structure of re-verification and critique? Consensus in science is not an opinion poll. It is not equivalent to a political consensus or social consensus. A scientific consensus (or theoretical model of the data) is reached through a preponderance of evidence directed by a process of critical thought to yield insightful understanding that ever more greatly aligns our models with the "nature" of the real world. A critical perspective allows a mind (or cognition) to see the shades of grey; instead of viewing events as black and white; it allows for the maximization of error correction. Consensus will still have bias, and hence, each individual needs a strategy from which to derive more information and further overcome their biases. The questions each individual must ask themselves are: From what system [of thought] do I derive information from the natural world? What thinking practice do I use? Do I seek the integration of a better thinking process to more greatly understand what I observe or am I promoting an interest group (as many "publications" are known to do)? Because, if someone cannot derive evidence from the natural world as well as integrate and verify what they observe, then how could they possibly re-orient their life (and society) toward one of more natural fulfillment (if not through a more thoughtful practice).

The only real way to eliminate biased research is to eliminate what causes people to conduct and publish it. In other words the way to eliminate biased research is to eliminate the incentive to produce biased research. Incentives lead to outcomes (i.e., aphoristically speaking, show me the incentives and I will show you the outcomes).

If scientific consensus is embedded within a competitive market system, then such consensus might directly challenge business interests; for example, as was the case when it was found that smoking industry cigarettes was a direct cause of lung cancer. In science, evidence is scrutinized and validity is demonstrated. Results are published and necessarily replicated, and position papers are put forward and criticized to explain

the replicated findings and refine an ongoing model of the evidence. Scientists identify experiments, perform them, replicate them (or refute), and discuss and publish their results.

The time to embrace new understandings is when they can be demonstrated and replicated, and not before (where there are not understandings, but beliefs and opinions). This is not to say that we should forfeit our critical thinking skills and automatically accept the scientific consensus or what "experts" say, but it is good starting point to come to an understanding of what is currently accepted before considering otherwise.

Scientific consensus is an "understood agreement" by the foremost individuals studying, performing research, and publishing in their field. They ought not to be casually dismissed because an alternative view sounds convincing or conforms to our beliefs. But, they ought to be criticized and questioned as we further experience [existence]. It could even be said that scientists have a duty to inform others, particularly those in [their] community of what the evidence says (or "points to"). There is no "true thing" from a scientific point of view. It's about being as accurate as possible.

We are evolutionarily programmed to be cognitive misers; we naturally desire cognitive efficiency. Such efficiency is one of the three basic biological drives (seeking pleasure, avoiding pain and conserving energy). As a species we are always looking for ways to conserve energy. In the real world it is of benefit to seek the [subconscious] auto-processing of information in order to produce a faster response time to an environmental circumstance [which might pose a threat to our survival]. But, if someone's thinking is poorly structured or the will behind cognition fades, then someone might in fact be responding with a greater efficiency of lazy thought. A rapid and lazy approach to conceptualization and characterization can deviate someone significantly from a healthy goal-oriented response. We need to stop, think, and navigate toward a higher state of potential fulfillment. We need to ask ourselves, what type of thinking are we optimizing?

Scientific studies into 'perception blindness' indicate that conscious experience maintains some form of subjectivity (as a conscious decisioning space). If our conscious experience of objective reality is subjective to some degree, then it is wise to use verified evidence to design and develop new socio-economic systems. If subjectivity were conceptualized at the social, and wherefore, political level, then a system of biases and agendas, of persuasively misleading information, might emerge; a system of politics. If human experience is partly subjective then when humans interact socially and with common resources, they ought to do so through an emergently common and verifiable organization (i.e., scientific knowledge).

Some people have trust issues with science, and rightly so. When this dislike is explored, then it is found that people do trust the scientific method, and they do not trust the existing science industry, which is clearly

corrupted through the mechanism of profit incentive as well as other maladaptive incentives present in the socio-economic environment of early 21st century society. Herein, science must be distinguished from the market, from industry, and from otherwise authoritative applications of the concept of "science".

Science functions incrementally, adding [bits of] information to create a larger and more accurately modeled "picture" of the real world environment. Such incremental and small advances are often not conducive for "front page" media coverage. And so, the media often has to distort the studies, or highlight exception studies that are contrary to the general understanding of the field to sell their product. The mainstream media is an industry, which both sells a product and modifies memes. The media regularly and deliberately misrepresents science, and hence confuses the public, under the guise of providing "balance for the viewers". Further, researchers in the marketplace sometimes go for the big headline as opposed to being genuine with their research.

'Institutional science' is science embedded within an institution. It is important to make a distinction between science as a method and science as an institution, which leads to the corruption of its results and the incentivized manipulation of data to forward an agenda. Institutions are incentivized to rig their "science". Science cannot be trusted when it is applied by the hands of entities with an abstraction directive, such as that of profit, power, or control. Fundamentally, industries filter perception "to add more value" to theirs and their own - the very idea of an institution (as a unique producer of services) filters out the perception of wholeness, and hence, systems-oriented solutions. Institutional science might also be referred to as "authoritarian science", "corrupt science", and "science for profit", and it leads directly to the weaponization of science. Science can quickly become a tool for making weapons or products more profitable. Yet, the true value of science lies in its result, and the questions individuals ask when they are confronted with evidence; particularly, "How can we use this scientific knowledge to improve our value orientation, and ultimately, our lives."

In the market science becomes politicized, lobbied, and commodified, and there is a lot of emotion, bias, and life-need gets injected into it such that it starts to become quite unscientific -- science as "scientism" - not science. Studies are no longer designed to come to an ultimate "truth", but are applied as part of a marketing effort toward concern for the sale of a product or the furthering of an agenda or position. Marketing can quickly dilute science to the point of nonsense.

Wherein, fact revision and commercial distribution of inaccurate information can disable the critical faculties of a population. Similarly, when relevant information is dropped from the total information set (i.e., left out), such as when data from controlled trials is withheld by producers of goods and services in the economy, then society's evidence-base for its [shopping] decisions

becomes less trustworthy, and the term 'evidence-based', itself, becomes relatively meaningless. When competing organization have the incentive and ability to withhold scientific evidence, then trust is absent. If the evidence base cannot be trusted and evidence can be withheld, then nothing that follows from it is trustworthy either. The market is a competitive system. Competitive systems are untrustworthy due to their incentive structure.

The industrial weaponization of science comes in two forms. The first form involves the misleading of others through the claim of science to forward an agenda. Therein, "weaponized science" (or industry science) is that which is not science, but has the appearance of science. The product of such behavior is marketing, not science. Industry studies can show anything they want (and there is a hiding of science behavior prominent in all profit-oriented industry). Therein, true science is either entirely absent or obfuscated, and that which is called science is a wolf masquerading in sheep's clothing, it is a tool of manipulation and of lie telling. When the claim to science is being used as a weapon, then individual and social benefit come second to the manipulation of an audience (the public) for profit and power, or even just one's simple livelihood. The second form of weaponization involves the utilization of the results of true science to develop weapons [at the expense and cost of human fulfillment]. It is important to point out that the military-industrial-congressional complex does in fact conduct secrecy cloaked science to forward their own defense and clandestine agendas, which may or may not be for the benefit of all of humankind. Any technology can be applied to a "dual-use" where the first use is that of mutual benefit to our total selves and the other is to individually attack that which we have stopped perceiving as ourselves (i.e., life-serving vs. weaponization). A knife can be used to kill more efficiently or to cook more efficiently; a knife is just a useful tool. All technology is essentially morally neutral (with the possible exception of automated and artificially intelligent, self-replicating weapons systems). Technical advancement among humanity is inevitable, and every significant technological advancement can be weaponized in some form. Without equivalent social system advances, advances in technology might accelerate a population to-ward its own demise.

The manipulated weaponization of science (i.e., the first form) can be very subtle and extremely hard to detect. For instance, the medical industry wants the public to "believe in science". But, the "science" about their products appears to contradict itself; so, the industries want the public to believe in the "science" that they favor. There can exist the appearance of science to forward agendas - agendas masquerading as science. And, this is why "you" must use critical thinking skills when examining all "science" from an industry or an establishment [for they have overt and covert agendas]. If you are looking to the science to lead you down a path of excellent health and a long life of fulfillment, then you

will likely be maligned by the “science” that industry and “professionals” purport to be science. Science cannot be bought; if it is bought, then there can be no trust that it is science.

There are many large and undiscussed problems with research in early 21st century society. Most notably is the fact that vested commercial interests are unlikely to publish negative results [about their business partner’s products]. In general (if not nearly always), commercial entities pay “researchers” to find a particular [advantageous, pre-desired] result; they won’t pay to find negative results and they won’t do business again with a research company that breaks legal contract and publishes such results.

Science for profit cannot ever be science because trust in an interrelationship is unverifiable (i.e., there are deceit promoting incentives). Science is an objective method of inquiry. Objectivity does not involve agendas and ethical positions; it does not involve commercial or political interests, only the collection of emergent facts. Often what is passed for science today is not actual science, but a covert agenda being passed (or more accurately, pushed) as science.

Science was initially met with heretical condemnation and is still often rejected today; even though it is the natural means by which the human organism learns about the world and is a method of inquiry that comes perfectly naturally to all humans. The ability to think scientifically and follow the scientific method is innate to children. And, we understand that the scientific method has literally facilitated every single attribute of human technological progress in history. The Community has naturally chosen the scientific method of analysis and organization as a base from which to develop a common pool of knowledge that we may all use to better ourselves.

Science is also misunderstood by many “scientists” who do not yet fully comprehend that science is the methodical, conceptual product of a larger organization, that of the systems methodology (or, systems science).

Generally, herein is a broad distinction here between other forms of thinking and scientific thinking. In truly scientific thinking, which makes possible the synthesizing of functionally technical systems, we work with what the world has to offer versus what we are trying to force upon it. Let us start with nature and optimize within nature.

NOTE: *The exercise of conscience arises from science (con [with] + science). Conscience involves the knowledge of how to generate and remain in a state of fulfillment - to understand behavior that is rightly aligned with fulfillment and behavior that is wrongly aligned with fulfillment.*

3.7 Societal material problems are significantly technical in nature

QUESTIONS: Do you have technical problems?

*What do you base your technical solutions on?
Do you desire an appropriately defined and
engineered] solution to your technical problems?*

Nature maintains technically discoverable relationships embedded within systems and perceived as patterns. We can meet our common material needs with scientific investigation and systematic technological engineering. Therein, the methods of science are applied to social concern and social problem solving. We understand that most of the world’s problems regarding the basic needs of humankind (e.g., shelter, food & clothing, energy & restoration, etc.) and the needs of our material community systems are technical in nature. Technical problems may be understood and resolved through the application of the most current science and technological systems engineering.

Although science gives us the most efficient way of solving problems, it should not be the reason to create a conformed world. Unity in diversity is the principle of the universe.

In the early 21st century, it is the abuse and misuse of science and technology that scares people, not science and technology itself.

“The time has come to realize that an interpretation of the universe—even a positivist one—remains unsatisfying unless it covers the interior as well as the exterior of things; mind as well as matter. The true physics is that which will, one day, achieve the inclusion of man in his wholeness in a coherent picture of the world.”

- Pierre Teilhard de Chardin

3.8 Scientific thinking

NOTE: *Science is essentially similar to philosophy in that they are robust and self-correcting methodical searches for the truth. Yet, science is not philosophy. Science has the option of using technological instrumentation in its inquiry into existence, whereas philosophy is inquiry without technological instrumentation [through the intellect solely].*

Scientific inquiry is a conceptual framework that functions to collect more information from the existent world and structure it into theories and models, which are developed within rigorous and logical constraints defined by the scientific method. The core of scientific reasoning involves the techniques of inductive and deductive reasoning.

The scientific method is a process for creating models of the natural world that can be verified and falsified experimentally. The scientific method requires making observations, recording data, and analyzing data in a form that can be duplicated by other scientists. In addition, the scientific method uses inductive reasoning and deductive reasoning to produce useful and reliable models of nature and natural phenomena. Inductive

reasoning is the examination of specific instances to develop a hypothesis or theory (to build up to a question or conclusion through the gathering of evidence), whereas deductive reasoning is the use of a theory to explain specific results. Abduction is just the generation of a hypothesis. Simply, moving from "hypothesis" towards "data" is always labelled "deduction." The other arrow begins at the tail of the previous, moving downward to the right from "data" to "hypothesis" and is always labelled "induction." Induction builds theories, deduction provides the structure.

Essentially, through reasoning, we are trying to prove intellectually to ourselves what exists, by means of our own observations.

- The Rules of Deductive Reasoning - mentally taking ideas apart; analysis
- The Rules of Inductive Reasoning - mentally putting ideas together; synthesis

Analysis and synthesis, like the grammar stage of the Trivium Method, depend upon definition. If not for definition it would not be possible to take things apart and reform them together. Herein, 'reason' takes items apart and analyzes them by identifying, comparing and contrasting that which makes an item unique as a differentiating factor.

Scientific reasoning involves induction and deduction. Induction uses data to generate new knowledge. Deduction uses knowledge to generate hypotheses that predict system behaviour (i.e., future data). The volitional consciousness is known to either put ideas together (induction) or takes ideas apart (deduction). Deduction is the observation of something, and then its explanation, wherein it is necessary to specify how an idea was taken apart into its components/particulars for understanding. Induction involves the confirmation, rejection, and possible modification of a previous hypothesis through experience by our senses. Our senses are the only known way to deduce. The test of a completed induction is the pointing out of an observed effect; wherein, sensation provides direct proof. The only way to prove something is to point to it - the processes of observing and then deducing. As thought is refined, we move forward; we move forward by testing our thoughts.

Inductive reasoning pertains to empirical reasoning based on experiential observation and uses the experimental method in which a hypothesis, which encompasses a particular problem [idea, concept], is formulated. This hypothesis is tested by gathering additional data to see if the hypothesis is false. A major misunderstanding lies in the fact that scientific hypothesis testing never ends up proving the hypothesis; instead, it either "rejects the hypothesis" or "fails to reject the hypothesis". If a hypothesis has been subjected to numerous rigorous attempts by scientists to its falsifiability, but it remains unrejected, then it becomes a theory. At no point, however, is any theory ever considered by scientists to have been "proven":

in the scientific world, all truth is "relative" to further evidence and provisional to the emergence of more accurate information.

The basic tenet of science is that nothing is ever "proven", a theory is accepted because scientists "fail to reject it". And, a well-substantiated explanation of facts is a "scientific theory". To a scientist, the idea of a "fact" can mean a repeatable observation that cognition can commonly and verifiably accept as perceptual input for further processing into potential knowledge; it can also refer to the "truth" or "falsity" of a proposition.

Facts are the world's data. Theories are structures of ideas that explain and interpret facts. Facts don't go away when scientists debate rival theories to explain them. Einstein's theory of gravitation replaced Newton's in the century, but apples didn't suspend themselves in mid-air, pending the outcome. Theories make use of facts. They're created to describe facts and relationships between facts. They're used to predict facts and explain facts.

Theories never become facts. If you drop something, it will tend to fall. That's the fact of gravity. Newton wrote one set of equations describing that relationship. That's the classical theory of gravity. Einstein wrote a different set of equations for the same purpose, meaning there's a different theory of gravity incorporated in the theory of General Relativity. Today there are people working on yet another entirely different set of equations to describe the quantum theory of gravity. Theories can change and grow. They can be discredited and supplanted. Sometimes they can stand up to centuries of investigation, and sometimes they can't bear any scrutiny at all. No theory -- right or wrong, accepted or rejected, remembered or forgotten -- none of them change the fact that dropped things tend to fall [with predictable certainty].

There are multiple inductive and deductive associations, including: inference, reasoning, argument, logic, analysis, and engineering.

In engineering, problem identification is deductive if it is thorough, and presenting a solution is inductive. In other words, induction is the engineering of a solution - the solution is obtained (or induced) from facts about the real world. An idea (or solution) that is inductive is not arbitrary because the same senses give everyone the ability to observe [with marginal degrees of variety] the same object in the same fashion, and perception blindness aside, it is only the paradigmatic or ideological interpretation of what we see or perceive where there is conflict.

In philosophic argumentation, deductive arguments attempt to draw conclusions from at least one premise, which as a generalization, must be the conclusion of an inductive inference. In other words, a deductive inference is a conclusion based on reasoning from at least one accepted premise. It is important remember that some premises are qualified approximations. For example the Earth is a spherical body, a sphere by definition has equal radius in all directions, and therefore the radius

of the Earth is equal in all directions. There are two reasonable premises here and a conclusion is reached from them. However, the conclusion is slightly flawed because the first premise is only an approximation: the Earth is really a prolate spheroid (it bulges toward the equator because of its rotation).

Inductive inference is a conclusion based on repeated observation of fact. Drop a particular kind of ball on a particular floor from a particular height numerous (n) times, and you can, by induction from those examples, make an inference and a prediction about what will happen the next time you drop the ball. However, your prediction is not a fact, in that you won't know by actual observation the result of the n+1th drop until it has happened.

Unlike deductive arguments, inductive reasoning allows for the possibility that the declaration is false, even if all of the premises (facts) are true. Alternatively, in a deductive argument if all premises are true, the terms are clear, and the rules of deductive logic are followed, then the conclusion reached is necessarily true. Instead of being valid or invalid, inductive arguments are either strong or weak, which describes how probable it is that the conclusion is true.

Deductive reasoning pertains to the usage and generation of logical language (the logical language of science). Deductive reasoning uses declaration [assertions of statements that are logically connected]; and procedurally, it does not account for whether the statements are true or false as long as they follow the logical argument (i.e., it identifies validity). Indeed deductive reasoning does not have to be based on evidence nor use statements of fact. Providing the logical form of statements is maintained (i.e. the rule non-contradiction is followed), then logical argument is a powerful tool in determining the validity and coherence of a statement. It is for this reason that logical argument (or syllogistic logic) is the basis of mathematics. An argument is valid if it is impossible for its premises to be true while its conclusion is false. However, if the truth of a statement is determined without any facts (and evidence), then the statement is removed from any usefulness in a real world context, for it is disconnected from that which is relevant and from which evidence originates, from the real world. When thinking abstractly, one should always ask oneself: how do these terms and statements relate to actual concretes, to reality? What do they really mean and what other concepts might their meaning rely on?

The process of always relating abstractions to concretes, in turn, exemplifies the essence of what is so unique about an objective approach to decision and action. An objective approach recognizes that all arguments and discussions, and all human knowledge, are expressed in terms of propositions, which are comprised of concepts. Someone who remains objective consistently and intentionally asks what the concepts mean, how they are formed, what they refer to in reality - especially the key concepts that are crucial to

philosophical, social and economic arguments. S/he asks what makes each concept possible, what it depends on and presupposes. S/he identifies, as a fundamental logical fallacy, any argument that uses a key concept while denying part, or the entire, essential context that makes that concept possible. This critical error in thinking and integration is known as the fallacy of the "stolen concept".

In "A letter to a philosopher", Ayn Rand (1997:511) wrote that this method ought to be one's "constant [and exclusive] approach to all thinking and all problems.... [She asked:] Do you think that the main tenets of modern philosophy could withstand the test, if you examined them by this epistemological method, with the same rigorous precision, with the same observance of the full context, the genetic roots and the exact definition of every concept involved?" In another work, she observed that some children (the most rational ones) learn new words "by treating words as concepts, by requiring a clear first-hand understanding (within the context of their knowledge) of the exact meaning of every word they learn, never allowing a break in the chain linking their concepts to the facts of reality." (Rand, 1990:20-21.) In other words, never allowing a break in their integration and model formation, they follow both inductive reasoning and deductive reasoning. Therein, deductive reasoning is subsumed under inductive reasoning. Inductive reasoning build the information structure, deductive reasoning is used to maintain the structure. In this sense, induction is the path to knowledge, deduction allows cognition to categorize a new observations within the existing knowledge that was previously induced [into four categories: data, information, knowledge, and values].

If deduction exhaustively demonstrates that an observation cannot be subsumed or integrated into the existing knowledge structure, in a loose sense, you may have deductively reached the conclusion that you have discovered something new, (i.e. not previously induced). By and far, induction is the integration of observations - such as Newton with his prisms refracting the light into different colors, merging them with the prisms back into white, inductively concluded that white light was actually comprised of all various colors.

NOTE: *The classical definition of reality is the claim that "reality" is every substance (or entity), action, attribute and relationship that ever was and ever will be. Existence is all the real things that actually exist in it.*

3.9 Neutral knowledge

INSIGHT: *Scientific facts reduce the entropy of a decision space, thus allowing for better decisions, and consequentially, better outcomes.*

Take information dispassionately on the basis of its credibility and veracity, its verifiability, and not whether

it fits with an ideology or belief system. As long as "you" have a rigid belief "you" are not developing toward a fulfilling higher potential. The mixture of an identity with a belief system is a form of egotism (or subjectivism). Those who follow science and its pursuit of open inquiry cannot have investments in fixed beliefs.

If you are skeptical but not open minded then you might catch yourself in a trap. That trap may be known as a belief in self-omniscience that says, "If I have not experienced it then it cannot exist". To be skeptical but not open minded is to essentially believe that you know everything. This is a trap. There is another equal trap, that of being open minded and not skeptical. Then, you fall in the trap that says, "I believe whatever I am told". There exist very real illusions and mirages, that we "see" and are convinced that they are real, but are not. Science submits itself to the evidence.

It is the discovery of knowledge, which is the ultimate cause of human technological and scientific change, and such change is at the roots of all fundamentally useful social change.

While human beings have certain needs, those needs can only be met to the extent allowed by the knowledge available in a particular society (i.e., culture). There are two ways to derive knowledge. Scientific knowledge is acquired through the methods of science. The second is that of logical reasoning from scientific knowledge (i.e., scientific reasoning). This form of reasoning provides useful analyses and maps [processes of change] of the universe. Modern inventions such as the internal combustion engine, television, radio, and electrical power arose partially or wholly from reasoning through scientific knowledge.

By the mid-20th century, mathematician and philosopher Bertrand Russell would write, "Almost everything that distinguishes the modern world from earlier centuries is attributable to science." As scientific knowledge was combined in unpredictable ways, humans learned how to manipulate the natural world for human benefit to an extent previously unimaginable. The impact of scientists on society has expanded proportionate to society's increasing reliance on, and ability to use, scientific knowledge. But, many people in early 21st century society still fail to recognize that their "success" now requires them to take on a set of new, broader responsibilities — both in their own geographic areas and around the world. What if 'success' weren't a destination, what if success was defined as a process, a journey (i.e., you never "arrive"). Science and scientists have the potential to play a critical role as a compass, guiding society in responsible and beneficial directions.

We also know that the application of science and technology can be used to produce harm. A lot of the fear ascribed to technology in early 21st century society reflects commercial pressures and power-driven agendas, and in a less commercial environment the technology would act differently. Science produces information; information has a neutral charge; information is acted upon by consciousness to produce

rippling variations in the potential of all experience, and technology represents one of those potentials. Some patterns [of potential] are harmful and others beneficial to fulfillment.

"As we come to understand how human beings can best collaborate and thrive in this world, science can help us find a path leading away from the lowest depths of misery and toward the heights of happiness for the greatest number of people."

- Sam Harris

4 The critical method

A.k.a., The trivium method of critical thinking, the critical method, the critical approach.

The method described herein is known by multiple names; the two most common of which are “the trivium method” and “critical thinking”. Herein, both terms are used, and they are used synonymously. The usage of one or the other of the terms is based upon its context of usage; quite often one term may be more appropriate than another. The term “clear reasoning” may also be used describe this approach. It is, effectively, an approach that clarifies our reasoning through the precision of our thought so that we may communicate more fully, and in doing so, generate a greater dynamic of synergistic fulfillment. Critical thinking involves, at the very least, fact checking, situational awareness development, methods for detecting logical errors, etc.

The usage of this general method of thought makes someone an independent and individual thinker rather than a dependant thinker. In not relying on one's own self-organized and self-regulated thoughts a dependent thinker (usually one marked by low self-esteem) has his or her mental content filled by various other so called “authorities” without discernment and filtration for one's own highest and best interests.

The method described herein is a skill, a basic skill, that an individual must to learn (or acquire) in order to effectively integrate further information. It is a rudimentary skill necessary to progress intellectually. The trivium method of critical thinking and creative problem solving by its very nature is preparation for further learning and the self-validation of one's own systematic thought. Critical thinking forms critical ideas and sharpens an analysis down to a critical path (i.e., forming critically useful information). Conceptual integration is one of the first processes a consciousness needs to know in order to know more. Unfortunately, most people in early 21st century society are unaware of the critical importance of having such a method at their disposal. Most people do not have this method as a skill to use for themselves; instead, they rely on others who they believe are following a similar process accurately and in their best interests.

Many people in early 21st century society approach critical thinking with the general attitude that they already have the ability to critically think. Most people realize that without the ability to critically think they would be unable to accurately orient themselves in the world, they could easily become victims. Without critical thinking the world cannot be understood in its totality and navigated accurately. People can easily delude themselves into believing that they have critical thinking, when there is no critical method present in their thinking.

Critical thinking is the bridge between knowledge [produced by analytical thought] and systems design [produced by synthetic thought]. And, like analytic thinking it too is a form of systematic thinking. In other

words, it is a “repetitive-use tool” for discovering and processing information in the systematically mechanized manner of input > process > output.

- **Input** = grammar - basic components; answers who, what, when, where?
- **Processing** = logic - relation of the parts to each other; answers why?
- **Output** = rhetoric - practical application and communication; answers how?

The trivium method is a systematic process based upon how the mind actually works. It is a mental feedback error-checking and correcting tool for new information. It facilitates consciousness in “coming to know” that the information it is working with can [with some degree of probability] be used to orient [intentionally].

This is critical thinking in non-technical jargon:

1. The foundation of all critical thinking is critical questioning (i.e., intentionally focused and actively open inquiry) by consciousness.
2. To find or otherwise discover that which is relevant through non-judgmental observation with a note to which sense did the observing.
3. To work with observations to form something that is consistent and coherent. In other words, to figure out how the discovered information works together (or doesn't work together, as the case may be).
4. To acquire a total [visual & conceptual] picture to reveal understanding and functional complexity.
5. To communicate that integrated information to other people and use it for a purpose. In other words, translate the understanding(s) into effective and efficient [interpersonal] communication.

The following are some of the characteristic components of critical thinking:

- Critical thinking is the ability to analyze facts, generate and organize ideas, make comparisons and identify contrasts, to draw inferences, to remove contradiction and identify opinion from facts, to evaluate arguments, and to solve problems.
- Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analysing, synthesizing, and/or evaluating information gathered from, or generated by observation, experience, reflection, reasoning, or communication, as a guide to decisioning and action.

The trivium method is the application of critical thinking by a consciousness to methodically gather raw, factual data into a coherent body of knowledge

(grammar); then to gain understanding of that body by systematically eliminating all identifiable contradictions and noise within it (dialectic or logic); and finally, to wisely express and utilize that valid knowledge and understanding in the objective, real world (rhetoric).

Once someone is conversant with this three-fold procedural pattern, s/he is now capable of thinking "maturely", learning progressively, approaching systematically, and self-orienting (through value exchange from axiomatic thought). In other words, through the process of learning how to learn, the tool user learns how to critically and creatively think for himself or herself, and in doing so, becomes a self-directed (or, -actualized) and efficacious human being.

The ancients, post Aristotle, understood that one could not study philosophy if one did not have a foundation in the trivium. The word "trivium" comes from the same in Latin, in which it means "where three roads meet" or "the three ways". Etymologically, the term trivium is classical Latin for, "a place where three roads meet; a frequented place; public street, highway," from tri- "three" + via "road". The "roads" being a metaphor to describe: grammar; logic; and rhetoric. Evidence finds that a form of the trivium was understood by ancient Greek philosophers and practiced during Greco-Roman times. As a method the trivium is thought to have been

formalized in ancient Greece. The trivium as a curriculum was formalized in the European medieval period and nearly universally embraced by teachers in the English-speaking world until the early 20th century when it was replaced by State and corporate sponsored schooling. The trivium together with four other subjects (known as the quadrivium) form the seven liberal arts. The term 'liberal' herein means "free". The seven liberal arts were intended to facilitate the development of a free thinking individual - someone free in thought and action. In today's early 21st century society the term "liberal" has taken on an entirely different definition and it should not be confused with the concept with the same name as used herein.

The trivium, the first three of the Seven Classical Liberal Arts and Sciences (the liberating arts (or "the techne"), is both a method and a selection of content used to support the mind in learning (continuous integration), and thinking systematically, without contradiction. Science is similar to the trivium in that it too is a body of knowledge and a process. The trivium was always learned first as preparation for all further learning. Once fluent in the trivium method someone is now capable of teaching themselves with minimal guidance from an instructor or facilitator how to learn an established subject or fully grasping any propositional topic. Through the process

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"What probably defines a thought more than anything else, and distinguishes it from other mental processes is that it is a construct made of concepts. For example, a small child comes across a door handle several times, until the pattern of it – its shape, its utility, its operation – is identified and the concept of a door knob is ingrained in her consciousness. The power of a concept, a mental pattern, to persist in physical reality accumulates with each iteration, each imprint of that concept. A thought is then an assembly of existing concepts, a mental model of a specific fraction of reality – what is commonly referred to as a thought-form."

In order for energy to follow and conform itself to thought so that it amounts to some significance, the thought must be potent and coherent. Potency is cumulative, and is also a function of congruence, or alignment. Coherence is a function of mental clarity and personality integration. In the same way that one learns a language, or a musical instrument, starting from a single word, or note, and then adding a second, and then a third, chaining and combining each additional bit of knowledge with the words and notes already assimilated, in the same way, concepts and therefore thoughts both at the level of the individual, as well as at the group and collective level, branch out of one another, each one adding more breadth and complexity, but also an awareness of, and structured in accordance with, the total body of knowledge. In this sense, not only the process, but also the body of knowledge, or consciousness itself, follows a fractal pattern.

If we imagine speeding up time to the point where the average human lifecycle of 80 years take place in about one second. At that speed, we would witness life – human, plant, animal – take form out of the life which preceded it, bloom, wither, and pass away, much like a wave, coming and going, coming and going, forming and dissolving, forming and dissolving. Each form sprouts like a branch out of the one which preceded it, like a fractal spanning the whole of time, each iteration adding one more element to a boundless, infinite pattern of expression.

We can choose to see ourselves in the divine pattern, and the divine pattern in ourselves. We can grow out of the branch that gives us this life towards the light, so that more branches may follow from us, and be part of the divine plan and the divine order in all its glory."

1. Zoudros, Leonidas. (2013). *World Goodwill Seminar, London 2013 - Leonidas Zoudros*. [LucisTrust. \[youtube.com\]](https://www.youtube.com/watch?v=JyfjwvXzDg)

of learning how to learn one also learns how to critically and creatively think for himself. Besides learning, the trivium method facilitates individuals in determining the reality of the real world versus that which is not of the real world, unreality. It facilitates the discernment of reality as objective existence from that which is only a creation of our minds (or someone else's mind) and not in resonance with real world reality.

To pull one thread of a paradigmatic tapestry could de-secure and potentially unravel all other threads. Remember, clarity in the integration of mental concepts and understandings is principal in systems thinking. When integration is incomplete, or worse, conflicting, then pulling one thread of a dishevelled mental paradigm could lead to the unravelling of understandings that are painful and to which their further integration necessitates the processing of fear. Fear blocks the intelligent understanding of life.

The trivium method consists of three components that form an ordered, procedural information set: **general grammar, logic** (Aristotelian), and classical **rhetoric** [in this order], which constitutes the "integrated", Classical Trivium method - the first three of the Seven Liberal Arts and Sciences; the last four constituents are called the Quadrivium. Each of these components is also a content area of the trivium's knowledge base. When each element of the trivium method is placed in its correct order (grammar <-> logic <-> rhetoric), then the method acts as a functioning cognitive information processing system. This information processing system involves three components: 1) the procedure; 2) the contents previously integrated into the three stages; and its 3rd component, the new information - space for conscious evaluation, a decision space. Together, this three-fold procedural pattern is applied toward a functional purpose, that of systematic and valid thinking. When visualized the method's application causes it to take the geometric form of a spiralling and emergent process that yields greater degrees of certainty and approximations of truth about the universe and ourselves as it spirals through and integrates new information. Hence, the evolution of information takes the form of a spiral structure. The emergent integration of information by consciousness takes the form of a spiral. When new data is found each component of the trivium must be rechecked for accuracy: Is the logic still correct? Is there a better way to communicate this? This is the method for critical thinking - the art of non-contradictory identification and logical integration.

This processes is essentially summed up in the definition of the term 'critical thinking'. Critical thinking is the [art of] non-contradictory identification and logical integration of information toward complex communication and creative design.

Therein, some thing's existence must first be identified prior to it being dealt with in any useful way. Critical thinking is not a functional cognitive tool unless consciousness has data to begin with; for without data one is just offering an opinion - there is no "sense"

[information] in the relationship. As consciousness collects and integrates data it begins to form into patterns. And, those patterns are recorded and tested to see that they hold true. Eventually there has been sufficient testing to suggest a theoretical technical regulation. Critical thinking involves the state of being comfortable with a pattern of thinking by which consciousness may by degree dispel confusion in reality.

Any attempt to verify information via the trivium method will lead to one of three outcomes:

1. Its logically reasoned verification.
2. More information needed.
3. Its partial or full dismissal.

The application of the method ensures a critical approach that questions assumptions based upon the currently layout of an issue's grammar and logic.

When power exists in questioning then motivation exists in doubting. Someone who seeks a higher potential state of information and doubts has the motivation to remove the contradictory paradox in the information's integration, in the experience of dissonance. Philosophy begins when one learns to doubt and question; and, there is no real philosophy until the mind turns around and examines itself. What is humankind, what can it become? What is the self, where has it come from? What am I experiencing?

The 4 philosophical questions are:

1. What is?
2. How do we know what is?
3. What do we do?
4. How do we communicate it?

In the real world, "What's" have a context; they have relationships and are related. They have a record, sometimes known as metadata (discussed further in the Decision System specification). If that record is not entirely known, then the "what" may not be fully known.

Herein, critical thinking is a philosophic skill. It is a cognitive procedural tool for reducing contradiction during the integration process by which new information becomes part of the information tapestry that is the emergent and accessible truth [that informs our decision space]. When we have critical reasoning we can disagree and still share a common ground as inquiry toward greater approximations of truth through evidence and logic. Therein, when we disagree we do not suddenly become "enemies". In fact, disagreement can lead to further understanding for both.

Truth is a proposition in correspondence with objective, factual reality (i.e., a conceptual statement with no innate disagreements). Therein, facts are an objective standard of truth. If someone is being rational, then everything is a refinement to the truth; but one could still be wrong if the logical paradigm that one is

using is refining information to something other than the truth (e.g., garbage in, garbage out).

The critical method is an orientation mechanism. The more accurate information someone has the more accurately they can align their decisions with a desirable and fulfilling direction. It is a tool among intelligent beings who desire to communicate in a clear and cogent manner. Wherein, it reduces the likelihood of becoming infected with falsehoods and arriving at decisions based on inaccurate information. The method involves a form of information verification (i.e., logical reasoning) prior to communication and decision making, which limits the infection of those downstream with paradoxical and polarized thinking.

It is wise to take care to know exactly what is being stored and processed in mind. To be mindful about just what memories we're encoding and how they were encoded. Everything in the mind has the potential to influence how thought occurs and is processed. The encoding of memories has a profound effect upon one's thinking and behavior. When they are encoded they are encoded with a resonant [emotional] structure, which is reflective in some manner of the structure of its environmental trigger. Hence, mindfulness is the presence of mind to resist distractions and understand whatever is going on at any particular point in time. Fundamentally, ideas have consequences [behavioral and at a systems level] when put into practice, when "encoded".

To use a computer analogy, the dissemination of false information is akin to the spreading of a virus, a mental virus (a "meme"), which is unhelpful in a community. A meme is the idea of the transference of cultural information [packets] which are not opened and critically examined (i.e., a mental virus). These abstracted mental programs (or mental viruses) disrupt the clear transfer of inputs. The lack of antivirus software on someone's computer leads to a greater likelihood of infection downstream, particularly when passing through more "conflicted" networks. Viruses clog the ability of a processing system to function at its most brilliant potential. Mental viruses integrate themselves into someone's perceptual awareness and create an increasingly fragmented and otherwise distorted artificial overlay on top of a truthful [source] reality. The method acts as a mental anti-virus, wherein the user looks for truth regardless of prior beliefs, opinions, and understandings. Truth becomes the ultimate search. Critical thinking reduces susceptibility to irrational attempts at persuasion. Yet, when intellectual self-defense is turned down and emotion and fear are turned up then ideas are more easily inserted into someone's cognition. In other words, without tools individuals may be easily turned into fools. We should all know how to recognize lies if we are all to become self-reliant, together.

Lies are like viruses. They can spread quickly and far, even without awareness of the individuals infected by them. Everyone can spread disinformation and lies

unconsciously if they do not make the effort to question, engage their critical thinking abilities, and network with others to gain greater objectivity. And, deprogramming oneself from the conditioning and lies of official culture (that most people aren't even aware of being lies) is challenging, but rewarding work.

As a whole the trivium method can be habituated such that it is continuously running in the background, like a systems integrated antivirus program. Therein it would reduce the contradictions that one personally holds in their mental model ("defragging" ones mind) or that are presented in a communicated statement itself. Its continuous application builds discerned, active inquiry as well as mental acuity.

There are two general categories of bad information:

1. **Dis-information** - is an active lie or deception.
2. **Mis-information** - is when an interlocutor is sincere, but is passing on information that is wrong, though not necessarily a lie.

There are three general categories of error:

1. **Relevancy** - is the error relevant? Does it have relevance to the argument?
2. **Presumption and presupposition** - is the error presumptuous? People add things to an argument that are not necessarily true or verifiable?
3. **Ambiguity** - is the error ambiguous? Does it leave the person who is the recipient of the argument with questions about what is actually said, or is there maybe a deliberate strategy of being unclear ongoing? And, is there honest integrity in the relationship so that uncertainties are transparent?

When individuals in mass are forced into a [schooling] system that disconnects their intellectual immune system (their intellectual self-defense), then the community naturally becomes incoherent. Volition, someone's decision making process, someone's choice, someone's free will is dependent upon a method to dispel confusion, a "mental immune system" or "ironic monitoring system". When the system is active and accurately informed their exists the potential for genuine self-esteem and self-reliance; the creation of a state of true self-direction. Therein, one can be reliant on oneself and others in the community to facilitate in the fulfillment of all common needs.

It can be unhealthy when people don't have a method to fill holes in their cognition. It can lead to some malicious person coming along with a pre-packaged explanation and saying, "here, rest easy, I am your leader and shall fill your hole with this knowledge ... but don't open it." Outsourcing your thoughts will not lead to your alignment with a higher potential. To really understand and think and move forward confidently with a better understanding and a bigger picture requires self-

directed effort. It is unwise to accept pre-packaged grammar (or prescribed grammar) without investigation. The package is highly likely to contain false and misleading grammar. Knowledge is not acquired by individuals through the acceptance of pre-packaged "gifts" given by an authority (i.e., knowledge is not acquired through schooling). Always question authority -- that means both the institutions and individuals that set themselves up to provide dictation and advice. It is unwise to be overly impressed by the status of any institution. Fundamentally, "your" self-confidence doesn't have to come from a group or from authority, it can come from having a method to handle uncertainty for oneself, which takes self-reflection on one's own beliefs, values, and knowings. Herein, reflection turns experience into insight and wisdom.

When corrective, philosophic thinking is absent then individuals are more likely to be "taken advantage of" by stimulus and response. Its absence can quite easily and subtly turn an otherwise free individual into an intellectual servant. And, there may be some unlearning (dissonance processing) necessary to recover ones individual self. There is competence and respect in being able to appropriately validate one's own thinking as well as the thinking and ideologies of others. There exists the experience of empowerment in being capable of orienting one's own body and mind in the world through rational thought applied in a systematic manner.

For the individual the trivium represents a methodical pattern-of-thought (a thought process) for thinking effectively. It does not direct the thinker "what" to think. Instead, it represent a system organization that creates an ever-improving map, which corresponds to the terrain, and is always improving itself; for the purposes of survival and life fulfillment.

The critical method has been obfuscated, suppressed, and taken out of most of modern education systems, where people are not taught "how" to think but "what" to think - they are programmatically conditioned.

Removing and withholding this tool leads to the ability of the few to control a collective [of their followers]. Taking critical thinking away leads to the removal of a very important connection, the idea that the language we use and the concepts we think about relate in a very real way to the natural world with a discoverable organization - that there exists a real world reality. It takes the meaning out of words and how words relate to these categories, these signature referents that exist in reality. It is a very simple idea that the nouns and words we use actually relate to tangible, physical reality; whereupon, a critical path can be navigated around obstacles as we emerge into a greater knowing and greater fulfillment. Inquiries become less about how our lives align with a tangible and dynamic reality, and more about how "you" mold tangible reality to get what "you" want out of it entirely de-contextualized. Therein, authorities come in and begin to guide someone's experience and direct the path of their attention. They prescribe your rights; they say what reality should or should not be; and they begin

setting up bureaucracies to obfuscate the abstractions that feed their collective.

The mind has a limit on processing power; it can readily be overwhelmed, confused and distracted if a method for dispelling confusion and finding reality is not continuously applied. The absence of such a method opens the door for external control and influence over the individual making social engineering easier. Moreover by curtailing the individual's ability to comprehend, integrate, and actively communicate what they have learned we are being cut off from reality (as knowledge of ourselves and our environment).

The truth doesn't change only because authority wants a different "truth" to be told. The truth can be observed and sensed and verified. Nouns relate to the substances of experience, adjectives relate to aspects or qualities, and prepositions [in part] involve types of relationships. Categories relate to real things that we experience, or have the potential to experience. Yet, thinking categorically (i.e., thinking from the perspective of a divided or divisional category) is not sufficient for understanding and for the design of fulfilling creation. One must also integrate the whole information space (i.e., think systematically). In community, it is necessary to think through the emergence of a system as well as think through the categorization of the elements of a system. Herein, critical thinking involves the challenging of categorizations, assumptions, and abstractions. Aristotle facilitated humanity's understanding that it is possible can create conceptual categories, "syllogisms", of things in reality. And in community, we add the design question, "What is possible?"

It is not necessarily so, that because "you" have been thinking for years, that just naturally over time "your" thinking has improved - it is not necessarily so. The fact that "you" are thinking alone will not make "you" better at thinking systematically. It only may makes you better at the type of thinking you are doing. The Two finger typist will over time become more refined at two finger typing, but that will not make the typist a structurally more efficient (or better) typist. So, if "you" are a poor thinker and "you" practice poor thinking a lot "you" will likely become an excellent poor thinker.

An example of poor thinking might be the failure to accept and appreciate criticism. In community it is important for us to admit that we may have made an error; herein, criticism becomes the antidote to error. And, if a society wants to become good at anything then criticism is valued. Today, science has become reasonably good at the reciprocal approach to criticism. In science, we do not kill or maim those who criticise. The ultimate critic is objective reality who says, "no, it sounds really good, but you are wrong." If we fear criticism or interpret criticism as "negative", transposing self-criticism for the notion of "can't afford a negative thought," then we lose out on the opportunity to grow by identifying and learning from our mistakes, which is the "theme" in a fulfillment-oriented society.

When we realize that we can know things and that

we can install better thinking tools to know things more accurately, then our confidence has truly begun to rebuild itself. Learning to think is like learning to walk, and once you are proficient at it then you can "hike through" a conversation with another proficient learner.

4.1 The three stages of the trivium method

INSIGHT: *If we choose to ignore principles that are based upon truth, and therefore, ultimately ignore truth, then we are likely to enter a chaotic existence (a higher entropic state) where self-inflicted suffering becomes our perpetual manifestation.*

The Trivium method (or process) contains three stages (or steps). Those three stages in order are:

1. **Grammar** (knowledge of that which exists) - Answers the question of Who, What, Where and When of a subject.
2. **Logic** (understanding of the interrelationships of that which exists) - Answers the Why of a subject.
3. **Rhetoric** (communication of grammar and logic) - Provides the How of a subject.

The trivium is the identification of a method to reduce contradiction that may also reduce fear.

4.1.1 The grammar stage

There are two separate concepts that compose the grammar stage of the trivium: special grammar and general grammar. The purpose of the grammar stage is to move from perceptual information to conceptual information without introducing or integrating contradiction.

4.1.1.1 Special grammar

Special grammar refers to the rules developed and applied to the ordering of words/concepts for verbal expression and communication in the form of a sentence; it refers to linguistics and the rules of a particular language. To connect conceptual points, or words, there must exist rules. Those rules are called special grammar. And, when both words and grammar exist, then language exists. In other words, special grammar is the grammar of languages - English and Russian grammar being two examples. Special grammar is grammar in the commonly discussed sense, as conceived of by Steen (2007), and encompasses all components that are needed for a full description of a language, such as its lexicon, phonology, morphology, syntax, semantics, and pragmatics (i.e. coded pragmatic functions such as elocutionary potential, honorifics, etc.). Special grammar is not a stage of the trivium method per say. Instead, it is a component of the body of content that makes up the grammar domain.

4.1.1.2 General grammar

INSIGHT: *It is unwise to accept and discontinuously integrate erroneous definitions.*

General grammar is the first stage of the trivium method and it concerns the facts of objective reality, regardless of language, which apply to all systems of their kind as the first set of building blocks to an integrated, fully interrelated, and objective body of knowledge (e.g., nouns). To understand nature it is important to first inquire into nature. The grammar stage of the trivium method involves the discovery as well as relational, discursive and sequential organization of factual data into a coherent and systematic body of knowledge. The grammar stage is limited by the information available to our common senses and technological instruments. Essentially, the product of science and the scientific method is 'general grammar'. General grammar is the equivalent of data and may not be in-formation.

The philosophical art of general grammar lies in definition. Things that exist in reality have specific differentiating factors. These factors can be defined and grouped by their unique attributes (i.e., their characteristics and structures) into a universal concept, which carries a definition. In other words, things that exist in reality have unique characteristics that can be differentiated from other information by grouping and universal conceptualization (like "tree" or "molecule"). Simply, through universal conceptualization of information contained in perception, consciousness can come to understand the existence in which it is enmeshed.

The English verb "define" comes from the Latin word "dēfīnīre", which means "to put a limit on, determine, explain" (from *de-* ["completely"] and *finis* ["boundary, end"]). Essentially, the process of defining is the process of delineation. Hence, for us to discuss something or have a philosophical argument, then we have to put a limit or place boundaries around a concept so that we aren't getting lost in what we are trying to describe and communicate and integrate.

Voltaire once said, "If you wish to converse with me define your terms." How many a debate would have been deflated into a paragraph if the disputants had dared to define their terms. Philosophy provides a way of defining. In philosophy, the 'essence' of something is that which makes it unique, and the 'universals' are the commonalities. Once universals are discovered/created, then statements, arguments, and questions can be generated. Through questions, scientific tests can be run, and then, stated conclusions can be drawn [through logical argument].

As embodied consciousness, we can use our senses to take in experience and abstract from it. The etymological root of the word "abstract" means to "take apart". So, for example, we can observe a color to grass. Abstracting the essence (or, one of the [structural] properties) of the thing we are observing and putting them together in uniquely meaningful ways is the foundation of art and

creativity. We have an almost infinite ability to abstract, to take things apart, and put them together in different ways. This is where our creative freedom lies.

Here, Korzybski's theory of "general semantics" has several important things to say on the topic of abstraction:

1. Mathematics should be used to describe physical events where possible.
2. Avoid identification of word with a thing.
Experiencing the things behind the name (will help us more greatly come to understand the world we live in).
3. Higher order abstractions should be used cautiously and consciously, and it is important to know what level of abstraction they are on.
4. Use visualization to show structural similarity and clear up what level of abstraction someone is on.
5. General semantics adds two additional points:
 - A. Education is about experience and self-verification; and
 - B. Delay conclusions until all the facts and experiences possible to arrive at a conclusion.

But, in order to put things together in useful ways we must first have accurate data.

General grammar answers the question of Who, What, Where, and the When of a subject. It consists of discovering and ordering the facts of reality that comprise basic, systematic knowledge of the total real world information system. In other words, the purpose of general grammar is to identify, gather, and systematically arrange raw, factual data of a similar nature into a specific body of knowledge. Thus, this stage works through primary first-order knowledge of a subject. Knowledge represents the first stage of conscious understanding after contradictions and fallacies have been processed out of incoming [sensory] information.

When individuals look out at the world they observe things that are identifiable, they observe "nouns"; no two of which in the existent world are in a state of contradiction. There are no contradictions in nature, only in the minds of individuals. A recognized contradiction is either a lie or an error. A thing cannot be itself and something else at the same time and space.

Existence is every substance, action, attribute, and relationship that is, was, and ever will be expressed grammatically. In other words, existence is every noun, verb, adjective, adverb and prepositional phrase that ever is, was, or ever will be (three dimensions of a temporal system: past; present - now; future). These are the categorematic words of consciousness (i.e. words that are capable of standing alone as the subject or predicate of a logical proposition).

Essentially, general grammar consists of objective reality organized into the parts of speech [of a language]. The parts of speech may be divided into:

1. **Concepts of existence** (categories and categorematic concepts that stand by themselves; they have a referent in reality; they are "parts of speech"):
 - A. **Noun** (a substance or "thing"; things have different *forms, attributes, and states; the "things" that make up reality*)
 - B. **Verb** (an action or state of being)
 - C. **Adjective** (a noun modifier provides an attribute of a noun).
 - D. **Adverb** (a verb modifier that provides an attribute of an action or state or being)
 - E. **Preposition** (full expression of a relationship)
 - F. **Symbolic measurement** (numbers; the identification of differences between things that exist, usually placed along a spectrum)
2. **Syncategorematic concepts** (conceptual words that facilitate, streamline, and economize thought):
 - A. **Conjunctions** - usually coordinate independent clauses (e.g., and, for, so, yet)
 - B. **Articles** - usually a special case introduction to a noun, introducing whether the noun is particular (definite) or general (indefinite); in order to clarify what is in our mind we look at general signatures (or pictures) and special pictures, we look at universals and particulars (e.g., the .., a .., an ..)
 - C. **Exclamatory interjections** - a word that extends a complete thought; followed by an exclamation point; the only words that stand by themselves as a complete thought or sentence

To an inquiring consciousness, there are:

1. Things that consciousness can experience the existence of (e.g., objects).
2. Things that describe what exist (e.g., words).
3. Things that relate what exist (e.g., concepts).

There must exist agreement on grammar (both special and general) between communicating individuals otherwise it is impossible for there to exist any form of logic between individuals. Communication about the existence of objects comes after individuated consciousness has identified and verified an existent relationship for itself. A coherent communication system involves a much larger system that seeks to facilitate individuated consciousness in experientially verifying the truth of existence for itself, and in so doing it generates resonant realities. Some resonant realities are more "in-tune" with existence than others, and hence, involve more coherent communication between individuated forms of consciousness ... for they are "realizing" (resolving or rendering) greater unity.

Discussions that involve logic and understanding cannot move forward until both special and general

grammar are defined and clarified between all participating parties, otherwise inherent (or intrinsic) confusion will exist as a property of the relationship. It is important to note that agreement on grammar need only exist during actual communication and that after its conclusion the communicating parties may revert back to their own individual grammar if that is their choice.

It is not "absolutist" to define your terms of language or general linguistic premises, it is a necessity for clear thought and communication. Engineers do not design lasting and safe structures out of confusion and contradiction, and critical thinkers do not develop accurate thinking skills, rational mental models, and coherent behavioral patterns out of confusion and contradiction. Definitions must be stated in advance of any communication, or accurate communication is unlikely to result - consciousness must synchronize and acknowledge communication (Read: SYN-ACK [en.wikipedia.org]) between individuals to remain in information coherence [in a dynamic, material environment]. This is particularly important when morality is being asserted.

INSIGHT: *The beginning of wisdom is the definition of terms. Definition - from all of the possible "you" are explaining what something actually is de-finiting, and not in-finiting.*

4.1.2 The logic stage

NOTE: *Logic derives greater understanding by removing inconsistencies and contradictions.*

Logic is the process of thinking correctly and without contradiction, the art of logical integration and interaction. Logic answers the "why" of a subject through the reasoning of existence of non-contradictory relationships, which reveals a more systematic understanding of the subject under examination and in question. Whereas science depends on logic, and logic depends upon non-contradiction. Logic is essentially a tool used in many disciplines including philosophy, mathematics, and science. Therein, logic may be defined as the science of non-contradictory reasoning [by itself]. Science uses logic as a tool and is unable to function without it. In science, logic involves the discovery of order - a natural ordering function. And, logic is empty without science to check its premises. Logic is a part of science, of mathematics, and of philosophy, and it is ineffective and counterproductive to separate them (i.e., to separate logic from inquiry into that which is). The purpose of the logic stage is to more coherently relate identified conceptions, to self-check [for errors].

After a body-of-knowledge is gathered (through scientific inquiry) and properly arranged through general grammar, a truthful understanding of the topic or proposition is sought. When all of the stated contradictions have been removed from the proposition by subjecting it to logic (this work is called "a proof"), the

proposition is said to be understood. When all of the relationships within the proposition are in concurrence and there remain no contradictions, then all of the statements within the proposition are related critical facts.

The methodical application of logic facilitates the alignment of subjective perception and personal understanding with objective reality.

The use of logic shifts the focus from mere facts to the understanding of relationships, which are discoverable and probabilistically assessable. Wherein, reason takes precedence in identifying critical assumptions, contradictions, logical fallacies and other inconsistencies. Logic facilitates consciousness in checking the accuracy of its grammar and minimizing the misinterpretation of incoming data [in its integration of sensory experience].

An individual consciousness makes contact with reality through its senses (i.e., bodily sense organs) - its "instruments of knowledge". Senses do not necessarily provide false information, it is instead consciousness' [mis]interpretation of the data that generates misleading and false information. The human mind can be affected by illness, by injury, and by illusions and belief to name just a few compounding factors. Sometimes sense data becomes distorted, and hence, consciousness requires a systematic way of looking at its own distortions (Read: contradictions) - logic in particular, and the trivium method in general provides for that.

Another word for the process of logic described herein is that of "dialectic". A dialectic is a method of argument or exposition that systematically weighs contradictory facts or ideas with a view to the resolution of their real or apparent contradictions - in order to ensure that one follows from the other - in order to generate a mental state of lower entropy (less confusion and chaos). It is the process of conducting an internal or external dialogue to reduce contradictions. It is the process of removing contradiction so that one thing follows from the other, which doesn't mean that it was necessarily caused by the other (Read: post hoc, ergo, proctor hoc).

The three critical laws of logic are:

1. **The law of identity** - that which occurs or has occurred can be individually identified to exist. How is it identified to exist?
2. **The law of non-contradiction** - There exists discoverable information about the real world, such that contradictory statement about the real-world cannot both be true (accurate, factual) and false (inaccurate, unverified).
3. **The law of excluded middle** - There exists discoverable information about the real world, such that a statement about the real world is either true (accurate, factual) or its negation is true (accurate, factual).

A **fallacy** (i.e., logical fallacy) is an unreasonable argument or a mistake in argument involving incorrect or illogical reasoning, which are often employed for purposes of manipulation. A fallacy is an error (or manipulation) in reasoning in which the premises given for the conclusion do not provide the needed degree of support. Arguments are subject to a variety of fallacies. Having explicit knowledge of logic and the fallacies enables the identification of the exact type contradiction or falsehood in a circulating argument. There currently exist a known collection of logical fallacies and the number of logical fallacies may never be complete because there may always be more ways knowable to propagate falsehood and to generate contradiction. Fallacies are, in part, incorrect methods of logically thinking.

Fallacious information can be intentional and unintentional. Notice that the root cause of unintentional fallacies is not starting from a recognized axiom and structuring factual data into greater knowledge, understanding, and wisdom. Additionally, it is unwise to assume that all possible ways of erring in reasoning have already been discovered, identified and understood. It seems that such an assumption would itself constitute a fallacy.

Fallacies are a red flag, but they are not necessarily the whole picture. Understanding the fallacies provides us with a nice warning or alarm system. The notification of a fallacy means that there is more investigation required in order to come to a valid and true conclusion. If the statement is in the form of a fallacy it doesn't mean that the statement is false. Perceptions develop into concepts, which are formed into propositions, which are then tested for validity. Herein, the definition of a thing is ultimately where truth resides, for a proposition is either true or false - what something is and not otherwise.

Language can be used to manipulate and plunder the self-worth and fulfillment of individuals. Language can be used to reveal and it can be used to conceal. Language contains logic if it is there to educate and it contains fallacies if applied to deceive.

The presentation of a contradiction to a discerning consciousness will likely generate an uneasy emotion in that consciousness, which must be "processed through". When contradictory information is integrated without coherent processing it will generate a static "traumatic / dramatic" emotion in the continuous rendering of consciousness. When contradictions are "given" to anyone (i.e., accepted and integrated without question), then they can significantly inhibit further critical thinking and potentially create a semi-permanent state of cognitive dissonance. It is essential for a consciousness that desires fulfillment to remove the contradiction from that which it is presented prior to integration into a working (Read: decisioning) information space.

When someone knows how the manipulation works it reduces or eliminates its effectiveness. In other words, if someone can identify the specific fallacies being conveyed in manipulative statements, then they are less

likely to succumb to the agenda of the manipulator. This is particularly true of those who have to some extent or another "inoculated" themselves against advertising and marketing, which in principle involves the fallacious manipulation of information to turn an "audience" into "consumers" of a desired business' product. It is important for one's very mental health to question declarative statements. Note here that there can be a double manipulation occurring. In other words, when someone experiences and notices manipulated information, that person may become more hardened in their original view because of the noticing of the manipulated information, which could be the manipulators original intent. In other words, the manipulator manipulates the information, the receiver notices the manipulation, the receiver then becomes more hardened in their view because of the noticing the manipulated information, which all along was the original intent of the manipulator (i.e., to harden the bias/view of the manipulated by putting out information that the manipulated would notice as being manipulated).

"The first principle [of effective reasoning] is that you must not fool yourself and you are the easiest person to fool."

- Richard Feynman

When you can look at an advertisement and see how the advertisement is attempting to manipulate you, it is helpful; it helps to reduce the effectiveness [of the manipulation tactic from pre-programmatically structuring the next iteration of your conscious state]. It is like watching a magician and knowing how the trick works. It just doesn't have the same effect anymore. But, some magicians are so good that when you are watching them, and even though you know what they are doing, it is still convincing (i.e., the advertisement is still insidiously influential). For instance, some advertisements are conducted like an informative and friendly interview. They are designed to appeal to someone's sense of "being informed", and therein, the sponsor's agenda slips into the observers mind through their fabricated feelings of self-development and resonance with the situation. And, make no mistake with years of scientific research into human manipulation behind them some advertisements are that good. We realize that all ads are all a form of propaganda. The purpose of advertising is to increase product sales. Advertising is paid propaganda no matter how it appears in its final form. It is possible to have contrived associations in "our" minds that are put there by competing entities entirely for their own benefit and for profit. Fundamentally, through advertising and marketing, people are looked upon as prey for a sale and salary.

Advertisements are paid for, in order to:

1. Cause people to remember a product (and think about it in future purchases).

2. Cause people to feel good about a product (engineering positive psychological responses to the products).
3. Familiarize and/or make people more comfortable with a product, idea or attitude.

Even when you are aware that you are being advertised to there may still be pervasive effects that slip in. And, if you ever catch yourself subconsciously repeating a marketing phrase or vision / image, then stop for a moment and realize that what you are experiencing is the effect of: experiencing advertising. The subconscious repetition of a market entity's message reinforces the message. Repetition can do incredibly useful and malignant things.

Marketing can be masked as news, scientific research, and it can be so subtle that it feels like "entertainment". Advertising doesn't just reflect a culture (as industry purports), it affects and normalizes attitudes, values, and behaviors (including unconscious behaviors).

From retail surveillance (gaining intelligence on "the customer") to scientific studies into addiction and human manipulation, there is an entire industry dedicated to making goods and services, foods in particular, more and more addictive and flavourful so that you will want more and more and buy more and more. That is the business of advertising and marketing. Chocolate chip intelligence is the level of intelligence in most of early 21st century society. The food industry is wrapping its crap in increasingly "green" and "soylent" looking packaging. Their business is to sell their products, never forget that. Advertising can build in false associations from early childhood, shifting and shaping perceptions, which then become maintained at the socio-economic, cultural-level. The business statements you see around you are a highly orchestrated and choreographed marketing extravaganza designed to encourage you to make purchasing choices that are most profitable for the store and their vendors - that's the business. When you see the wizard behind the curtain you are able to make different choices. And, it is also important to realize that we are hardwired to be vulnerable to some tactics, even when we are aware of them.

Common fallacies are categorized by their type, such as Ad Hominem (personal attack), and appeals to authority, belief, fear, ridicule, tradition, etc.

The word fallacy comes from Latin, wherein it means a trick, deceit, or lie. Yet, contradictions are either errors or lies. The ability to identify logical fallacies in the statements and arguments of others, and to avoid them in one's own is both valuable and assists in the discovery of truth, a reduction in error, and the inhibited spread of lies. If one can identify the fallacies one can start to identify the manipulation (intentional or otherwise). Here, we need to understand deception and historical biases so that we may come to understand some of those things that are limiting us.

The logical fallacies are a means of evaluating information for contradiction. Fallacies are sometimes

known as "conclusion loops" in that there is no basis for proof of the argument because the premise and conclusion of the argument loop into each other (i.e., represent a contradiction). Knowing the logical fallacies is like taking the red pill in the matrix and revealing the relationships that are known up to now to compose reality in a non-contradictory, and hence, non-paradoxical manner.

Logic is a way of tracing an argument or opinion or belief or relationship. It is a tool used by a critical mind in discerning where the argument begins (inputs), where it goes (processes), and where it concludes (outputs), how reliable or valid it is (feedback), and how it is applied to other incoming information for new creation (engineering). Logic is a system of reasoning, which in a virtual information system involves the encoding and decoding of the virtual information experience. Reason does more than go from premise to conclusion, it provides the potential for synchronization with some aspect of the real [world reality].

Logic is a [conceptually constructed] tool, a "construction". Logic is applied relative to a paradigmatic system of thought. In a social environment logic becomes the agreement among people to have a common denominator in the integration of new information and new relationships. It is the way to objective truth in our shared world. Yet, the internal logic of some structures is quite unhelpful in producing understanding. And still, it can ground objectivity reality in the inquiry into understanding and valid knowledge. It does not, however, give a person knowledge of absolute or divine truth, or give any satisfactory meaning and purpose to one's life. Logic is only a tool for discerning a closer approximation of truth.

The process of integration [by consciousness] cannot be feasibly deferred to someone else, to an "authority" - if so, then it is not true integration, it is not learning.

Having knowledge and understanding of the world around us through the removal of the contradictions in our thoughts so that they're "not dissonant", focusable, "intellectually pure", reasonable, and rational is at the very least going to lead to less conflict in a community. Without logic applied systematically unreasonable, irrational, illogical, and contradiction-driven ideas may be the very things that give us the problems we face: greed, war, usury, slavery, injustice, etc., - all based in the irrational and illogical thoughts of those who wish to dominate others in the sole observance of the achievement of their needs over those common to all. Behaving in this manner is an indication that they do not recognize personal fulfillment reciprocally connected to social fulfillment as a logically existent relationship.

Someone who places logic before grammar might say, "Don't confuse me with facts, I have already made up my mind." False conclusions are reached when individuals go straight to why without first collecting data and asking who, what, when, and where. When someone puts their logic before their grammar they shut off the totality of their thinking process.

Individuals need the ability to connect to information (e.g., the senses; science), but we also need mechanics. Mechanics allows for intellectual integration and intellectual self-defense through the method of information processing known as critical thinking. The process (or mechanics) involves the identification and sorting of new information, the accurate integrate the new information, and then the new information model's optimal application and communication. This functional process may be metaphorically referred to as a "navigation tool", similar in function to a compass and gyroscope; mechanics are things that may help to keep one balanced and focused and adaptive to one's material and conceptual surroundings. To have this method is to have the freedom to continue the learning process [without or with reduced deceitful interference].

Thinking is the act of processing perceptions and applying logic to ensure one's conscious awareness remains in sync with that which exists. The inability to process our perceptions of reality into knowledge, understanding, and wisdom continues to cause many of the problems present in early 21st century society.

All humans have common sensory abilities (unless someone has a some severe disability). These senses are how we interface our mind with matter. We use language to connect through and between matter. The question then becomes, is your mind in synchronization with reality? If you bump into someone who is irrational, they might be dangerous to your mental health. If you bump into someone who is physically violent, they might be dangerous to your physical health. People who do not use logic, or further, those who deny that they use logic -- they can be irrational and dangerous. They carry mental viruses that it is wise to protect oneself from.

NOTE: *Dissonance (conflict) in perception can lead to greater understanding if thinking is fluid (not stuck, static, or stagnantly skeptical).*

4.1.3 The rhetoric stage

INSIGHT: *Observation, identification, organization, communication, and feedback are the individual steps through which individuals may come to learn, to decide, and to make useful tools.*

Grammar and logic are now integrated into *explanation*, *communication*, and *application*. This is also the stage in which new questions are asked of phenomena. Rhetoric is the *How* of a subject. A rhetor will ask, "How is the grammar and understanding of a subject best communicated and applied?" Holistic concepts, such as "best" and "optimal", are a critical component of coherency. They represent the most holistic form of consistency.

Inherent in the rhetoric stage is the proper choice of means and methods for cogently expressing the conclusions of the grammar and logic of a subject. Once a body of knowledge has been grammatically arranged

and a logical conclusion has been made from that arrangement, the choice of how best to communicate the conclusion to others must be considered, and in the process, the subject being examined usually comes into an even sharper focus to the rhetor. In part, rhetoric is the art of selecting the best means of communication from a set of known principles about coherent communication - wisdom in the communication of logical findings - context in communication (communication as a full-dimensional thought structure). After a body of knowledge has been grammatically arranged and a logical conclusion has been arrived at from that arrangement we come to a point where we have to make choices about the best way to communicate the integrated understandings to other individuals. In this process the presenter, the thinker, can gain an even better understanding of the subject matter through a thoughtful presentation, while reinforcing desired neural pathways. A comprehensive perspective is achieved during this stage - thus the truism, "you don't know it until you can explain it".

In the rhetoric stage conclusions that had been derived into *statements of rationale* [in the logic stage] become a set of instructions deduced from the rationale for the purpose of application and encoding (of those conclusions) in the real world. These formalized instructions are sometimes known as *statements of protocol*.

It can be all too easy to forget in one's communication with another being that there exists an essential sameness in the experience. Hence, for rhetoric (i.e., communication and action) to remain in valid alignment with existence it cannot become abstracted from compassion. In all communities there exists usefulness in 'compassionate communication', whose absence prevents constructive action. It is interesting that the global schooling system does not teach individuals the essence of communicating and how to really share themselves, clarify truth, and get their needs met, when it has much more to do with all forms of success in life on all levels than anything else that could be taught. This approach involves the fulfillment of needs for reasons that one won't regret later.

Rhetoric is another word for wisdom, it is systematically usable knowledge and understanding together, and it allows for value re-orientation. The trivium method is an open systems process, it is continuously repeated for purposes of clarity in orientation over time. If it is knowledge and understanding that someone cannot use in the real world, then it is not wisdom.

Humankind can apply the concept of ratio, which is the root of rational thought. By perceiving ratios in nature an individual can design an item in mind, and if it is valid and true, in accordance with that which is, s/he can produce that in material form (reification), s/he can create the ratio in material structure.

The art of rhetoric originates in ancient Greece where it was generally defined as the art of persuasion. There was an early Greek emphasis on rhetoric, and a misconception that a good speaker essentially had to be

a good person. At the time few people asked, "How could someone who was so convincing and so persuasive, so eloquent, possibly be less than forthright in other ways?" Certainly, that misconception carries right up to the present day, where it still matters little what a "professional public speaker" is, as long as it sounds and looks good to the audience. As long as they build this crescendo that leads to people erupting into applause. People without the ability to respond with deep thought may potentially react in applause without deep thought.

The Greek word for wisdom is "sophía"; from which the term "sophistry" and "the sophists" originate. Sophistry is persuasively sophisticated rhetoric through plausible, but fallacious argumentation, not wisdom nor the idea of rhetoric conveyed herein. The sophists were a group of traveling teachers who would go around supposedly instilling wisdom (they were professional public speakers), but all they were really good at was sophisticated rhetoric - winning the argument through the confused contortion of logic, or the application of logic for which the audience is already attached and comfortable. And, if "you" paid them enough, they would reach any conclusions "you" like; kind of like lawyers and politicians in early 21st century society. Logic might have been complementary to the process and discipline of sophisticated rhetoric, but it wasn't until Plato and Aristotle that logic and rhetoric became intertwined in an important way.

One of the first thinkers that tried to provide some distinction between philosophy and sophism was a man named Isocrates. Isocrates wrote a piece called, "Against the Sophists" where he elaborated upon several criticisms that he had of what the sophists were doing. In "against the sophists" Isocrates claims that these people are essentially charlatans who were making promises upon which they could not deliver -- they claim to be much wiser than they actually were. Isocrates questions why they would demand payment up front if they were so wise and confident in their ability to teach virtue and justice. He asks why they would not simply take payment in one sum at the end. Isocrates points out that it is far easier to teach a person a few strategies of rhetorical trickery than it is teach the real, solid rules for filtering through to a greater approximation of truth and the communication of that truth through clear visual language.

Plato lived at approximately the same time as Isocrates, and he introduces the idea that if the goal of such teachings were truth and not just trickery, then rhetoric cannot exist independent of logic. It is also Plato who says that the sophists are just people who are telling others what they want to hear or saying to others things that sound impressive, but are not advancing knowledge in students or audiences, and in many cases, may be working against real knowledge, understanding, and wisdom - at worst providing a kind of counterfeit wisdom. Later, Aristotle reinforces Plato's idea essentially saying that true rhetoric is the counterpart of dialectic (i.e., logic) -- the two must go together. Aristotle communicates

this through what he referred to as the three appeals, as foundational requirements for persuasion: logos (rational); pathos (emotional); and ethos (ethical). If rhetoric is to have any practical use in life, then it must result from logical conclusions. The emotional and the ethical are the other two appeals to persuasion. Aristotle acknowledged that part of persuasion was being able to reach people on an emotional level where-after ethics becomes salient.

Instead of Plato's conception of persuasion as a form of uplifting communication, persuasion can be viewed as the desire to spread bias and belief through. Therein, the idea of persuasion is uni-dimensional (i.e., biased), and the idea of truthful inquiry is omni-dimensional (i.e., holistic). In other words, in the negative, persuasion is the manipulation of another for one's own self-centered gain, whereas truthful inquiry does not involve persuasion on anyone's part, but is instead the process of open inquiry and active integration on everyone's part (Read: everyone participating or otherwise communicating).

A connection is a communications conduit (or channel). Whether the communication is experienced either as a resonant symphony, or, as a disordered cacophony, depends on the ability of the participants to synchronize their information systems. Individuals in a community might choose to synchronize their information systems to an objective and common reality for their mutual fulfillment.

"The greatest obstacle to communication is the illusion that it has occurred."
- Harri Kallio

4.2 Conception

NOTE: *The process of schema changing [to another pre-defined schema] is known as 'assimilation'; which, in and of itself, is a morally neutral concept.*

The first unit of information is the "concept". This is basically a category that groups together items with similar characteristics or properties. These are the building blocks that are used to create structured knowledge. Concepts can represent anything identifiable, such as objects, events, abstract ideas, relationships, or activities. A concept is a fundamental category of existence. To consciousness, a concept is a meaningful connection within awarenesses. When speaking of the idea of conception it is essential to provide a definition for the word, 'definition'. A definition is a limitation placed on the extent of usage of a word.

Concepts are [identifiable] building blocks, and the mind uses them to relate and to build. Concepts are put together to create propositions, which are units of meaning expressing a single idea. Come up with a sentence, any sentence -- this is a proposition. Truthful propositions that are related and linked create a network of knowledge and information that makes up a schema

(or model). A schema is basically a mental model of what a mind expects from a particular encounter. Mental models are the inner representation [that embodied consciousness maintains] about how things work in the outer world. And, they affect how individuals and societies work with information and determine decisions.

Concepts are formed and/or constructed (i.e., conceptualization occurs) when consciousness isolates two or more similar identities from the rest of one's perceptual field, and integrates them into a single mental unit (an "identity"), symbolized by a word (or other symbol), by language. Concept formation is also sometimes known as "universal abstraction" (i.e., abstracting to a universal), the most fundamental [systems-] level of which might be referred to as an 'axiom'. To consciousness, concepts serve mental [processing] needs by maximizing cognitive economy.

A concept subsumes an unlimited number of instances (past, present, and future) which are similar to it. It is an identified, universal property of a system. Useful conceptualization requires thought on the part of consciousness. Conceptualizing the different aspects of self and of reality [by consciousness] can facilitate the integration of experience into wiser decisions.

Concepts organize perceptual material and are a mental representation that share a set of signature similarities, or characteristics, with objects and experiences in reality. That is, concepts refer, and what they refer to are perceptively identifiable categories in existence. Concepts can and cannot relate to things in reality. Conceptual similarity provides the foundation from which individuals might work together in common.

The objective theory of concepts states that definition is the final step of concept-formation. We do not begin forming concepts by first defining them and then looking for units which satisfy their definitions. This would be a reversal: what would we be defining in such a case? It would be a concept without units, which is a contradiction in terms. And what gave rise to a concept without units?

The task of a concept is to "unite things that share an essential similarity". We form concepts for a purpose – to group like things into a mental unit which is open-ended in its scope of reference and distinguished by a definition for the purpose of identifying and integrating the objects we perceive. The process begins with perceptual awareness, and through the process of 'abstraction' we advance to a new level of awareness, conceptual awareness - the level which expands our awareness beyond the perceptual level. But, we do not begin the process of forming concepts with the process of supplying definitions. This step only comes after we have isolated and integrated units to inform the concept. Only then do we have something to define. Rand (1990:40) explains:

"A definition is a statement that identifies the nature of the units subsumed under a concept."

"It is often said that definitions state the meaning of words. This is true, but it is not exact. A word

is merely a visual-auditory symbol used to represent a concept; a word has no meaning other than that of the concept it symbolizes, and the meaning of a concept consists of its units. It is not words, but concepts that man defines—by specifying their referents."

The purpose of a definition is to distinguish a concept from all other concepts and thus to keep its units differentiated from all other existents.

Since the definition of a concept is formulated in terms of other concepts, it enables man, not only to identify and retain a concept, but also to establish the relationships, the hierarchy, the integration of all his concepts and thus the integration of his knowledge. Definitions preserve, not the chronological order in which a given man may have learned concepts, but the logical order of their hierarchical interdependence.

With certain significant exceptions, every concept can be defined and communicated in terms of other concepts. The exceptions are concepts referring to sensations, and metaphysical axioms."

Here, Bahnsen Burner explains:

"Clearly then, before we can define a concept, we need the units which that concept subsumes, and we need to have formed the concept itself. Just as we do not "interpret" concrete objects like rocks or chairs (we interpret symbols, statements, facial expressions, etc.), we do not define the units which a concept subsumes, but rather the concept which subsumes a distinguished class of objects. Definitions make it possible to differentiate one concept from another. And since definitions of concepts consist of other concepts, definitions help us map out the hierarchical relationships in which concepts are contextually embedded." (Burner, 2013)

Peikoff explains:

"If a concept is to be a device of cognition, it must be tied to reality. It must denote units that one has methodically isolated from all others... A definition cannot list all the characteristics of the units; such a catalogue would be too large to retain. Instead, a definition identifies a concept's units by specifying their essential characteristics. The "essential" characteristic(s) is the fundamental characteristic(s) which makes the units the kind of existents they are and differentiates them from all other known existents." (Peikoff, 1993:96-97)

"The process by which concepts are formed involves isolating objects that are essentially similar and uniting them into a mental unit by means of measurement-omission. Measurement-omission is the principle that "omitted

measurements must exist in some quantity, but may exist in any quantity." (Rand, 1990:18).

It is clear from her writings that Rand (1990:28) recognized the implications her theory had for induction and deduction:

"Thus the process of forming and applying concepts contains the essential pattern of two fundamental methods of cognition: induction and deduction. The process of observing the facts of reality and of integrating them into concepts is, in essence a process of induction. The process of subsuming new instances under a known concept is, in essence, a process of deduction."

Porter (1999:93) adds the following points:

"Induction produces universal knowledge from other knowledge, especially from particular knowledge. Concepts are universal knowledge. We do have some knowledge about people we don't know, about their ranges of shapes, heights and weights (but not about unknown and unconceptualized existents). We couldn't have this knowledge if we didn't distinguish those attributes from their measurements, within human ranges. Or if we didn't know there are human ranges. We couldn't do this without forming the concept "man", and we'd have this universal knowledge once we'd formed it. Forming concepts must somehow produce universal knowledge. It must be induction."

Bahnsen Burner explains:

"The general point here is that just by forming a concept – since its reference is open-ended and inclusive of all units of a class of objects regardless of when or where they exist or how many there might ultimately be – is in essence an inductive process. We form concepts on the basis of only two or more units which we have observed, and yet the concept so formed includes all units of the same class even though we have not observed nearly all of them. This is an unprecedented power, an ability we should not take for granted [or give over to some authority]. To understand induction, we need to understand how the mind forms concepts." (Burner, 2013)

Given these points, it would not be the case that all deductive arguments would consequently lose their strength given the supposition that all inductive inferences are necessarily less than certain. Inductive inferences which draw on information already included in a concept may in fact, given the nature of the particulars involved, lead to conclusions which are unassailably true.

We perceive the world, and thus, have awareness of objects as 'entities'. Thus, we can differentiate some objects from others. We can observe general similarities

shared between some entities by differentiating them from everything else we perceive and integrate them into open-ended mental units using the process of measurement-omission. Thus, through the process of abstraction, we have universal knowledge based on perception of just a few objects. There is no need for this to be "revealed" to us, as though our minds did not have an ability that they clearly do have.

Fundamentally, it is experience, not faith, which is required to transform data and information found among society into knowledge and a more fulfilling value orientation - the objective evaluation of a subjective experience. If you think the previous sentence contains an oxymoron (that an objective evaluation of subjective experience is impossible), you probably have too narrow a definition of the word "objective". Results can be objectively measured even if the motivations, understanding, and intent (i.e., the underlying dynamics) that created those results are entirely subjective.

There are two primary conceptual categories by which consciousness interfaces with existent reality: objects in reality (i.e., objectively) and experiences in reality (i.e., subjectively). Objects in a common reality (i.e., in objective reality) may be commonly interfaced with, identified and explored. Objects are commonly identifiable and verifiable through common functional tools (i.e., the human senses and scientific measuring instruments). Experiences are individuated; they are subjectively experienced states of reality by individuated units of consciousness that may or may not represent that which has actually occurred in objective reality, in truth. Hence, it is important for us as individuals and as a community to attaching the right concepts to the objects and relationships in our environment so that we can apply (or "leverage") a truthful understanding of the world in our design decisions.

Experiences may, in fact, convey useful information about objective reality. When information gathered in an experience is openly inquired of and sought verification to objectively, then it may lead to deeper levels of knowledge and understanding of the real, common world.

In a real world information system, knowledge consists of concepts in some patterned (i.e., mirrored) relationship to objective existence, to data, and to that which has occurred (i.e., to truth). Knowledge is not composed of subjective experiences that have not undergone further inquiry to determine their validity and rational alignment with real world occurrences.

Subjective experiences must be themselves be "subject" to common and objective verification prior to their conceptual integration into a community's information structure about the real world. In other words, objective data must be collected on claimed conceptions from subjective experiences prior to the conceptions becoming claims to information.

Once we begin forming concepts on the basis of object-oriented perceptual input, we are identifying the evidences of the senses in conceptual form, which

means: we now have a process by which we can categorize specific entities and features (i.e., concrete objects), which we observe, in the form of stable, open-ended classifications. These classifications (or concepts) are formed ultimately on the basis of what we perceive, but include a potential infinity (quantity-wise) of units that we have not perceived (and may never perceive). The concept 'human', for example, includes not only those men and women whom we have actually observed first-hand, but every human who exists now, who existed in the past, and who will exist in the future, however many that sum total may be.

If a claim to knowledge is to be accepted and integrated into the knowledge structure of an individual or community, then logic requires the presentation of evidence that is objective in its nature. Objective evidence is rationally distinguishable from something one may merely be imagining. For a claim to be objective it must have a commonly perceivable referring object in natural existence. Rational inquiry and investigation is required to support a claim to knowledge.

To say that there is "no objective truth" is to say there is no way with verifiable certainty to know of that which has occurred, to know of truth. The fact[ual] reality is that we have knowledge of our world, which has formed a global telecommunications system - this is some pretty good indication that truth exists, and that we can come to know it, and through knowing it we can design more fulfilling systems.

Many concepts correspond to lexical or encyclopedic entries, such as the English word "flashlight". Concepts are centrally involved in communication. Language is the exclusive domain and tool of concepts. Fundamentally, an individual's ability to abstract and to precisely communicate those abstractions is reduced without a concise and coherently shared conceptual language. Consequently, the confusion and deterioration of a language leads to the degradation of the intellectual reasoning capability in those who use the language, for their conceptual structures will have entered into higher states information entropy (i.e., greater disorder and alignment with objective reality). Language shapes the way we think, and this has been well demonstrated. Semantic and syntactical confusion leads to confusion in ones thinking and behavior. There are many excellent works on this topic, including one of the most well known, "The Tyranny of Words" by Stuart Chase.

The systematic process of behavioral adaptation to environmental change is based on two complementary mental processes: assimilation and accommodation. First, the new experience is interpreted and integrated (or assimilated) in terms of the current model of understanding things (i.e. the 'cognitive level'); and second, thinking is modified to 'accommodate' those features of the experience which cannot be explained by the same cognitive level. Assimilation and accommodation are complementary aspects of all psychological activity involved in understanding the changing environment. As a result of this continuous dynamic "equilibration",

behaviour is modified in a process of adaptation which involves greater balance between the individual and the environment through the updating of its knowledge systems. Each new situation (context) causes imbalance, which is corrected in the overall process of adaptation. Accommodation depends on meaningful learning being encoded into some long-term storage or memory for future assimilation and accommodation.

The idea of a "concept" maintains two broad functions: categorization (+ degree) and ordered (+ degree). Categorization is the process by which mental representations (concepts) determine whether some entity is a member of a category. Categorization enables a wide variety of subordinate functions because classifying something as a category member allows for the informing of a new instance. The categorization of novel entities has the potential to lead to knowledge that may be used for understanding and prediction in objective reality. Recognizing a cylindrical object as a flashlight allows you to understand its parts, trace its functions, and predict its behavior, which is useful under conditions of darkness. Not only do people categorize in order to understand new entities, but they also use the new entities to modify and update their concepts. In other words, categorization facilitates integration.

When Aristotle used the word 'concept' he intended it to solely mean abstraction. By abstraction, he meant a special focus on the similarities among things (i.e., categorization), while ignoring or not specifying the magnitudes of their differences. With humankind's greater understanding of the methods of science and our technological tools we can continue to recognize similarities while we measure and calculate their relationships and the magnitudes of their probable difference. This is particularly possible with instrument sense data coming in from our scientific and technical measuring tools, which Aristotle wasn't privy to. Scientific evidence allows us to refine our conceptions of reality so that they are more aligned with reality. Measurements between concepts that concern the functioning of our society no longer have to be omitted. In fact, scientists have become so adept at measuring the referents to their conceptual variables that concept and measurement are isomorphic in the physical sciences -- an electron is not a theoretical construct, but a very real thing.

However, the inception of a concept initially requires measurement omission. Simply, a concept is a mental integration of two or more units or two or more identical groups of units possessing the same distinguishing characteristic. Concept formation involves the omission of some (and, in the case of highly abstract concepts like consciousness, the vast majority) of information about the units it refers to. In that sense, concepts are clearly different from the physical units subsumed under them (which tend to have all their characteristics intact and in perfect condition, at all times, irrespective of whether they are deemed "essential" or not).

It is important to understand how humans have the potential of going through a process of encountering

something new, distilling it down to its premises and perceptual signatures, synthesizing the identities and integrating them in a non-contradictory manner into an emergent information structure.

In a community where individuals are fully versed in the understandings presented here, then an individual would never have to engage in a wholesale clarification of his or her knowledge, for s/he would be performing the processes of logical analysis and synthesis continuously. The process of integration would not integrate information in a fractured manner. Any serious interruption in integration must eventually result in a wholesale re-clarification of one's model of reality. This is particularly the case if the individual seeks to once again orient toward truthful fulfillment. In such a community everyone would be facilitated in their acquisition and usage of this methodical framework of thought gradually from childhood as they were developing. They would not have to face years of remedial work in order to undo years of conceptual chaos. And, metaphorically speaking, the deeper the conceptual rut (belief) the harder it becomes openly decide to step out of it. When all these random chaotic things are rambling around in someone's head it makes it more difficult for them to solve problems.

Removing prejudice is seeing things as they are. When individuals have the tools [to see and integrate reality as it is] habituated at a young age, then they wouldn't have to identify then they wouldn't have to go through a whole-scale re-clarification of their thinking process, which can be a significant self-challenge.

Consciousness is in charge of the conceptual level of thought, and it can be used effectively to reflect on what nature is giving [expressed] awareness, from which consciousness can generate its own fulfillment. Herein, concepts become abstractions, as separate from the existent to which they are intended to reference. Once "you" begin forming concepts, you can create more concepts (i.e., we can abstract way from the existent, to the point that the conceptual idea being reference has no possible, actual referential existence). Yet, we are still learning and doing through concepts.

Here, the power of our "abstract mind" is the building of abstraction from other abstractions. New concepts from already devised concepts. An individual then takes a number of concepts and integrates them into a model. Then, individuated consciousness tests itself (and its models) in reality. In order to verify one's orientation one must always test that which has been identified and perceived; while repeating the process of forming new concepts from previously established concepts. The formation of concepts represents the potential of bringing us into, or out of, greater alignment with reality. To "abstract" is to create a concept. Accurate abstractions are formed from the evidence we perceive of a tangible reality. The concepts in mind must "match up" with the real world if they are to have any use in orienting toward ever more fulfilling states of reality.

By asking a question, a concept is formed. Then,

consciousness relates concepts to one another in a proposition form. Propositions become more coherent through argument and scientific testing, building into reasoning itself. To "reason" is to compare and contrast, pattern match things in reality. Abstractions can be analyzed, synthesized, and patterned (i.e., matched in a spectral matrix of patterns).

4.3 Reason

NOTE: *When individuals want to discuss things rationally, then they bring themselves into the commons. All individual, rational beings have the potential for seeing and processing the commons in common. This is only rational.*

In objectivism, that which is known as 'reason' is defined as the means by which individuated consciousness learns about the world, about one self, and one's needs. Thus, human knowledge - all human knowledge - is a result of a process that extends from perceptual observation through logical inference. Reason is one of humanity's survival tools, and the process of logic is not the "cold, calculating dead hand of reason", but instead enables one to live a life aligned with the real world, some might say, part of the virtue of integrity and honesty in a community. So, if humans reject reason, if they reject non-contradictory identification and logical integration (i.e., critical systems thinking), then what are they left with other than feelings (subjective affective states), political statements (subjective opinions), and prophets (subjective authorities). Things like these cannot be logically integrated into a conceptual and logical model of the real world – they are "disconnects". When societies are structured upon these disconnected concepts they are likely to lead to social and economic systems that thwart real world fulfillment. In other words, their encoding into the social and economic structures of a society (into markets, politics, and leaders) has the consequence of creating an environment where inherently insufficient fulfillment leads to the generation of corrosive behaviors that even further inhibit or degrade fulfillment.

Humankind gains knowledge [at least] by perceiving reality with its five senses, forming concepts and principles on the basis of what is perceived, checking ideas for consistency with reality, and correcting any contradictions discovered in the thinking processes (i.e., cognitive adaptation to lower states of entropy). Reason is how those in humankind who follow the scientific method and its ancillary processes discover facts about the world, from the principles of biomimicry to the existence of probability waves to the structure of biological life, DNA; it is how inventors and engineers design life-enhancing machines and devices, from automobiles (locomotion that provides a larger decision space to a community) to heart pumps (extension of the quality of life) to mp3 players (extension of the quality of communication); it is the potential for collaboratively creating a socio-economic system to fulfill all known

human needs in a community while sustaining a regenerative environment and reducing the presence of environments that generate personally and socially corrosive states of being, doing and having.

Reason gets you from premises to conclusions. It doesn't tell you which premises are accurate and it only works in deductive arguments. Inductive arguments always have a degree of uncertainty to them.

INSIGHT: Reality includes human experience, but human experience may not align with reality (as in, the commonly objective and existent real world reality). Neither experience nor existence is illusory. What we call a map is actually the territory relating to itself recursively -- there is only territory. Even if the map is incorrect, it is still part of the territory at some level. To accurately orient, maps must be changed to match the territory. Yet, even if people have concepts in their minds utterly disconnected from reality, then those disconnected concepts are still part of the territory and part of existence - their structure is accountable for by the whole system. And, there is a correct map for human fulfillment somewhere in the territory.

4.4 Contradiction in integration

"For if you [the rulers] suffer your people to be ill-educated, and their manners to be corrupted from their infancy, and then punish them for those crimes to which their first education disposed them, what else is to be concluded from this, but that you first make thieves [criminals] and then punish them."

-Sir Thomas Moore (1478-1535), Utopia, Book 1

When conceptual understandings are adopted and integrate without conscious thought then there is a high likelihood that undesirable concepts will slip into someone's habitual thinking processes and pollute their entire information system, causing them to act in some higher degree of dis-alignment with the fulfillment of their needs. To reach higher states of fulfillment it is necessary to question new concepts, to re-evaluate concepts, to update them, and to inquire into the contradictions between them. People are often willing and do integrate a whole litany of things that have nothing to do with an alignment with existent reality. These "disconnects" (or disconnected things) take root in their mind and warp their perceptual and conceptual alignment with reality, and hence, their behaviors to others in reality.

As a community, we do not integrate into our knowledge structures ideas that are contradictory and opposed to the facts of reality, or have not been sufficiently verified, for if we ever do then our community would begin a path opposing our well-being and our lives on a planet that functions in a particular, fact[ual] manner. We would essentially be put on a path that risks our very survival; for we will no longer be tracking the

reality we exist within and which maintains our existence. In other words, we would no longer perceive the truth of reality with great frequency, frequently - we would have a "lower vibrational" alignment with the existent reality in which we have real needs.

Humans appear to have a natural propensity to seek the removal of contradictory understandings from their minds. Long practicing thinkers will tell you how in deep states of meditation, contradictions that one unknowingly held, were revealed for their true and identifiable and relatable nature - maybe the mind naturally performs some form of logical defragmenting and clean up when experiencing a conducive "mentation" state. Some of us need to rearranging things in our mind so we can think more coherently, more simply and effectively. And, there are tools effective for this process: meditation; systems thinking; critical thinking; and analytic thinking; ayahuasca.

If someone is having difficulty arriving at solutions to problems with a cause, then it might be wise of them to re-evaluate their knowledge map of the world for they may have integrated concepts in a conflicting (incoherent) manner and generated claimed "knowledge" that conflicts with the factual, technical principles of the real world. They may have accepted traumatic programming. Arbitrary concepts and knowledge are highly likely to corrupt someone's information model of the world, reducing their decision space for fulfillment to a subset of the space needed to understand and solve the problem.

How is someone to know if s/he is contradicting herself at a given time and in any given moment? Since human awareness is finite and limited, how is s/he to know whether some proposal or idea, which may sound plausible, is consistent with what s/he already accepts, since her mind cannot compare old contents and new in a flash of synaptic incite. Since it cannot hold in a single frame of awareness all of her relevant former ideas and a new item being considered. There is only one apparent alternative. Humans must work to integrate new ideas. A conceptual consciousness as an integrating mechanism demands the integration of all its contents. One movement at a time she must relate a new item to her previously accepted items and ideas. To the extent of her knowledge s/he must search for aspects, presuppositions, patterns, implications and applications of the new idea that bear on her previous understandings. And s/he must identify explicitly the logical relationships s/he discovers. If s/he finds a contradiction anywhere s/he must elucidate it on the basis of available evidence. And, if evidence isn't sufficient then she might activate a 'perceptual inquiry protocol' to gather or discover more data. On this basis, s/he must amend her former views, defer, or reject the new claim. As a community, we must do the same with our information systems. Concepts must be integrated at a community level through common semantics, syntaxics, symbols, and systems.

In the social information system of the Community, when contradiction appears or ideas present the

necessary discovery of new information, the Data Domain is activated to acquire more data to fill in the knowledge gap in the Knowledge Domain for the community in common.

The opposite of the process of integration is exemplified by the “concrete bound mentality”, which is a label for someone who establishes no relationships among his mental concepts. To him or her a new issue is a new concrete, unrelated to that which came before, to principles, or to any systematic context. To him, the context that would reveal the absurdity of the new idea is itself unreal. He does not integrate his mental contents, or only integrates within an arbitrary space or compartment. Herein lies the realm of what is known as ‘mental compartmentalization’, which is induced [by at least “schooling”] and is highly prevalent in early 21st century society. The compartmentalization of concepts and knowledge prevents optimal movements toward the fulfillment of a unifying set of needs in the real world. Early 21st century society is composed of so-called “sovereign” entities who desire acquisition from others, and who believe and work in the cult of the corporate-nation-states, the business.

Some thrifty people even invent contexts that don’t actually exist in reality to give the illusion of rightness to their behaviors and claims. Instead of using their imagination to envision a better world, they use their imagination to fill in gaps in between beliefs.

The type of non-integration being discussed here is known as “compartmentalization”. A mind that compartmentalizes does not examine the total implications for the integration of an idea. It is a form of mind that does not question the ramifications of an economic system to all the domains of a society. It is a type of mind that does not perceive the existence of behaviors in a human society as connected to the social organization of a society. It is a “mental system” out of unified and integral alignment with reality. Such a mind often relegates the thinking about these things the domain of another, regularly called an “authority”.

Compartmentalization [in part] involves a disorienting form of specialization. It consists not merely of specialization, but in regarding a specialty as a dissociated fiefdom unrelated to the rest of knowledge. Therein, integration is not the systematic specialization of emergent functions in structural organization for the overall benefit of the whole. Compartmentalization disregards the fact[ual] idea that all knowledge about a common interconnected system, which exists and is experienced, is itself interconnected. To cut off a single field, any field from the rest of cognition and from reality is to drop the vast [systems] context, which makes that field possible and anchors it to reality. One might perceive the anchors as our belief systems, the ultimate product of which become articles (constitutions and other declarations) of faith and dogma that reduce the progression of independent thought. And there, the ultimate result, as with any failure of integration, because ultimately some concepts cannot be integrated,

is “floating abstractions”, self-contradiction, cognitive dissonance, discontinuous thinking, and systemic social problems: a world out of context. A world where collective concepts that do not originate from the real world, filter our experience and become encoded in the systems that we “hope” and have “faith” will make us “peaceful” and “happy” people.

When logical errors (i.e., fallacies) go unrecognized they disrupt the ability to integrate and logically infer in an optimal and coherent manner. The “confirmation bias fallacy” is a ‘cognitive bias’ and it occurs when someone does not accept new factual information for the reason that it conflicts with old, pre-existing information. If integration, introspection, and unlearning skills are not possessed by someone, then this cognitive bias is not likely to be recognized when it occurs. To understand reality consciousness must “override” cognitive biases, something that can be exceptionally challenging to do. And, for someone to have the opportunity to do so there cannot be punishment for failure in learning, ever.

When we are more coherent in mind we are more likely to be coherent in our communication, and vice versa. We have mind and matter. We have things that exist, and then we have knowledge about things that exist, and it seems that we need a process to integrate mind and matter. This is known as logic. Logic is a process by which a human being synchronizes its mind with reality [without integrating information into isolation (in isolated ways) so that self-realities don’t interfere with the common-self-reality, or what is in the real world].

Objectivity and subjectivity only make sense as concepts in their relationship to one another. They are in essence, polar ends of a contextual spectrum. Objective thinking takes place in reality, and involves existence, consciousness, and identity. At the other end of the spectrum lies the pure subjective experience as all of reality. At the pure subjective end, consciousness experiences itself AND the separation of identity does not exist IN existence. In other words, there is no commonly identifiable existence, there is no individuated consciousness. Objectivity may be defined as the minds ability to relate to an identifiable, collectively shared, reality. The subjective experiences of consciousness about a common reality can be objectively made known through logic, language, and verification. In objective reality humans are cooperatively creating structures known as technologies within a shared material experience. Herein, ‘objective concepts’ are concepts that correlate with reality, synchronizing with the real world.

Identifications must be made explicit in order to step back and comprehend systematic relationships. There is a complexity of information that must be understood individually to “get the big picture” and to resolve the “big issues”. Complex systems must be approached with complexity.

The very idea of knowledge relates to the existence of a common reality and to identity in that common reality. Knowledge presupposes identities - that there

is a foundation to that which we are trying to describe through language. Knowledge and truth are based on the fact that existence does exist; that things cannot be in the same space, at the same time, and in the same respect. A cup isn't a lizard. If things in reality didn't have an identifiably separable nature (or existent signature), then there would be no such thing as car accidents because all cars and people could occupy the same space at the same time. In some discoverable sense, nature doesn't have contradiction.

And, our knowledge of what is true changes and becomes updated and optimized as we go through time (Δt , state change), and gather more facts that we didn't previously have access to. Herein, our knowledge of truth itself is always evolving, which does not mean that what was the old truth is now the new truth; it just means that we have an updated and more whole grasp of what is true (if we were accurately integrating the whole time). A "contradiction" would be an apparent break in the signature identity in existence. The following would be an example of such a break: when a wooden object formed into the structure of a functional table could be a biological lizard at the same time and in the same respect.

There is a critical thinking method known as the Dialectic Method. In process, it "argues" all sides of a philosophic argument while discovering and introducing evidence to the point that there is no longer any "argument" [between those who are openly inquiring]. The method applies logical reasoning to the generation of a semantic and syntactic unification of the argument. And yet, a philosophic argument doesn't just involve argumentation with others, but it involves argumentation within one's own mind (i.e., dialectic or omnilectic [all sides] - internal, external, and all perspectives; spectral thought). We all have the potential of thinking systematically.

In a very general sense, the dialectic method involves:

1. Identify all known information about the matter to be considered.
2. Identify and define abstract or ambiguous terminology and concepts.
3. Acknowledge the existence of apparent contradiction, paradox, and nuance.
4. Acquire new information.
5. Repeat steps 1, 2, 3, 4 while also moving to step 6.
6. Determine commonalities and points of connection.
7. Generate the most coherent model of the matter in light of information gleaned through elucidation of both paradox and connection.

The idea of "debating" is a futile effort, and it may be contrasted with directed inquiry and philosophic discovery. A debate is a game with gaming strategies that have been renamed in their lexicon as "debating strategies and tactics". Debating tactics involve the

application of sophisticated fallacious arguments and logically de-contextualized statements in order to win the debate. Debating is a characteristic of a political system, not a philosophic one.

Those with intelligence do not reduce themselves to a Cartesian point on a graph, at a single moment in time. When reduced to an anonymous point, singular nothing-of-sorts, a mind can be easily manipulated to suit the needs of whatever corrupt regime is in power at the moment. It is a mind calculating the experience of selective consciousness limitation.

In a topological version of mind the mind is modeled in-time. The mind-in-time models the complexity and ordered-coursing of a mind over time. So, over time it occupies a greater mind space (or "dimension") through a finer, ordered integration of thought. A reduced mind-space occurs when some distortion or disruption reduces the mind's progressively ordered connectedness, its larger context. Over time, such disruptions can be seen as shrinking the dimensions of a mind during the given period. By consequence, a less connected mental space generates a smaller decision space. A well-integrated mind suffers fewer disruptions; herein, a well-adjusted mind seeks greater refinement--a finer, larger coursing of information over time. It retraces the development of its thought and re-analyzes. It integrates observations with as much of its past and future context as it can reference. It either picks up key strands of earlier thought to further correct and develop them, or it suffers a loss of mind space [and decision space] over time.

4.5 Philosophy

APHORISM: *Through philosophy we can come to de-mystify the truth. Philosophers see no authority beyond the open inquiry for greater states of truth.*

The nominal definition (i.e., definition in name only) of the term 'philosophy' comes from two Greek concepts, *philos* (the love of) + *sofia* (wisdom); so the "love of wisdom" is essentially what philosophy concerns. It involves studying and coming to know the aspects of our mind and of reality for the love of doing so for oneself. As a field of study, philosophy is the general study of real world problems, such as those connected with existence, knowledge, values, reason, the mind, fulfillment, and language. It is distinguished from other ways of addressing such problems by its critical, generally systematic approach and its reliance on 'rational argument', and in more modern times, visualization. As a process, philosophy starts with the habit of asking questions about declarative sentences; for declarative sentences are conclusions, are potential beliefs and judgments, and are decisions. They are encoded within human systems, they can affect behaviors and they are capable of being spread. Instead of just passively accepting the claims of others, philosophy engages a framework of conceptual activities that are designed

to break down, synthesize and communicate matters under inquiry in greater alignment with the truth and the real world. Hence, a "philosopher" desires to know how a conclusion (a why explanation) was arrived at; otherwise knowledge is just a case of "because I say so" or "because the authority said so". As a conceptual framework, philosophy activates the ability to recognize patterns and to communicate those patterns for more accurate action. Some even go so far as to say that "the only true philosophy is that of self-exploration and inquiry, which need not even be called a philosophy". Philosophy could also be said to be the continuous inquiry into that which is "universal".

If philosophy were said to have a goal, then it might be to align perception with that which is already there, that which has occurred (i.e., truth). Wherein, conflicts in perception present a potential opportunity for greater philosophical understanding. Yet, information and its integration can quite easily become "truncated".

Practically speaking, philosophy is the search for truth through integration, which becomes a thoughtfully constructed and explained set of perceptions, beliefs, values, conclusions, and practices that are (1) directed toward understanding the nature of reality and existence, and (2) offer a set perspectives and guidelines regarding how individuals make sense of existence, determine what gives meaning and direction to life, what goals to strive for, how best to act and operate, and how best to navigate through the conditions of existence they encounter. Notice here that no institution exists regarding implementation.

Let us all start on our way toward developing an autonomously inquisitive philosophy, which is something we refine and use every day of our lives. As individuals, we can share knowledge, but we cannot share the task of thinking for ourselves. And, it is due to the three axioms of a non-contradictory philosophy that we can all communicate, share our observations, think for ourselves, and slowly embody the change we want to be in the world.

In an objective philosophy a common reality really exists (metaphysical realism) and individual consciousness can come to know and identify with reality through perceptual sensation. This is an inherent principle in philosophy. Reality is experienced through perception, which contains descriptive information. Reality doesn't exist "beyond" perception; it interfaces with the perception of consciousness. Some interfaces are more "clear" and less "attached" to mental constructions than others. In order to perceive, there must be some interface or connection, some relationship between the subjective experience of consciousness and the objective experience of an existent common reality. If there was no interface then what would anyone be perceiving?

Reality is not dependent upon humankind for its existence. It exists in nature independently from humanity. Existence has a basis in reality, and is a component of truth. It is inherent to the system we exist

within and are conscious of. Existence is not caused by humanity or any one individual. There is a real world and we can at least know it with some sort of probabilistic, statistical certainty.

Reality involves [at least] a system of discoverable technical principles, as conditions that exists, that are both binding (they have an effect, not dependent upon belief), and immutable no matter what someone does, that effect cannot be changed, that condition is there and it is there because "creation" or some larger system put it there. And, humankind is not in a position to change their effects. They are existing conditions that are both binding and immutable.

These principles are sometimes referred to as [natural] laws, though more accurately they are principles that govern and act as the governing dynamics for consciousness in reality. Their existence brings a decision space and consequences; with which comes the possibility for inquiry and integration, which leads to higher states of potential.

Philosophic epistemology depends upon two crucial concepts: that of the nature and the validity of concepts in aligning with nature. If concepts refer to things existing in reality, then knowledge is real and reliable. If they do not, however—if instead they are imaginary constructs adopted from authority or by social convention without reference to existence, then knowledge is baseless and inherently undependable (i.e., it cannot be depended upon to facilitate moral decisions). The validity of humankind's knowledge depends on the validity of concepts.

Some schools of "modern philosophy" counter the idea of knowing reality with the idea that humans cannot know anything for certain and that there are no absolutes in reality. This singular idea has the effect of drawing people away from its opposite, idea that things can be known, that fact and truth exist. It leaves everything open to interpretation and flexibility, to the rightness of opinion. There exist a wide variety of expressions related to this idea, such as, "it may be true for you, but it is not true for me". This expression indicates that somehow objective knowledge is impossible. Other examples of such an expression are, "everyone is entitled to their own opinion" and "every opinion is valid", as if all opinions are equal because everyone having one is a person. When all opinions are equal, all philosophical arguments end in a "draw" and not a deeper understanding of reality and the truth. Such thinking, of course, finds that which is behind a statement or opinion to be irrelevant, disregarding the validity of the knowledge base and methods from which the statement or opinion appeared. Ideas must be left in the form of working hypotheses open to critical inquiry and the approximation of truth found by the process of exploration and experimentation. Herein, nonsense takes the place of learning and effort. Instead of taking responsibility for testing the veracity of ideas, affective preference obviates knowledge. For the very stability of a society, individuals must be free to experience and experiment for themselves, unhampered by the

mere conventions of culture. Unfortunately, this line of thinking, this ideology (not a philosophy), invites people to dismiss logic entirely. A stable society-scale community cannot exist on these subjective grounds where all opinions are equal and the substance behind every opinion is not critically and factually examined.

Philosophic arguments to knowledge are valid, invalid, or unknown. Newton didn't just "get his way", Einstein didn't just "get his way", Darwin didn't just "get his way". They synthesized novel information that was later verified and has become part of humanity's common and emergent pool of knowledge.

If the problems are based on mass psychoses, then real and rational solutions will be of no avail until the psychoses themselves are addressed.

For a community, to accept declarative statements on faith without critical thought (or rational discernment) is a recipe for disaster. If logic is a means of objectivity, then a logical conclusion must be derived from reality, it must be warranted by antecedent knowledge. Logical conclusions are systematically contextual, must relate to prior knowledge, and cannot simply be arbitrary, they must rest on earlier knowledge and so on back until one reaches the perceptual truth, the data of sense. Reason is the process by which individuals identify and integrate the material of their senses, their percepts. This kind of chain, and nothing less, is what is required for philosophic proof of an idea prior to the arrival of a decision that impacts a community. Philosophic proof is the process of establishing truth and reducing conceptual propositions to axioms (and ultimately to sensory evidence). Such analytical reduction is the primary means by which humankind has of discovering the relationship between non-axiomatic propositions and the facts of reality. An in general, in a society that was taught logical integration from a young age and performed it habitually, then social conversations would not require large scale analytical reduction with each social discussion (as they often do now, which leads [sometimes falsely and sometimes truly] to claims of reductionism).

Ideas must be subject to scrutiny. If they are not, then illusion is bound to begin, masking an individual's perception of true reality. Individuals in regressive social information systems (i.e., high entropic societies) are highly likely to cease conscious discovery of reality and begin creating structures that further lead them out of alignment with reality, and hence, out of states of higher fulfillment. If an individual ignores the principles that govern the reality that s/he exists in, then how could it possibly be said that s/he will create formations that serve needs or meet root desires? Without realization a society's creations might take on disconnected and erroneous forms, "[social] belief constructs", that are adverse to our individual's reality-based needs.

It does not follow that if a claim is not axiomatically true, that it is therefore false or even self-refuting. If a claim which is not self-evidently true can be logically reduced to the axioms of existence, consciousness and

identity as well as to the facts that inform them without breaching the methodological principles of systems dynamics, then it has a basis for being true. After all, that is the purpose of logic: to tie conceptual cognition to the perceptual level of awareness. Through systematic and philosophic methods we are more greatly able to explain and understand the why and how of various natural phenomena, which exist interdependently and must therefore be understood systematically. If any interdependent factor is missing, then the phenomena will be incompletely comprehended.

If a communicator doesn't identify truth before communicating to another human being there is a high likelihood that s/he is going to spread a whole host of non-truths. The world today is substantially based on things that do not exist, non-truths, illusions, frauds and deceptions.

Philosophy involves the unocculted keys of learning that provide a potential for people to set themselves free. Early 21st century society does not teach people how to discover the truth for themselves, how to think systematically, and to experience critically; it does not facilitate any meaningful adoption of the actually methods and methodology. Instead, the "authorities" just get the populace to accept what they say. Acceptance leads to order following, and to order following without question, in particular. An order follower is someone who acts upon an order stimulus, which has been artificially programmed into an individual's stimulus-response mechanism. Order following involves a programmatic response to a stimulus with identifying the contents within and behind both the stimulus and the action that is being ordered to be carried out. Therein, conscious inquiry and intention are absent - that is the definition of order following. Order following is a mental abdication that accompanies not wanting to own one's own personal responsibility, which is a very dangerous path to go down for it quickly leads to a totalitarian culture. Order following involves a stimulus and response, and a squeezing out of conscious thought. Freedom and choice come from that space in consciousness, and anything less is a possible form of slavery.

Hence, a few useful reasons for philosophy are:

1. Some people lie.
2. Some people can't discern fact versus fiction.
3. Some people don't discern facts consistently.

Correct thinking is the most reliable guide to action we humans have. Thinking is a conscious mental process performed to solve a problem, make a decision, or gain an understanding. Thinking is the most reasonable way to test emotions and insights. What would the term "critical thinking" mean if there is no truth. We assume it means learning to discern truth, but if truth does not exist, then instead it becomes a tool for shaping thought. Critical thinking is not as many school teacher's guides would have one believe, "Thinking that is focused

on deciding what to believe and what to do" ... with a predetermined (or preselected) outcome set by those in authority.

Have you been dissuaded from looking into philosophy, from looking into nature, from looking into the truth of that which exists? A governing and controlling class, an "elite", would not have an interest in facilitating individuals' understanding of reality for it could easily lead to the systematic questioning of their power structure. Many people can look at the who, what, when, where, and maybe even the how, but when you ask them to explain why, to explain the causal and root factors; why is it like this, and more importantly, why does it continue to persist, most people do not have an answer - hence an indication that the causal factors are not actually understood. If you do not understand causal factors you cannot get to a diagnosis regarding the root or causal problem so that you can then work to change the causal factors and therefore set the problem "right" and fulfill real needs. If you don't have access to the causal factor, then there is no possibility for solving the problem.

The greatest social messages are promoted through movies and drama, through the fixation of emotive sequences, not logical and factual sequences. Emotively desensitizing content implants experiences and affective reactionary states into the psyche of a consciousness, lessening rational thought. Emotional content is "absorbed", rather than going through a conscious and logical integration process. There are few philosophic dialogues in mass media and mass amusing entertainment; it is mostly propagandistic messages and other Aristotelian box memes (i.e., the placement of people into Aristotelian boxes). When someone is "being downloaded" through fiction their guard is down. The sensory filtration part of the brain is not engaged. It isn't saying "yes I agree with this" or "no, I disagree with that", and asking, "is this contradictory?" as must be done in a philosophic discussion or conscious integration. Instead, the observer is in an alpha state being "downloaded" and "programmed" with new ideas and reaction patterns, and having prior programming reinforced.

When reason is bypassed then contradictory and agenda-based information ends up creating a chaos of the psyche and the individual may become dependent upon the authority of the day as the primary source of information.

The objective philosophic understanding of existence:

- There is a physical reality which exists independent of humans.
- Human consciousness perceives reality.
- The primary material of a human's consciousness is the information received from its senses, its sense interfaces.
- Sensations allow humans to become aware of

existent entities (i.e. perceived as identifications of sensations).

- Isolating particular entities according to their differences from other entities is the process of identification.
- Understanding the relationships (similarities and differences) between identities transforms entities into cognitive "units" of information.
- Measurement is the language of describing quantitative relationships between units.
- Measurement's purpose is to relate an unlimited scale of knowledge to man's limited perceptual experience.
- The facts established by measurements are the same regardless of the particular measurement standard that is used.

4.5.1 Solipsism and philosophy

Solipsism is a form of relativism that makes the claim that there is no such thing as objective truth and that everything is only subjective opinion - nothing can actually be known, everyone's definition and/or explanation is valid. To a solipsist, thought cannot achieve ever greater approximations of the truth through the action of non-contradictory identification and logical integration, for there is no truth or existence in mind - there is only one's own egoic mind. The philosophical concept of solipsism asserts that the only certainty is that one's own egoically projected mind is sure to exist. It is the negation of the idea of objective truth, and often, existence in a commonly interrelated and interrelatable environment. By its own postulate, solipsism is both irrefutable and yet indefensible in the same manner. Solipsism is a preoccupation with oneself, focusing strictly on the "me" to a socially dysfunctional degree. The extreme form of solipsism denies the possibility of any knowledge other than of one's own existence. The less extreme form claims that there is no such thing as objective knowledge of factual reality, but that knowledge is the social construction of multiple minds. Solipsism is a radical preoccupation with the indulgence of one's feelings, desires, and egoistic self-absorptions. It is a preoccupation with oneself or one's own affairs. In short, "it's all about me!" Solipsism is disconnect and detachment from truthful reality, rendering the solipsist clueless about the real world, yet giving them the false notion that they are aware of the world around them. Solipsism mistakes the perception of an object for the object itself, which inhibits the thoughtful processing of illusion and the arrival at solutions that might otherwise become evident.

If one accepts on its faith the notion that there is no such thing as objective truth, then essentially, there is no such thing as knowledge. Nothing can ever be truly known. If nothing can be truly known then ask yourself what would someone be willing to believe? You could get someone who is a solipsist to believe anything. Or it

could be looked at another way; you could never truly get a solipsist to accept anything. Soren Kierkegaard states, "There are only two ways that humanity is ever fooled. The first is to believe that which is not true. And the second is to refuse to accept that which is true." There is objective truth and it is a natural goal of any conscience being to discern that which is. Once someone does not accept the concept of logic, then it's over, then anyone can get that person to believe anything given time and manipulative intelligence.

- **The grammar of solipsism:** Latin [sol-us = alone] + [ipse = self]; the self is alone.
- **The logic of solipsism:** Self is the object of real knowledge, no other existent.
- **The rhetoric of solipsism:** Egoism = no proof of existence other than his or her own mind.

The solipsistic approach is a non-relational approach and does not optimize the human condition. If someone thinks that there is no true, existent common reality and that s/he is simply creating reality on their own (i.e., alone), right now, then how is s/he to come to know that which a community of humans might call the common 'human conditions' for fulfillment. Common fulfillment does not exist in the solipsist's world; it isn't discoverable and can't be inquired into. Because the [believed-in] thinking framework that is "solipsism" generates a decision space that lacks a common reference among individuals it is a structure that is incapable of adaptively evolving the socialized individual who identifies only with their egoic selves and nothing broader - someone who has placed a border around their existence is no longer learning of their broader and larger selves..

Many contradictory and disconnected ideologies (solipsism being one of these) have the resonance that they do because of the methodical way in which they are fed to people, often inculcated through some form of fear or passive amusement.

Solipsism is the ideology that no one can know anything, and are thus, continuously held in a subtle state of fear [of the unknown]. Solipsism comes from the Latin sol-us = alone + ipse = self, all by oneself, all alone. It is the ideology that there is no truth because there is no objective reality. The only thing that exists is the contents of ones perceptions. Only ones perceptions are assured to exist and anything outside of ones perceptions is completely unknowable, unsure. Therefore there is no truth and the universe revolves around our perceptions at any given time. If that is ones ideology then the individual can never truly come to know anything. Nothing about the external reality can really be known. There is no objective reality so you can't know anything. How could someone possibly dispel fear when s/he holds to such an ideology. This is what knowledge is ultimately about,

Aligning ones value system in the direction of a higher state of fulfillment (i.e., wisdom) is what a community does with what individuals in the community have

come to understand through knowledge. If we do not develop that knowledge and understanding and put it into practice in our lives, then we are always going to be in a state of fear, we are always going to lack the understanding that dispels fear and our behaviors are ultimately going to be chaotic and are not going to align with what actually is, a real environment and real human needs. When knowledge is not available or not employed, then a community is going to get things that it says it doesn't want.

The idea that there is no truth to arrive at, that there is no map in the territory, that it's just all perception, feeds into other ideologies, in particular, moral relativism. If there is no truth, then there can't be any morality; there can't be objective right or wrong if there is no objective truth. From moral relativism it is a short step to totalitarian thinking, because if there is no moral right and wrong alignment with real world fulfillment then every human gets to decide what is right and optimal for him or herself, and this becomes a dangerous state when combined with the belief in authority. Truth is no longer something that requires discovery; instead, everyone can "make it up" according to their likes and dislikes or preferences or whims or perceptions in the moment. See the relationship between the belief that truth is a dirty word and the idea there is no such thing as objective truth. It is an ideology that will invariably lead to moral relativism and moral relativism is [in part] a movement toward a totalitarian society.

Belief takes precedence when meaning becomes obscured. How can there be coherent communication between individuals if they can't grasp how one another are using the words they are using. Solipsism is a perpetual "memory hole".

Imagine a world where individuals could have conversations and all parties uniformly had the goal of achieving a higher understanding. The opponent in the conversation becomes the wrong answer, not the other person, not the other persons look or clothing, not the other persons size or skin color. The conversation becomes one of "lets together exchange our information and come to a better understanding, for that is ultimately what is better for both of us."

4.6 Solipsism and systems thinking

NOTE: Among community, individuals understand the danger of delegating their own understanding to others.

The very concept of proof presupposes the conceptual axioms of existence, consciousness, and identity. You cannot prove that other people exist (or that anything exists in a common system), only validate it. It is the material of proof, which is presupposed by any process of proof. Systems are an interconnected relation of existent identities composing a whole. Systems thinking is not a component of a solipsist's ideology. The idea of systems thinking makes no sense in solipsism, and

it is not a possible part of its paradigmatic expression. When the paradigm is flawed, the paradigm's logic is consequentially flawed.

There is a world of objective reality that exists independent of human beings and that has a determinate nature that is knowable. Principles that supply a systematic level of understanding must be based on the facts of reality. To survive and flourish humankind must come to grips with the fact that it exists in a common reality. Everyone is constrained by what is metaphysically real. And yet, many people live the majority of their physical lives in a fluid unreality.

If, however, nothing exists, then there can be no consciousness: a consciousness with nothing to be conscious of is a contradiction in conceptual terms. A consciousness conscious of nothing but itself is also a contradiction in terms: before it could identify itself as consciousness, it had to be conscious of something. If that which you claim to perceive does not exist, what you possess is not intentional consciousness, but is instead programmed consciousness.

By virtue of solipsists' attempts to convince others of solipsism, solipsists reveal an implicit acceptance of the existence of other minds and an external objective reality. When a solipsist makes any attempt to convince or confront a "critic" they marshal facts, employ logic, and use reason in the explanation / debate. Each of these actions reveals an implicit affirmation of a common frame of reference to an external objective reality and the existence of other minds, which are to make use of it (their mind) in understanding the argument. In the very act of arguing for solipsism, the solipsist affirms and upholds the very principle he seeks to dismiss.

The ability to defend oneself from sophistic[ated] ideologies (e.g., solipsism) has gradually been lost to those who are considered by society to be "informed" and "well educated". Without being able to detect lies, their freedom of choice slowly slips away.

Solipsism, like other "flights from understanding", blocks the insights that the creation and sustainment of fulfilling socio-economic situations demand. Wherefore, solipsists follow unfulfilling policies and inept courses of action as situations deteriorate and demand even keener insights, and as they are blocked, policies become more unintelligible and action more inept (i.e., the mind space becomes confused). What is worse, the deteriorating situation seems to provide the uncritical, biased mind with factual evidence in which the bias is claimed to be verified. So, in ever increasing measure intelligence comes to be regarded as irrelevant to practical living. Human activity settles down to a decadent routine, and initiative becomes the privilege of violence. This is exactly what Zbigniew Brzezinski talked about in his book "Between Two Ages" (published 1976). He said, "Shortly, the public will be unable to reason or think for themselves. They'll only be able to parrot the information they've been given on the previous night's news."

A "flight from understanding" blocks the occurrence of synthesized knowledge that would upset an otherwise

emotionally "comfortable equilibrium". A human's mind must grasp the relationship between the facts of existence and his/her life if there is to exist true emotional equilibrium, equanimity. Clearly, a person can be mistaken with respect to their value decisions. Consciousness can be wrong regarding what a human's authentic needs really are, the actual relative importance of his needs, and the goods or services that truly fulfill needs.

The human mind is regularly contrived in early 21st century society by the pushing of non-rational buttons and by the putting of maladaptive ideas into consciousness to keep people from thinking clearly. If people were thinking clearly and emotionally stable, would they spend vast amounts of money on things like disease causing (patho-) fizzy sugar water? No, they would not. But, the economy depends upon having people consume a lot of things they don't really want, certainly don't need, and would be better off without. The perpetuation of early 21st century society relies on the manipulation of consciousness to contract its ability to think and to make it fixate on something that someone else wants it to fixate on ... often for profit (in the Market). Advertising is [in part] there to manipulate emotional buttons and to make it hard for individuals to think such that the next time they see a bottle of fizzy brown sugar water they have a craving for it, or they can't think about anything but consuming it. The market itself is a competitive system where players are incentivized to generate cravings (and misunderstandings) because it is profitable.

Modern consumer States and market institutions are run on manipulation of the public, of the consumer, and of the voter. These institutions rely on manipulating these entities to do things that are not in their best interests, by compressing and contracting their sphere of conscious thought by way pushing individuals emotional buttons and implanting self-destructive concepts in their psyches (e.g., "authority"). Early 21st century society promotes gut level, unthinking irrationality, which is generally prompted by people at a distance pushing emotional and physiological buttons. Primal biological drives are hammered on over and over again until they swamp the capacity for [rational] thought including fear, lust, greed and a handful of other primal biological drives - over time the egoic mind comes to believe that it is the only mind in existence. Images of food and of being accepted or rejected are flashed over and over again in front of consciousness to keep people in a state of unconscious consumption and production -- to impulsively act on their self-concept instead of reflecting upon and integrating every self-concept. Scary images and soothing images are scientifically studied by governmental agencies and businesses and are sequentially replayed in front of the unthinking public to promote overtly expressed profit agendas and covertly thought out power agendas. These aberrant structures degrade the expanded potential of human consciousness to that of a programmable machine. Those who use such manipulation tactics are

not your friends; yet, they too are here to learn and to grow from experience. Do not let them fill your mind with garbage. Wherever there is profit and social power there is also deficit. And, the deficit more often than not is one of consciousness.

Fundamentally, solipsism is an anti-philosophy that occults knowledge and counterfeits wisdom. It is the philosophic corruption of the conscious integration of reality through the absence of reason and the destruction of identity, wherein reality becomes something that either doesn't exist, cannot be known/identified, or cannot be known of commonly (i.e., existence does not exist, is not identifiable, or cannot be coherently communicated; everything is just subjective interpretation - common creation becomes challenging here, for engineering requires objectivity, and we are all creators in reality). Like every belief, solipsism holds learning for those who have temporarily chosen to partake in its limitation.

When we begin to doubt and question, then we begin to explore, then we won't buy the social narrative that keeps our consciousness trapped in a state of perpetual suffering for the pseudo-fulfillment of the few and the ultimate suffering of all.

NOTE: *The truth is always harsh to the fearful. One must realize that one is not the center of everyone else's universe - this is known as de-centering. A fulfilled society would facilitate in the de-centering of the young of their species. To de-center is to both realize that consciousness can take many forms and that one's egoic self-conception is not the center of the universe. And further, to de-center is to realize that there is an objective reality outside of everyone's subjective experience of reality.*

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TABLES**Table 4.** *Differences between the system thinking forms.*

Methodological Thinking	Systematic Thinking	Systems Thinking	Systemic Thinking	Synthetical Thinking
Thinking about methods.	Thinking methodically (i.e., using a systems-oriented method).	Thinking about how things interact with one another.	A techniques for finding systems-wide focus and gaining systemic [root] insights into complex systems.	Synthesizing an understood identification of complex interactions of patterns (i.e., similarities) in a system. Whereas analytical thinking is an identification of differences.

The Data and Knowledge Sub-Domains of a Community-Type Society

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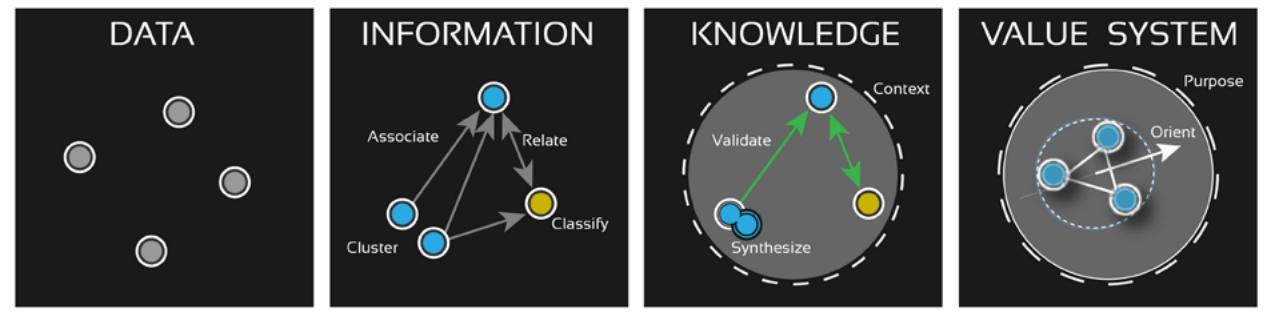
Abstract

The organization of the social system is a two dimensional layer - it is a data platform, consisting of data that is ordered/categorized according to some meaningful process. All new information, and all existing information at its axiomatic-unit level, is data. Data can be more or less useful for the purpose of taking decisions (i.e., more or less actionable). Data with some association to the output of experimental science is called, a body of knowledge. Data with some association to the output of rational science is called, a model. Data with some association to the input of a sense or survey is called feedback. Feedback, if allowed, can be integrated with existing knowledge to produce better results for the consciousness intending a better result.

Graphical Abstract

Figure 19. Progression model from data to Information to knowledge to values.

THE DATA - INFORMATION - KNOWLEDGE - VALUE MODEL



1 The data sub-domain

APHORISM: *To truly understand, one has to understand what the data (e.g., the numbers), are telling one, without advertising.*

The Data Domain functions to identify observable, measurable, and calculable elements of the natural, existent real world and place them into an emergent and initial information structure for functional access by the community, and in particular, the Knowledge Domain. The Data Domain's internal structure represents that of an organized and digitized information system for data (i.e., a 'data management system'). The Data Domain involves the identification of data from existence, and the processing of that data into a structural formation for meaningful access and orientational usefulness by consciousness.

Generally, 'data' are a description of empirical facts or observations in the form of identifiable signs (symbols, signals, or signatures) about phenomena; they are the objective facts of reality. A 'fact' is an undeniable observation. The fact is the effect that we measure. Data are the recorded facts (as attributes or variables) of events, entities, states, relationships, or conditions in the real world. Data is the product of 'research and discovery', and it may or may not be devoid of context, meaning, or intent.

A single piece of data (a 'datum') has little potential for meaning unless the context from which it originated is also understood. A datum (singular of data) is a discrete and communicable reference point to (or descriptive representation of) an event, entity, state, or condition in space-time as the first [identifiable] indicator that orients [consciousness within a common existent reality]. Accurate and timely data is vital for a community that seeks to arrive at decisions that facilitate its continuation and adaptation (i.e., resilience). The Data Domain involves the collection and structuring of data about systems (the real world; the habitat; and the habitat service systems), which is later organized into a system of knowledge through common data processing methods. Data about systems is collected objectively through the methods of science, filtered through critical thought, and put toward the design of new and more fulfilling systems that more accurately express our fulfillment and reflect our nature in the real world. Through data we adjust our orientation as individuals and as a community.

To navigate together using data, the following information sets are required:

1. Semiotics: The iterative process of generating and applying intelligence through data.
2. Data: The symbolic representation of sensations and measurements.
3. Information: The relationship among data elements.
4. Knowledge: The meaning of the relationships

among the data elements.

5. Stakeholders: Those affecting and affected by the data.

In concern to science and data processing (a.k.a., data manipulation), altering data for use in science is only acceptable if:

1. The original data set is preserved,
2. An explanation is provided for how the data set was modified.
3. A reason is given for why the modified data set was created.
4. A description is given for how the modified data set is being used.

The Data Domain involves a long list of processing activities for data with the purpose of collecting, structuring and ordering data into the information space known as "knowledge". Some common collection activities in this domain include: gathering of parts (content); surveying; testing; researching; capturing; discovering; sensing signals, observation and measuring; trial and error; and exploring. The structuring and ordering of data can include a multitude of processing activities, such as calculating, collating; grouping; linking; connecting; aggregating; categorizing; comparing, sorting, associating, relating, clustering, and classifying. Where applicable these processes provide an initial re-organization of the data into a usable [information] structure (i.e., into 'knowledge').

People often use the terms 'data' and 'information' interchangeably. However, it is better to view data as "the raw referential signatures of existence" that are processed into knowledge-oriented information as an output of the Data Domain for access by other systems. Then, information can be defined as the set of patterns, or expectations, that underlie the data.

Here, 'information' may be viewed from two equivalent data-perspectives. First, information is data that have been structured into a "meaningful" and "useful" context for specific forms of access in a larger semantic information structure known as the Real World Community. And second, information is a pre-existing structure in the real world that data [with degrees of accuracy] describes and references. In both cases, information is composed of data that have been given a functional meaning by way of the identification of existent relational connections between data, information, and knowledge. Essentially, when facts are put into a context and combined within a [patterned] structure, then information [which was always present] emerges into the awareness of consciousness. Herein, consciousness is capable of identifying and measuring between that which it has awareness of. In other words, information is data in some form of a patterned and [measurably] meaningful structure (i.e., data "information"). Information and knowledge are a data construction (herein, "con-" means together with a

structurally defined purpose, iterative prediction and our fulfillment). Also, 'data' describes information in a discrete manner - it describes that which it is referencing, and it is essentially referencing information.

Everything is information for there are always associations in the real world, even if they are not recognized. And, the data is there, we may just not be experiencing it.

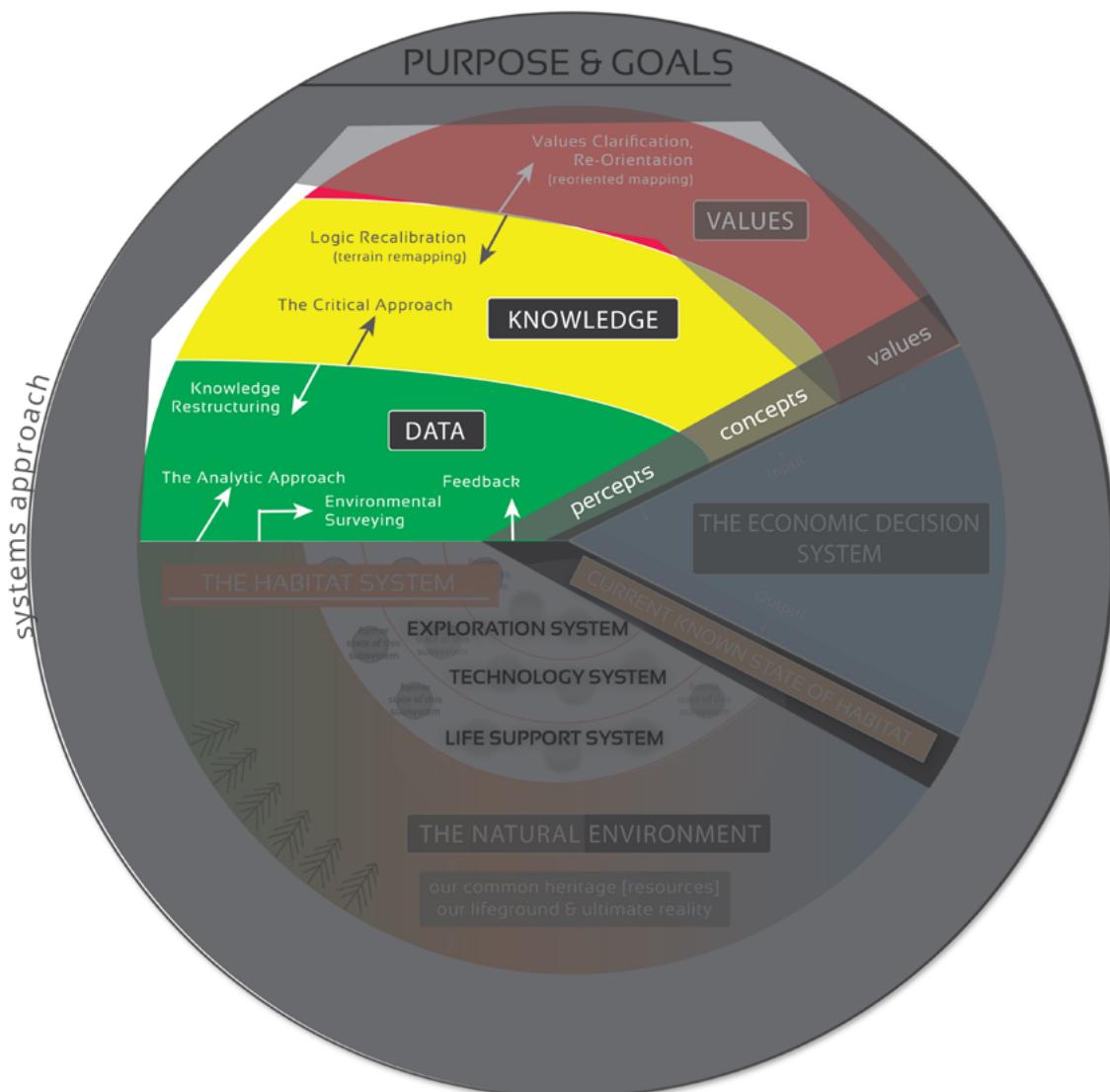
'Data' is bits of information collected to more greatly understand the real world information system and to facilitate the design of community systems that more accurately orient toward higher states of fulfillment. In general, the process of turning data into information involves the identification of similar relationships and patterns between data, information, and knowledge. And, when information is validated and placed into a more cohesive and useful context, then knowledge

[of the objective and real world information system] emerges. What is the purpose of science if not to discover what identifiable 'tasked objects' exist in the real world?

Herein, it may be interesting to note that relational information systems (e.g., a relational database) can generate data from the data stored within them. This fact is one of the reasons why the human species is presently seeing the exponential growth of data about the world in which it exists. It is possible to computationally simulate (and synthesize) information from relational information (which is a redundant thing to say). Fundamentally, all data can be tested in simulation.

Data is the first input in an information system [as the first indicator that orients within a system]. Hence, any method for handling information must first account for the data of which the information is composed. The three methodological approaches described in the Social

Figure 20. Isolation of the data and knowledge domains (with the values domain less visible) as components of the social organization of information in the real-world community information model.



System specification (i.e., the systems methodology, the scientific method, and the trivium method) all account for data first, or they account for data synchronously with other inputs.

The Data Domain correlates [in part] with the general grammar stage of the trivium method, which involves the gathering of data prior to any other logical, critical, or exploratory thought, and prior to inductive logical thinking and reasoning. The gathering of data under the general grammar stage of the trivium method includes the processes of observing, collecting, recognizing and identifying, categorizing, associating, and relating data from an environment.

There are four system-level aspects to data in an information system:

- **Data availability** – The data exists (or does not), and existing data remains accessible (or available) to the system.
- **Data collection** – Data is collected via any number of different means, which the system uses to remain in a state of equilibrium and functional adaptation.
- **Data processing & Structuring** – The processing of data into a structure for coherent integration by the system.
- **Data as information** – After data is processed and converted to information, its new structure is more complex, more ordered and less entropic (if the data were accurate).

Scientific data are usually “subjected” to data processing in the Data Domain during which:

1. Their form is aggregated, structured, patterned, and otherwise organized.
2. Their content is analyzed and statistically evaluated.
3. They are placed in a proper context for later access.

Within the data domain, data processing occurs. Here, data processing involves the identification of implicit, previously unknown, and potentially useful information from data.

Data domain processing include, but are not limited to:

1. **Data categorization**
 - Do categorization (set/group pattern recognition).
2. **Causal understanding**
 - Look at an object and identify its causal properties.
 - Do connections between data to produce understanding.
 - A societally mandated module that demands that you figure out the consequences of your actions.
3. **Causal encoding**

- Look at a process and identify its causal properties.
- Do connections between understandings to produce orientation (i.e., values, objectives).
- A societally mandated module that demands what to minimize and what to maximize. What are the goals and what are the goals to be rejected.

4. **Decision system (data extends into the decision system)**

- A computation design module that generates a new system state based upon demands.

The processing of data leads to the initial structuring of data into ‘information’ in the Data Domain. There are four primary data processes (or data processing techniques) that accomplish this functional task:

- **Classifying** - a [problem] process of assigning a data object to one of several pre-defined categories based upon the attributes of the object. In general, in classification you have a set of predefined classes and want to know which class a new object belongs to. This process is sometimes known as *classification learning*.
- **Clustering** - a [problem] process of grouping objects based upon distance or similarity. Clustering tries to group a set of objects and find whether there is some relationship between the objects. A cluster is the resulting collection of similar or same items from acquired data.
- **Associating** - a [problem] process of identifying any association among features between [data] objects, not just ones that predict a particular class value. This process is sometimes known as *association learning*.
- **Relating** - a [problem] process of relating new object [data] instances whose class is unknown to existing ones whose class is known.

The processing of data [through logic to derive critical understanding] involves three general sub-steps:

1. **Filtration** - data is filtered after gathering to ensure relevance and accuracy.
2. **Correlation** - data is mutually related by context.
3. **Analysis** - data is inspected, cleaned, transformed, and modelled with the goal of discovering [relationally] useful information, suggesting conclusions, and supporting decisioning.

The characteristics of data include:

1. **Accuracy** - The accuracy of tourism statistics is the degree to which the data correctly estimate or describe the quantities or characteristics they

are designed to measure. In general, accuracy can be characterized in terms of errors in statistical estimates and is traditionally decomposed into bias (systematic error) and variance (random error) components.

- A. **Validity** refers to whether a data collection tool or concept truly captures what it is intended to measure. In other words, a variable or measure is valid if the values estimated are close to the true values.
 - B. **Reliability** of data refers to whether the instrument or source of the data would produce consistent results under identical circumstances regardless of who uses it.
 - C. **Precision** refers to an aspect of the reporting of data, or of statistics or indices derived from original data and is not, in itself, an intrinsic quality of the original data.
2. **Timeliness** - The timeliness of tourism statistics refers to the delay between the end of the reference period to which the data pertain and the date on which the data are released and available to the public. This dimension usually involves a trade-off against accuracy. The timeliness of information also influences its relevance, as accurate data that are not timely are of limited usefulness.
3. **Methodological soundness** - The methodological soundness of a data source refers to the application of international standards, guidelines and good practices in production of tourism statistics.
4. **Coherence** - Coherence reflects the degree to which the data are logically connected and mutually consistent, that is, they can be successfully brought together with other statistical information within a broad analytical framework and over time. The use of standard concepts, classifications and target populations promotes coherence, as does the use of common methodology across surveys when relevant. Coherence has four important subdimensions:
- A. Coherence within a data set implies that the elementary data items are based on compatible concepts, definitions and classifications and can be meaningfully combined.
 - B. Coherence across data sets implies that the data are based on common concepts, definitions and classifications, or that any differences are explained and can be allowed for.
 - C. Coherence over time implies that the data are based on common concepts, definitions and methodology over time, or that any differences

are explained and can be allowed for.

D. Coherence across countries implies that the data are based on common concepts, definitions and methodology over countries, or that any differences are explained and can be allowed for;

1.1 The smallest amount of data

An information system is made out of bits, which are the smallest piece of information. Bits are a yes or a no, a 1 or a 0. In other words, a bit is the smallest unit of information in an information system, represented by a single binary digit 0 or 1. The smallest amount of information consciousness can have is the answer to a yes/no question. The outcome to such an inquiry can be represented as a [binary] probability spectrum (0 or 1 = 1 bit of information).

INSIGHT: *Information is not only conceptual, but also everything physical. Everything in the real world is information; the real world is an information system and there is also the potential for creating a software (digital) information system to manage the total information space.*

1.2 Database

A.k.a., The collection of data.

Virtually all computer systems require a persistent storage medium of some sort, a database. Databases enable the effective management of information. Without databases it would literally be impossible to effectively store and track data, and trace all the relationships between various data items required by the multiplicity of applications that comprise computer-based information systems. The unified information system is stored in a database. Applications and tasks, therein, will involve information being stored in the database.

Database coordination (a.k.a., database management) systems provide [at least] the following:

- Organize data so that unnecessary duplication is avoided and redundancy is reduced.
- Allowed many different applications to share common data is a secure and efficient
- Isolate physical data storage and retrieval from the application programs that consume it.
- Provide concurrency controls and serialization methods so that shared data can be updated by multiple concurrent users or programs.
- Provide common authentication along with access control administration, enforcement, and logging for data and relationships.
- Enable concurrent transactions so that changes to

data can be committed or "rolled back" depending on other conditions that might arise within the environment or the application program, etc.

- Provide detail audit trails that describe who/when/why, etc. data was accessed, modified, deleted, etc.
- Provide various indexing and query optimization techniques that make it possible for the volume and velocity of data to scale to the expectations and requirements of the modern enterprise, WWW, etc.
- Provide for distributing data across large computing networks because it is no longer possible for single, monolithic computers to handle modern data requirements.

NOTE: *In market- and State-based information organizations, the database is often hidden from users.*

1.3 The percept domain

NOTE: *If "you" don't know that something is an issue (or even exists), then "you" are unlikely to record that data.*

From a philosophical perspective, the Data Domain represents perceptual data and observable phenomena, known as 'percepts'. The term 'percept' refers to perceptual sense data (both human sense data and technical sense data; sensory input) gathered through [open and objective] observation. Percept is the automatic integration of sensation that leads to awareness of a specific existent (or, event in space and time). Herein, concepts involve the mind's organization of percepts [as well as other concepts] into groups based on their essential characteristics that differentiate them from other entities.

For example, take color and texture and solidity, which are perceptually emergent if we consider the behavior of solitary electrons, protons, and neutrons. Color, texture, and solidity are not 'properties' per say, but are 'percepts'. This is how we perceive these properties of the [object] system under observation. This is a phenomenon which belongs to the realm of epistemology (i.e., how do we know what we know?), not metaphysics (i.e., what is reality?). Percepts cannot be reduced to properties, in spite of the fact that perception is a valid representation of reality - it is a mental phenomenon. It can only be said that a certain atomic structure is responsible for reflection of light waves of certain frequency and length which we perceive as a "red color". Fundamentally, the perception of color is an extremely complex scientific issue. The perceived color is not just a function of the wavelength of light reflected off a surface. It depends upon the receptors in our eyes; it depends upon the background and surrounding colors in a given field of view. It depends upon the color of light striking the object. Sometimes, it can depend upon the angle of

viewing the object.

There are 3 elements in perception:

1. **The object** of perception [in an environment].
2. **The media** (light waves, sound waves, etc.) that transfer information and material [in the environment].
3. **The organ(s)** of perception.
4. **Conscious awareness** integrating input from perception organ (i.e., the subject, the experiencer, the self, the being).

Note: The conception of a 'percept' is a combination of the first three elements of perception.

Perception is a process of active interaction between sensory input and information which has been previously stored in brain and modeled by it. In other words we have ready templates of percepts (as subconscious schemata or automata) that interact and interface with sensory input. This makes the process of recognition of objects very quick. But, mental model templates are not identical to sensory input, and hence, the brain has to compensate, which creates the phenomena known as 'perception blindness'. Perception blindness is one of the many reasons it is prudent to account for perception at the social level with common tools and environmental feedback.

Certainly, humankind's current sense organs do not have the same precision and accuracy (or at least have not been trained to) as many of its technical and scientific measuring tools, which have been developed through the shared communication of knowledge. Although we as individuals perceive reality through our own individual sense organs, we can use science and technology to commonly discover more accurate data about reality than our five physical sense organs in their current form are capable of doing. In other words, there are two ways in which a community of individuals might collect data and "percept reality": (1) individually through their own sense organs; and (2) socially through collectively developed technical sense instruments (i.e., scientific measuring & surveying instruments) -- perception that correlates to experimental, clinical, and scientific data. When we seek to socially understand our environment and arrive at decisions that involve everyone, we principally apply those tools that are best for commonly measuring and identifying our common, objective reality. This [in part] ensures that our community's information structures maintain an objective alignment with our intentional direction in a common reality [and are less likely to become delusional trappings]. A reluctance to face [a shared] reality in the name of ego-protection is a common barrier to self-development. The idea that we can acquire common data about our common reality through collectively developed technological instruments as well as common methodologies (and

methods) is an essential understanding for a community of individuals who seek common and optimal fulfillment.

Before any systematic (and intelligent) expenditure of energy there must first exist an observation of the environment [for input]. Observation leads to the collection, recognition, and structuring of data, such that it persists in a uniquely identifiable and functionally accessible location – so that it is recognizable by the larger community and its information system. This allows for the systematic prioritization of time and energy in all future accessing and processing of the data.

The data domain represents the collective data-base of the community and it is composed of data from three primary sources, which [in part] represent the analytical and critical approaches:

- **Scientific inquiry** is used to discover a data set for building reliable knowledge structures of the natural world. Through hypotheses, testing, and experimentation we discover more about ourselves, our real world, and its existent cause and effect relationships. Controlled experimental [research] studies are an example of scientific inquiry.
- **Environmental surveys** are conducted to inform the community's information model about the state of the environment. Two common surveys are: surveys of resources, their allocation and availability; and empirical community surveys that collect data about the needs and preferences of the community.
- Data from electronic environmental real-time **feedback sensors** feed data [in real-time] about every systems of which the community is composed [excluding protected personal information resources] into the Data Domain (Read: technological sensory feedback). There is a continuous feedback loop between our actions and the world. Here, our view of our selves is informed.

Wherein, verifiably conflicting data points call for more data and a re-evaluation of the models and measures used in the collection and structuring of the data. And herein, we are necessarily called to measure how much we are measuring.

If our sensors fail or we fail to recognize that our sensors provide data, then our actions are much more likely to be based on beliefs that are much less correlated with the actual environment, and hence, they are more likely to dis-align our decisions for a common intentional purpose. And, if our actions are poorly calibrated [to the factual environment], then there will be "miss-steps" in action, which is bad for our survival.

1.4 What is metadata?

INSIGHT: *It is the insight we gain, not just the*

data we gather, that makes a difference.

Essentially, data is a discrete communicable reference point to an event in space and time. The reference point originated from somewhere and so it has some additional data accompanying it. This additional data is known as 'metadata'. Metadata represents the first structuring of data (or, pre-defined structuring of data).

All data must be accompanied by contextual auxiliary information if it is to be accurately structured, processed and accessed by other systems. This auxiliary (or additional) information that accompanies the generation and collection of data is known as 'metadata'. Metadata is information about [the meaning and context of] data - sometimes defined as "data about data". It is descriptive information about a particular data set, object, or resource, including how it is formatted, and [at least] when, how, and by whom (i.e., source) it was collected. In an information system, metadata is a standardized information descriptor for data - a "data descriptor" that allows for the processing of all data in that system. In other words, metadata accompanies data to aid in its interpreted explanation and processing. In the Data Domain, data is processed with its metadata to obtain more detailed information about the data in systematic association with other information. Activity in an information environment generates data, but it needs to be in a workable format and accompanied by meta-contextual information for it to have usefulness and for it to remain accessible to the whole community.

The conceptual idea of "metadata" has been in use for as long as collections of information have been organized. And, metadata is an essential component of the engineering of information systems and of technological design in general. It involves the codification and description of data in a standardised manner; and hence, it allows for the system-wide interoperation and openness of data.

Metadata can originate from one of two sources: (1) it can be automatically derived from the digital resource itself (as *intrinsic* or *implicit metadata*), or (2) it can be created and associated with a resource by human beings (*extrinsic* or *explicit metadata*). In other words, metadata may be generated automatically using software or it may be entered manually by an individual. Through the use of digital technology, data may be easily collected, stored, structured, and communicated using electronic or other media that self-generates (Read: self-populates) or facilitates in the generation of metadata to provide an initial propositional context for structuring the data inside the Data Domain.

The process of formally standardizing metadata is three-fold:

1. Metadata models (or schemas),
2. Metadata semantics
3. Metadata syntax

Technically, metadata has three basic sub-types:

1. **Structural metadata** - describes the containers of data (i.e., the format of data). Structural metadata describes the physical and/or logical structure of an information resource to facilitate relationships between or within resources.
2. **Descriptive metadata** - describes the content of the data (i.e., metacontent). Descriptive metadata describes the content of an information resource and is used to find, identify and understand a resource. Descriptions involve qualifications.
3. **Administrative metadata** - describes data management. Administrative metadata facilitates the management of information resources through elements such as version number, archiving date, and other technical information for purposes of information management and preservation. It is used to manage the creation, use and preservation of the resource (includes technical and preservation metadata).

Together, these metadata types facilitate in the identification and retrieval of data as a 'resource', 'record' or 'log'. These are not always discrete sets of metadata, and there is often a considerable overlap.

Metadata facilitates the association of data and can describe any number of data association signatures, including but not limited to:

- A data source.
- A process(es).
- An event.
- An organization.
- A particular collection of data (a file or a database or a table in a relational database or a class in an object-oriented database).
- An instance of data (in a relational database table, object instance in a class within an object-oriented database).
- Data associated with the values of an attribute within a domain, or the particular value of an attribute in one instance.
- Metadata can also describe data models.

Metadata has clear purposeful usage in:

- Describing data for the purposes of data exchange.
- Describing data for the purposes of system access from query (including update) to optimise recall and relevance.
- Describing data for the purposes of query optimisation.
- Describing data for the purposes of upstream information integration and explanation.
- Describing data for the purposes of correct

analytical processing or interpretation, representation or visualisation.

- Describing the data to overcome multi-linguality and multimedia heterogeneities.

All of these purposes require that the data be described:

- Such that the resource is constrained formally (i.e., identifiable via a standard structure) to ensure integrity [in communication].
- Such that the resource is reachable by directed and automated means (i.e., searchable and retrievable).
- Such that there is sufficient description for purposeful usage of the output - input data, output information (i.e., it is useful).

In order for data to remain useful and accessible over time its structuring must be updated and corrected. Most of the updating and correcting of data structuring over time actually involves changes to data's metadata as opposed to the data itself (although it might conceivably involve changes to the data).

1.5 Philosophical data axioms

Axiomatic concepts are the foundation and precondition for objective data, information, and knowledge. They are irreducible and fundamental. They are a starting point for [scientific] reason. The very idea of objective data has axiomatic concepts built into it; every effort made to perceive facts depends upon concepts that must first be recognized. It is by means of these axiomatic concepts that individuated consciousness is capable of maintaining a state of conceptual awareness of data, information and knowledge as a continuous function of a purposeful orientation within a common reality. Axiomatic concepts represent the first layer of interconnection between perception and mental conception. It is axiomatic concepts that identify the preconditions of conceptual data, information and knowledge: the distinction between existence and consciousness, between reality and the awareness of reality, between the object and the subject of cognition. Axiomatic concepts are the foundation for the continuous conceptual orientation of the human organism in the real world. Data about the real world [system] is: understandable objectively (objective axioms, data), collected scientifically (scientific axioms, knowledge), and processed systematically (systems axioms, information).

In a real world information system there are three known types (or "value sets") of axiomatic conceptual recognition, related to data, information, and knowledge. Respectively, they are the conceptual axioms of *objectivity* (data), of *systems* (information), and of *science* (knowledge). These conceptual axioms provide a source for moral orientation and direction in a real world reality. Axiomatic concepts frame all contexts and understandings - they are the first universal constructs

(or encoded abstracts) for the conscious visualization of reality. Herein, frameworks, contexts, and methodologies are regarded as fundamentals for conceptual existence in an information system - how do we come to know what we know (i.e., epistemology)

Without a recognition of axiomatic concepts all awareness, interpretation, orientation, and communication of data, information and knowledge become like the telephone game - where people overlay the source of existence with their own narratives, obfuscating the source and corrupting information pertaining to it. Possibly, something akin to "subjectivism" as described in the Social System specification. Hence, it is always important to perceive the original, the source, rather than copies, and to see it through accurate prototypical perception rather than egoic illusion and programmed belief. In other words, it is necessary to have self-awareness: to remain open to what is, to experience objectively without judgment, and to observe without filtration - to "take in" that which is with as little perceptual and cognitive distortion (i.e., biased analytical overlay) as possible.

When looking at objective data an individual is essentially looking at an identifiable aspect of conscious existence. Existence can either be perceived for that which it is or it can be perceived for that which it is not. Regardless, perception is not the totality of reality. The truth (as that which has occurred or is occurring) exists independent of perception. Perception is "how" an individual perceives those events occurring and "how" they are recorded for future posterity as data. The "how" can either originate from a place of axiomatic truth, or it can not. In either case, truth and existence are (Read: exist) independent of perception. Essentially, when broken down into its etymological roots, 'perception' means "to see through" - to see through the lens of the individual, seeing through their mind (and psyche) - to see through to that which is or is not.

Essentially, perception is a process of active interaction between sensory input and information that has been previously stored in the mind/brain and modeled by it. In other words we have ready templates of percepts which interact with sensory input; metadata are an example of this. Such schema may make the process of the recognition of objects very quick ('subconscious automata'). But, templates are not identical with sensory input, and hence, the mind/brain must compensate, to varying degrees.

The truth is something that has the possibility of being observed and sensed by every other being around it, even if it is not accurately sensed or sensed at all. If it is true for one person, then the perception and sensing of that, whatever the predicate of the subject, it has to be true for all - if it is not true for all, then it is not true for one. Things in reality have commonly identifiable *characteristics, attributes, and states / dynamics*. This is a foundational understanding for how we engage with our world and how we communicate [truthfully] with others. An inquiry into truth, a philosophical inquiry, eventually

fosters a "natural morality" - a morality that recognizes the natural common needs of all ecologically related organisms.

So, the question becomes, is an individual "subjectively" seeing through to that which is objective, systematic and scientifically observable as true, or are they seeing through belief systems and other filters that prevent a perception that is accurately aligned with truth? Said in another way: to what degree does an individual resonate with the potential that may be resonated with? There are many different perspectives, but not every perception aligns with what actually has occurred, which is objective and independent of perception. Perception can be aligned with truth or it can waver widely from that actuality. Accurate perception involves the attuning of an individual's "perceptual axiomatic frequencies" to the truth such that perception comes into contact with truth with a high degree of frequency (i.e., very frequently) and only wavers from it slightly. In part, it is the work of consciousness to align its perceptions with the truth instead of choosing to remain in opposition to that which is by a refusal to accept truth, which may be emergently known. It could be said that human beings ultimate work is to align perception with reality so that they have a more accurate understanding of the truth and are thus more capable of designing systems and arriving at decisions that align their behaviors and actions with true and verifiable fulfillment.

Herein, philosophy is a process of inquiring into truth, of uncovering and discovering truth. As we become more familiar with that which exists we become more capable of creating in alignment with our real needs. Philosophy is the continual process of engaging will (Read: determined intention) to discover that which is, to align perceptions to reality, and to create in alignment with that which is truly fulfilling, which is truthfully shared].

Belief exists in opposition to truth. When consciousness holds a belief, it is essentially just "going with" whatever perception it happens to have in the moment, or whatever it has been told by an accepted authority. Belief does not involve fact checking, it doesn't involve data, it does not involve verification, it doesn't involve an alignment with that which is, and it doesn't involve the attuning of perception to that which has actually happened and is occurring. Instead, it is [in part] a "runaway" imagination.

Imagination is important for it allows consciousness to envision and visualize (a) truth and (b) something different, something which is desired or desirable, and then facilitates creative action; but if imagination goes unchecked, then it can turn into naïveté, blind belief, and a rigid sceptical mindset. A "runaway" naive imagination involves the imaginative creation of "evidence" and the encoding of unverified structures of information. A lack of real evidence leads to thoughts, behaviors, and actions that may be quite out of alignment with real world fulfillment as they are not based upon that which is. Alternatively, someone who is "rigidly

skeptical" has imagined something that is not true, and is attached to that imaginative belief such that s/he ceases to openly inquire; instead, such a person has this idea of "knowledge" that they are holding on to that isn't in alignment with that which is; yet, they are so imaginatively convinced that they are accurate that the so-called "knowledge" has become a total believed in paradigmatic system of understanding, an "-ism", to them.

In community, we do not think in belief systems. By recognizing belief systems we maintain critical thought and are sufficiently capable of designing systems that are thoughtful to our resilience and ultimate fulfillment. We are less interested in "what" is believed (although it is relevant) and more interested in "why", in substantiation.

When "you" use certain language some people can't hear "you", but that doesn't necessarily call for "you" to use different language. It may mean that the divide between what "you" are saying and what they are believing is too great for them to overcome [at the present time]. This gap or distance in [f]actual knowledge is sometimes known as an *inferential distance* (or differential difference). It is the gap that needs bridging between a more coherent knowledge model and a more confused mental model of the real world.

Belief has nothing to do with that which is, which was, or with data. It has nothing to do with the ability to discover that which is, which comes about through systematic, critical and scientific inquiry into existence and truth. A belief system does not depend upon a process of inquiry, of discovery, of observation, of logic, of verification, and of synthesis into the understanding of that which has actually occurred. Instead, belief involves the process of developing or passively accepting [as given] imaginative "mental constructs" in an individual's own mind with no actual verifiable evidence to back up that constructed (or "fabricated") perception.

Belief and prejudice are similar concepts. They both conceptualize the idea that someone is prejudging, presupposing, or fabricating an opinion without sufficient inquiry, evidence, and validity. And therein, the beliefs of any one individual affect how s/he interrelates to others in society as well as to his/her own life/learning experience. What is believed is not the truth, otherwise it would not be belief. What is believed is not useful information, otherwise it would be knowledge. What is believed tremendously affects the perception and the experience of the truth and knowledge. Belief systems limit reality to a sub-set of the solution space that does not contain the answer to any real world problem.

"True believers" are people so completely captured by their belief that they can't think (or imagine) of their belief as a trap. True believers don't mind "a little inconsistency"; they just ignore it and go on. When "you" are a true believer "you" don't care if there is information to the contrary; "you" just deny it and go on. Yet, falsifiable evidence is not a thing to deny and go on, it's a thing to embrace and integrate, and move forward. Usefully fulfilling information gets ignored and humans

experience suffering when evidence conflicts with true belief.

Ultimately, beliefs begin with someone not wanting (or having been conditioned not) to take on the personal responsibility to discover truth for themselves. Some people [for discoverable reasons] would rather listen to someone else and take that into themselves as a belief instead of remaining open to possibilities and looking at what actually is knowable for themselves. In "early 21st century society, where there exists a high degree of conceptual chaos (i.e., high entropy), any inquiry into truth requires a lot of challenging and diligent work. In early 21st century society, human minds, which would otherwise be used as tools for discovery and fulfilling creations, are highly controlled and have become like an atrophied and unused muscle. Herein, belief ends when open inquiry and self-respect begins, and the individual re-engages their will and desire to do the work to discover the truth for themselves while admitting when there appears contradiction.

All data about something (an object/entity) has to come from somewhere (the real world; space-time). If information that consciousness uses to take action comes from beliefs and presumptions, then the resulting consequences of the action are likely to be as out of alignment with fulfillment as are the beliefs and presuppositions.

An objective, "natural law" philosophy, which facilitates the collection of objective data about the natural world by consciousness, involves three axiomatic subdivisions (or branches). The three subdivisions of this type of philosophy are:

- **Metaphysics** - the world as it exists, the world around us, what is (objective reality, entity). What there is to know? What is real? What are the axioms of reality? How may one acquire knowledge until one has established that there is reality to know?
- **Epistemology** - we are conscious of existence (percept, concept, reason, and logical). The study of knowledge, or more exactly, the ultimate nature of knowledge and how it is acquired. How do you know what you know? How do we know things, and how do we know they are valid? What are the requirements of [living] things in reality?
- **Identity** - things are what they are (non-contradictory identification). Identity references something specific [in the real world]. How do you identify what you know? What is error and how is it minimized? Identity concerns both metaphysics and epistemology as the identification of [axiomatic] reality and the identification of knowledge.

The purpose for the an objective, natural philosophy is the discovery of truth and "correct" moral action, as that which is logically and empirically aligned with

human (and ecological) fulfillment and flourishing, through the non-contradictory identification and logically verified conception by consciousness of that which exists. The term 'natural philosophy' may be used to pertain to the work of analysis and synthesis of common experience and logical argumentation applied toward the explanation and description of nature (i.e., natural synthesis by logically integrating the experiences of consciousness). An objective philosophy has a basis in nature (existent reality), which is based in truth and it is not made or caused by humankind. Objective reality is not a construct that exists only in the minds of human beings. An objective philosophy involves an inquiry into that which is inherent and objective in nature, and may be perceived, but is not perception. It seeks to identify those existing conditions in nature that are both binding and immutable. Thus, its discoveries are considered binding in the sense that it doesn't make a difference whether someone believes in them or not, or even understands their operation [or not], consciousness is and will still be held under its (i.e., natures technical) effects regardless. It is not within a human beings power to change these discoverable conditions (or "universal technical principles"), they are always in effect and they are unchangeable by anything that anyone is capable of doing. This is a philosophy that seeks to discover the immutable and not man-made, binding conditions that act as the ordering principles and "governing systems dynamics" in the world, which have use in designing more fulfilling habitat systems. When this form of philosophy is practiced habitually, it facilitates an individuated consciousness in remaining in [frequency] synchronization with the existent source [system] dynamics of reality.

Epistemologically, the formation of axiomatic concepts is an act of abstraction, a selective focusing on and mental isolation of metaphysical fundamentals; but metaphysically, it is an act of integration—the widest integration possible to humankind; it unites and embraces the totality of someone's experience. From the perspective of source reality it involves the letting go of all abstracted attachment and a stepping into (or reconnecting to) the universal flow of all of existence.

Most concepts that people use in discourse are contingent on some other preceding thing (i.e. concept) that has to be accepted, whether it is realized and has been accepted or not. For example, the concept of 'blasphemy' has no meaning if you don't believe in a divine authority. The concept of 'leisure' or 'holiday' (as defined in early 21st century society) has no meaning unless work is alienating.

Generally in philosophy, reduction occurs along two parallel lines: on the one line consciousness can reduce assumptions, and on the other consciousness can reduce concepts. The axiomatic method is a way to reduce assumptions used in a theory to a few basic principles. Reducing assumptions means that they are derivable from other assumptions; reducing concepts means that they are definable from other concepts.

Eventually no further reduction is possible [with the given information available], leading to the emergence of axioms and "primitive" concepts. Primitive concepts are those which are not defined given the information available. Therein, the purpose of axioms is to describe some inherent part of the underlying conceptually structured nature of the real world, accepting that the world has [levels of] structure. Axioms are useful in describing a class of structures, as well as in describing a single structure, though only incompletely.

A **data axiom** is an irreducible conceptual state expressed in the form of a concept (or proposition) that identifies the origin (or source) of data about a common real world, and it pertains to any further statement of that data, such as those of information and knowledge. In other words, a data axiom is a [conceptual] statement necessarily contained in all others about data, whether any particular communicator chooses to identify it or not. In other words, the objective data axioms also pertain to all objective information and objective knowledge.

'Axiom' is a term of logic and it means an irreducible truth (or proposition) that cannot be proved by means of analysis because all means of proof and evidence depend on this proposition. In philosophic discussion, these axioms become propositions that cannot be argued against and are not a matter of arbitrary choice. They are something that an arguing party would have to accept and use in the process of any attempt to deny them. Here, it is necessary to recognize that not every true statement of a system can be proved by deductive reasoning from other statements, or there would exist infinite regression. These primary (or source) statements and principles on which all others are based, and from which the others are "proved", are known as axioms.

As Rand (1990: 55) explains:

"Axioms are usually considered to be propositions identifying a fundamental, self-evident truth. But explicit propositions as such are not primaries: they are made of concepts. The base of man's knowledge—of all other concepts, all axioms, propositions and thought—consists of axiomatic concepts. An axiomatic concept is the identification of a primary fact of reality, which cannot be analyzed, i.e., reduced to other facts or broken into component parts. It is implicit in all facts and in all knowledge. It is the fundamentally given and directly perceived or experienced, which requires no proof or explanation, but on which all proofs and explanations rest. The first and primary axiomatic concepts are "existence," "identity" (which is a corollary of "existence") and "consciousness." One can study what exists and how consciousness functions; but one cannot analyze (or "prove") existence as such, or consciousness as such. These are irreducible primaries. (An attempt to "prove" them is self-contradictory: it is an attempt to "prove" existence by means of non-existence, and

consciousness by means of unconsciousness.)"

In rational philosophy, axioms are perceptual self-evidences. Conscious organisms in their pursuit of useful, objective data about the real world [toward the intention of well-being] necessarily require a set of axiomatic concepts that describe their interaction with the source from which their data originates (a useful relationship and context).

In concern to axioms and fallacies, there is the "stolen concept" fallacy refers to the using of a concept while denying the validity of its requirements (or "genetic roots"). There is absurdity in arguing against a position when the argument depends upon that position.

A data axiom refers to a fact of reality about the system from which the data was derived. It is ascertained by observing the fact that it cannot be escaped, that it is implicit in all data, and that it has to be accepted and used even in the process of attempting to deny it.

When someone declares that axioms are a matter of arbitrary choice, and proceeds to choose complex, derivative concepts as the alleged axioms of their alleged reasoning about data, one can observe that their statements imply and depend on *existence*, *consciousness*, and *identity*, which they profess to negate, but which are smuggled into their arguments in the form of unacknowledged, "stolen" concepts. "Stolen concepts" are an indication that an individuated consciousness has not performed the process of conceptual reduction sufficiently to become aware of those concepts underlying the concepts they are using.

Existence, identity and consciousness are the axiomatic values of objectivity; and hence, all objective data. They provide an objective framework for the experience and "correct" interpretation of all data. Data acquired under the value conditions of objectivity maintains the attributes of identifiably existent entities and events in the real world, which have a probability of being comprehended by consciousness qualified by the accuracy of the other identified structures used to know it - how do we come to know what we know? Forming a coherent awareness of primary facts is one of the crucial epistemological functions of axiomatic concepts. It is also the reason why they can be translated into a statement only in the form of a repetition (as a base and a reminder): Existence exists; Consciousness is conscious; A is A. This converts axiomatic concepts into formal axioms. An axiomatic concept (argument or proposition) does not "prove" that the objective data axioms of existence, consciousness, and identity are true. Instead, it is only an individuals unobstructed experience that they are axioms at the base of all data, information and knowledge, and thus, inescapable.

The axiomatic philosophical logic of being [in the context of data] includes:

1. Consciousness - It comes into presence.
2. Existence - It is always present.

3. Identity - It moves through presence.

Question: If consciousness, identity, and existence, and their corollaries, are not axiomatic conceptual propositions for all data, information, and knowledge in a given society, then what are the axiomatic concepts that inform said society's information structure and all its framework decisions.

'Existence' is objective, perceptually self-evident, incontestably true, implicit in all knowledge, and conceptually irreducible. It is a challenge to identify a starting point which does not assume the truth of the axiom of existence.

The objective concepts of existence, identity, and consciousness are axiomatic in the design of the social organization of the Community - they are paradigmatic propositions for the adaptive alignment of the orientational value state of the Community toward a fulfilling purpose in the real world. They are presupposed in all cognition, as well as every communication and decision. Individuals that acknowledge these concepts have a level of perceptual cognition that may be said to maintain some form of accurate alignment with the objective characteristics of reality.

It is relevant to note here that the most important question for language bias is whether a concept description language is universal or whether it imposes constraints on what concepts can be learned subsequently. This is relevant because the integration of some concepts and their spatial orientation to other concepts in someone's cognitive schematic model has the potential to set limits on the future integration of more accurate conceptual understandings. If you consider the set of all possible examples, a concept is really just a division of that set into subsets.

Yet, the inaccurate integration of information subsets often leads to obscurity and confusion in the integration and understanding of the system as a whole. Wherein, a universal language is one that is capable of expressing every possible subset of examples. Therefore, it must originate with axiomatic concepts that are universal, and in particular, the axiomatic concepts of objectivity, of systems, and of science to remain sufficiently open and universal to all of real world existence so that existence as a whole system may be perceived and worked within.

Axiomatic concepts are epistemological guidelines. They sum up the essence of all human cognition: something *exists* of which I am *conscious*; I must discover its *identity*.

Additional comments on data axioms include:

1. The standard test for calling two objects the same is **Leibniz's law**: if they are the same, then whatever is true of one is true of the other and whatever is false of one is false of the other. Herein, reductionism's mistake [in identification of

- that which exists in consciousness] is to confuse a necessary condition with an equivalence.
2. An **axiomatic concept** is not [identifiably] reducible within epistemology. That means it does not have any other propositions or concepts which are necessary to understanding the axiomatic concept. An axiomatic concept is therefore also one of the first-level concepts, whose meaning is established by its reference to an existent (as opposed to another abstraction).
 3. For everything that exists, including consciousness, it is always valid to inquire into how it works and what it is composed of; division rests within composition through the process of 'synthesized reconciliation'.

QUESTION: *What does the data suggest is the optimal and most truthful arrangement and structure of that which exists?*

1.5.1 Existence

INSIGHT: *To wholly understand the world, the world must be looked at as one inclusive [whole] information system.*

The concept of existence, as a singular unit, is undeniable and inescapable. If you are reading this you are experiencing the reality of existence, as well as the data of existence, at this very moment - regardless of how you might be choosing to perceive it - you are sensorially perceiving the signatures of existence with degrees of identifiable accuracy and you are doing so with some degree of self-initiated intention. In any logical structure of systematic concepts and propositions there must be some universal or source starting point (possibly a more encompassing multidimensional system).

Existence is implied in every percept; if it is not, then it is a possible falsehood. The concept of existence is irreducible since it pertains to everything that exists, including mental content, all other concepts, material reality, and all entities which have never been and maybe never will be directly observable. That said, there exists a subset of existence, the real world, and this is our common conscious reality involving natural and discoverable phenomena not composed of chaotic mental constructions. This is the real world that our Community exists within, and it must be accounted for if human fulfillment is sought.

What example can we find of something that is absolutely true at all times and all spaces? The first thing that may come to mind is the axiom of existence: existence exists. Since the concepts 'time' and 'space' presuppose existence as the underlying metaphysical precondition of their meaning, any time must take place sometime in existence, just as any space must exist somewhere in existence. The fact that existence exists is true at all times and all places; although, some things

exist in the real world and some things only exist in the minds of those who believe they exist; and, an "objective view" looks at all of this existences as that which exists.

Through existence comes a world space and through a world space comes an [identifiable] 'decision space' that feeds back possibility into the world space creating a navigable environment - a space where consciousness may take choices and cause the world to more greatly respond to our thoughts, for consciousness has that potential as it more greatly understands the nature of the space it is working (or otherwise, being) within.

The identification by consciousness of that which exists in the real world is the first step in turning data into information. Things which exist in the real world have commonly identifiable signatures. Consciousness has a potential [probability] for recognizing these existent signatures and integrating them into the information structures by which it arrives at decisions that lead to greater or lesser entropic coherency and fulfillment. Herein, data allows consciousness to experience patterned space where decisions that are arrived at by consequence lead to greater and lesser states of potential fulfillment.

If it exists, then a basic corollary is that it must all integrate. In order to exist, there must be a larger technical conservation of the ecology - there is a discoverable technical integration that leads to greater states of powerful thought-responsiveness. We must think about how the entire universe can seem to be both physical, yet not made of solids, but of probability distributions. In other words, if we know that there must be conservation in all relationships of all sorts, then how do we both embody and accord with that understanding? What are we doing to improve both ourselves and our community in that regard? We are all transparent in this sense - we all integrate into a commonly identifiable existence.

NOTE: *Imagine if someone said existence exists isn't a primary since it can be reduced by every existent that makes up existence. This is a basic circular argument since what is known, is being confused with, how it is known.*

1.5.2 Consciousness

INSIGHT: *"You" can become conscious of what consciousness is, because you are conscious. Because consciousness is 'now' (i.e., an immediate thing), and you are it, the only way you can know what consciousness is, is by you being conscious of it. Which means, a scientist can't do it for you.*

Consciousness is observed as a self-initiated goal-oriented response[ability] (SIGOR) to an environment[al challenge] through the active perceptual conception of a living entity -- the generation of an em-bodied sensory awareness with a decision space. Herein, biological action is a fractal of consciousness, it is a self-initiated goal-oriented response. The body is [in part] a highly

attuned and adaptive sensory array that interfaces our consciousness through with an environment to which we become a part.

Consciousness is an aware and self-modifying system, and hence, it can evolve itself. Consciousness can put in effort to make better choices to produce lower entropy. It takes effort (work) to lower entropy. There has to be input to run counter to entropy. Therein, consciousness can evolve itself through effort. Consciousness can also de-evolve through lack of effort or through poorly directed effort. Critically, a system (e.g., consciousness) that does not understand its environment, and its relationship to that environment, may not understand the value, or the dangers, of self-modification.

Consciousness is awareness that takes choices; it is a choice making awareness (Read: "I am, and I choose this rather than that"). If there is the ability to take a choice, then there is some degree of freewill. For any choice, there is a "before the choice" and an "after the choice". If anything happens, now and then (before and after), then there is time. Hence, consciousness, free will, and time must logically exist for any of them to co-exist. Therein, consciousness evolves by ordering its bits, and as it orders its bits it can do more work (i.e., can accomplish more activities). There is usefulness [to consciousness] to the organization of information.

There is always a decision space when there exists an identifiable consciousness. There is a signal of data in existence that consciousness can identify [through embodied sensation] and use to construct; and through its experience, it feeds back information. Therein, the verifiability of existence is common to all consciousness.

Consciousness is axiomatic precisely since all proof starts with it – You cannot know something without first admitting you know anything. It commits one to no other physical or metaphysical claims. Conscious means being aware of something and the ability therein to self-reflect. To say conscious doesn't exist is self-refuting. Consciousness is essentially a phenomenon of information. Axiomatically, consciousness formation given the information available will integrated into a unified whole so that it is impossible to divide into independent parts. That reflects the experience that each instance of consciousness is a unified whole that cannot be decomposed into separate components. (Tegmark, 2014)

Consciousness identifies its existent environment through the naming of unique observations by conceptually relational patterning (by "fractaling"). Identifiable things (i.e., things in existence of which data is gathered) have properties, attributes and characteristics, and behaviors that become interrelated and more meaningful in a compiled and more completely integrated information system (through emergence). Therein, human individuals are capable of identifying existent objects through cognition after the experience of perceptual data from their senses and collective instruments from the existent, real world. All consciousness is consciousness of something.

Consciousness has an object[ive challenge for adaptation and growth]. In some respects, consciousness is the distinction of past from present - time, the iterative identification of that which exists by consciousness and initiates the structuring of a potential space of decisions. In this sense, consciousness is a type of information system.

An information system is made out of bits, which are the smallest piece of information. Bits are a yes or a no, a 1 or a 0. If all the bits are random, the system has no information. Random bits carry no information, but if the bits are ordered, then the entropy of that information system is lowered. If the bits are not only ordered, but also made meaningful and/or useful [to consciousness], then consciousness lowers its entropy. In a sense, consciousness is itself an information system.

Entropy has two general aspects:

1. Entropy is a measure of disorder. If order is increased, organization is increased and entropy is lowered.
2. If entropy is lowered in a system, then that increases the system's ability to do work. Through order there is a greater ability to do work.

In order to create information in an information system the bits must be ordered and the order must mean something. To raise the entropy the bits must be randomized.

When things are identified and organized, then consciousness immediately begins to feel less overwhelmed for it can perceive the landscape that it is navigating through, what it has to work with, and what the next probable step or action toward fulfillment might be. Most "next steps" (i.e., navigation) are easy once sufficient data about the terrain has been collected, correctly identified, and sufficiently integrated - the solutions to decisions (and hence, problems) "unfold". The folding and unfolding of protein structures might be a good metaphor here.

It is only consciousness that is capable of conceptual errors and "perceptual blindness". It is only consciousness that needs a special identification of the directly given, to embrace and de-limit the entire field of its awareness -- to de-limit it from the void of "unreality" (or delusion) to which conceptual errors can lead.

Consciousness has an awareness of itself and its thought processing. There is introspection with consciousness. There is a space between stimulus and response. When that space is attenuated or even non-existent (as when fear and greed are present), then it could be said that one does not have "conscience", that one is of a "lower consciousness", or that one is not [internally/intellectually] free. But again, these are labels, and so they are imprecise descriptions of that which is occurring.

One might ask, what can consciousness do? Principally, consciousness can re-focus its intention and

its attention; it can re-direct and re-orient itself as space-time iterates. Syn-chronously, consciousness (the mind-body) can experience, think and identify.

Within the real world there is the potential for life experience [by consciousness]. The very existence of data opens a ‘pattern space’ for consciousness - a space where identifiable objects maintain the potential for having deeper and more meaningful similarity and interrelationship, a space for understanding, learning, and ultimately, evolution.

INSIGHT: *There is no learning by consciousness without [the identifiable] data [of existence].*

1.5.3 Identity

INSIGHT: *The only meaning that a concept has is precisely the difference between it and everything that is not it.*

Existence and consciousness reconcile through identity. Identity is the first form of integration; it is the *reconciling force* in the Three Forces Model that is detailed in its full description in the Social System specification. The reconciling force integrates and “balances” the other two forces (as existence and consciousness). In this application of the Model, consciousness (or will) is the *activating force*, and existence (or technically bounded reality) is the *restraining force*.

If someone doesn’t “do” identification, and hence, integration, then they might end up in an unpleasant place where seemingly random and threatening information pops in from everywhere and nowhere, almost as if they were in a scary children’s cartoon. When existence is not identified and integrated, then individuals end up with an amorphous blob of identities and relationships swirling around their psyche. By not identifying and integrating information accurately there will exist a discordance between consciousness and existence (its absolute environment) because the two are not being identified and reconciled - relationships become frustrat[ed/ing]. When we don’t reconcile our differences in [value] orientation then there is the potential for frustration in our social relationships.

Also, if someone doesn’t have a method for dealing with and otherwise logically organizing information in their mental model of the world, then the information will be integrated in a disconnected manner and its future access will consequently be inefficient. When identity is applied to action [in an information system], then there is probable causality and the potential for iterative prediction.

Without identification (as in, labelling and defining) people can think they are talking about the same thing and in actual fact be talking about multiple different things with potentially conflicting meanings. If you name something it is easier for to think about it and talk about it, while recognizing that names are constructions, and not the actual existing thing. Without accurate

identification the probability of social conflict increases.

There are some significant rhetorical questions to ask in relation to identity:

- How do someone relate anything to any other thing (i.e., identify relationships) without naming?
- How do someone come to know anything when things do not have identifiable signatures or names?

INSIGHT: *In nature things neither hide nor reveal, but signify [to consciousness].*

1.6 Logical reasoning to information

INSIGHT: *Community is a reflection of each individual having an abundance of accurate information about the whole.*

The process of *logical reasoning* takes percepts and integrates them into identifiable concepts for purposes of delineation, to find distinguishing characteristics and relationships in reality for use in reducing the entropy of our information systems and generating greater states of fulfillment and more fulfilling systems. This is not an arbitrary process, and to consider it as such undermines a human’s ability to comprehend the existence of a commonly objective, scientific, and systematic reality. What exists is what we as a community have to deal with. If there is evidence of something we must have the courage in ourselves to address the unknown, to apply our observations and skills of identification and definition, our ability to recognize patterns, to dismiss the arbitrary and eliminate the noise so that we are left with a clear and coherent understanding of that which is; so that we may apply that which is toward decisions and actions that better fulfill our common needs (i.e., that which also is). Truly, this is what we are all looking for because it is that which allows us to act with self-confidence and maintain an accurate orientational alignment with a commonly fulfilling purpose.

Concepts and assertions must be capable of being reduced to facts. If they cannot be reduced to facts then why would a community base its decisions on them? The “risk” or unpredictable consequences of a decision increase as the absence of accurate information increases.

Reality exists independent of perception. There are approaches which may be used to determine what is truth and fantasy, what actually exists in the real world versus what is just a figment of someone’s imagination. It is possible to follow the truth to wherever it leads. The systems approach is part of that process of discovery and integration. Regardless of what approach is chosen, ultimately, humankind must align its perceptions with the reality of that which actually exists in the real world if there is to be any real world progress [beyond politics and power and authority and fear].

When someone states, "we cannot know the facts of reality", then metaphorically speaking, they are cutting a community off at the knees. If we cannot know the facts of reality, then we cannot learn and adapt. Herein, the fallacy of the stolen concept becomes salient. This particular instance of this fallacy makes a claim to the belief that human individuals cannot know anything for certain. Although this statement is said with absolute certainty, it must be asked, how can anyone be so certain, for one must apply the concept of certainty to assert a proposition that nothing can be known for certain? The word "certain" in the statement could be replaced with the word "absolute". The fallacy of the stolen concept consists of using a higher level concept while denying or ignoring its hierarchical roots (i.e., denying one or more of the earlier concepts on which it stands). Errors of this kind are widespread and are the intellectual equivalent of standing on an upper floor of a skyscraper while dynamiting all of the earlier floors. The statement that there are no absolutes is an absolute statement in itself, and thus, exists in a state of contradiction -- it cannot be coherently integrated and may lead to the corruption of someone's perception of that which really exists.

As a community we "arrive" at informed decisions using a systematic, analytic, and critical process, as opposed to "making decisions" via subjective human opinion. A pilot can have an opinion concerning his/her altitude; however, this is not sufficient to fly a plane carrying multiple people with a predictable degree of safety. When the pilot arrives at a conclusion about his/her altitude by consulting the Doppler radar readout on the aircraft's instrumentation panel, s/he will know exactly how far s/he is off the ground due to this collectively developed sense instrument, Doppler radar. Today, automated aircraft piloting systems (autopilot) fly and land many commercial aircraft. Most "new" aircraft have 'autopilot'. Therein, Doppler radar is incorporated as a sub-system of a larger collectively developed and formalized automated decision system known as autopilot (with degrees of functionality and complexity). Now, apply this same thinking to the way in which a digital, technological community might organize itself socially and economically. What weight does opinion have when compared to the availability of observable, factual data, which provides someone's cognitive reasoning with an accurately informed decision space? Surely, an opinion is just that, an opinion. If it was based upon fact and data with a real world referent, then it wouldn't be an opinion. As such, when it comes to a social orientation in a finite habitat opinions serve as nothing more than a means to state a perspective. An opinion exists merely as a temporal stance prior to the receipt of verifiable data. Ideologies are wholly composed of opinionated information. A philosophy aligned with the logical integration of reality seeks to filter opinion.

The logical organization of information is important to our well-being as a community, for without it we might drown ourselves in repetition and confused oblivion. We might create and repeat things that continuously

generate states of suffering and inflict suffering on others.

"Objectivity is both a metaphysical and an epistemological concept. It pertains to the relationship of consciousness to existence. Metaphysically, it is the recognition of the fact that reality exists independent of any perceiver's consciousness. Epistemologically, it is the recognition of the fact that a perceiver's consciousness must acquire knowledge of reality by certain means (reason) in accordance with certain rules (logic). This means that although reality is immutable, in any given context only one answer is true, and the truth is not automatically available to a human consciousness. It can be obtained only by a certain mental process, which is required of every man who seeks knowledge—that there is no substitute for this process, no escape from the responsibility for it, no short-cuts, no special revelations to privileged observers—and that there can be no such thing as a final "authority" in matters pertaining to human knowledge.

Metaphysically, the only authority is reality; epistemologically, it is one's own mind. The first is the ultimate arbiter of the second. The concept of objectivity contains the reason why the question "Who decides what is right or wrong?" is wrong. Nobody "decides." Nature does not decide—it merely is. In issues of knowledge, man does not decide, he merely observes that which is. When it comes to applying his knowledge, man decides what he chooses to do, according to what he has learned, remembering that the basic principle of rational action in all aspects of human existence, is: "Nature, to be commanded, must be obeyed." This means that man does not create reality and can achieve his values only by making his decisions consonant with the facts of reality."

- "Who Is the Final Authority in Ethics?". The Objectivist Newsletter, Feb. 1965, 7.

1.7 Power and data

NOTE: *The exploitation of gaps in knowledge has the potential for generating fear, which might then be exploited for energy acquisition and human resource management.*

Data and knowledge are not necessarily "power" in themselves, but they are a potential means to power. A differential in the dissemination of accurate information has the ability to create a differential in power. Ultimately, power comes from acting upon knowledge, and when knowledge is hidden or "occulted" from people, it is possible to keep them at a distinct disadvantage, influencing their mind and ultimately their behaviors for selfish agendas. In competition, accurate information provides leverage. In a system where information equates to leverage over others, then of course there will be establishments that seek to control information (e.g.,

industries and States). Fundamentally, the information we have available matters [to our fulfillment].

The "elite" maintain a power differential through the ignorance of the masses. When an individual's will is weakened through centuries of manipulation and attachment, then individuals might stop the acquisition and integration of knowledge at an early age, or they might be enculturated [en-cult-urated] to only accept and integrate [as much as possible] the "knowledge" of leaders, authorities, and power figures. This would represent a very unsafe social environment. And, the people trapped within it might not realize how unsafe it actually is because the "knowledge" they are presented with by the authority or some other uncriticizable leader might not provide any immediate indication of such.

In discussions on political matters we quickly find that if we don't agree on what ethical foundations we have, then we don't get very far talking politics. And, when we have an ethical discussion we find out that if you don't agree on epistemology (Read: on how we know anything), then you don't get very far agreeing on ethics. And, epistemology in turn is based on metaphysics (Read: what actually exists). In truth, everybody in their own way has to work through the foundations of truthful understanding in their own self-initiated way. A community environment can facilitate the more rapid acquisition of this experiential quality of the self. Yet, if there is disagreement at the level of axiom, premise, and system [of approach], then two people are just going to keep talking past each other (i.e., coordination is not possible). If there is a difference in direction, orientation and approach, then there is a fundamental difference in the structure of the information being communicated between us, which will lead to confusion and may generate conflict. And herein, those who may desire a greater competitive edge (or concentration of power) are presented with the opportunity to take advantage of a situation with disarranged understanding and possible emotionally intense contention.

1.8 Data processing and pointlessness

INSIGHT: *Every step you take in nature, in reality, offers you a choice.*

Without a purpose data can quickly become pointless. Without purpose life can quickly turn into a situation of processing more data to process even more data, and so on.

1.9 The evidence of data

Only *experimental*, *controlled* and *falsifiable* studies can verifiably demonstrate whether a particular activity is the cause of something. *Observational* (or *epidemiological*) studies may find an association or a correlation between a thing and an outcome, but they cannot say with statistical certainty that one is the cause of the other. Correlation does not necessarily imply

causation. Empirical observation by itself does not prove or explain *how*. It shows spatial proximity, but does not prove causation; the scientific method demonstrates causation through its falsifiability and controlled [experimental] design; it is a social approach with the acknowledgement that there are individualistically mindful and introspective approaches also.

In the domain of common decisioning we reference our information: we visually model it and we associate it with an experience so that we understand how the information is flowing.

2 The knowledge sub-domain

QUESTION: *Without facts, upon what is there to base knowledge (i.e., upon what do we base our knowledge without facts)? Knowledge may be said to be the "mental grasp" of facts.*

The Knowledge Domain functions to identify a greater complexity and understanding of relationships and patterns in information from the Data Domain and integrate them into a relational, logical, and systematic knowledge structure (a "semantic web"). This structure defines the forms, functions, and principle processes of the real world. Herein, data about systems, which has been collected through empirical and experimental means, is organizationally integrated and otherwise structured into a 'system of knowledge' for useful access by the Community, and in particular, the Values Domain and the Decision System Domain. Accurate and timely knowledge is vital for a community that seeks to arrive at decisions that facilitate its adaptation and dynamic fulfillment. Knowledge is all about an accurate representation of reality (i.e., it is a representation of reality with high certainty).

Note that among community, it is important to realize when one is passed the limit of one's knowledge and has begun to conjecture, and that is not a failure. It is ok, there is no punishment that will be inflicted if someone says the words, "I don't know." For individuals in society to act continuously based upon conjecture and presupposition is inefficient, and certainly, ineffectual for their own and everyone's fulfillment. And herein, it is important to recognize that if there is a topic about which no one knows anything and won't be honest in communicating that they don't know, that maximizes the degree to which people have opinions.

The Knowledge Domain involves knowledge, as highly structured and integrated information about the systems of which the real world community is composed. The Knowledge Domain involves the clarifying of perceptual and relational identities and the integration of object[ive] data and conceptual understandings by individuals, instruments, and systems in the real world into a more cohesive and useful model for orientating and for deciding as a community.

The term knowledge refers to a set of emergently corrected and objectively identifiable conclusions about the real world. Knowledge is a structurally and relationally organized collection of facts, truths, or principles that explain the experiential and consequential probabilities of relationships in existence, it has predictive properties, and it results from the integration of information generated by inquiry, discovery, perception, and fundamentally, experience into the existent. Since knowledge explains [in part] real world systems, it is therefore useful in designing, developing and predicting the behaviors of systems it [correctly] describes.

Knowledge is communicated through conceptual language. Visually, knowledge is represented by a

semantic (relational meaning) and syntactic (logical arrangement, rules) network consisting of concepts (nodes) and links (edges). Nodes represent objects and edges represent relationships. Hence, concepts are definable by their internal attributes and external relationships.

Knowledge is an emergent organizational resource commonly informed by individuals and systems in the Community. Knowledge is "more integrated" data or "highly informed" information, and it has significance beyond its mere presence. Better knowledge results in better decisions, better actions, and better performance. Knowledge has meaning to an entity with a decision space for its usefulness in optimizing predictions and decisions in the systematically spatial and relational world where the entity with a decision space exists. Knowledge comprises of everything that data comprises of (facts, observations, and asserted perceptions) structured into a complex relational model (also known as map, schema, mental model, connectome, or concept model, among others). It is relevant to note here that such models are evaluated by their ability to explain the existing data within a self-consistent and coherent system reflective of the real world by some probable (and predictable) degree.

When a model is tested and it "hits a roadblock" (i.e., its logical prediction does not align with what was expected in 'negative feedback'), then there is the appearance of a boundary in the information landscape of our understanding of our resolving of that which exists. Some strategies, those of adaptability and resiliency, see this as an opportunity to optimize the knowledge structuring of themselves and society. A gap in our understanding may be overcome through learning. Often, the key to understanding is casting out belief (or "false knowledge"). The idea that knowledge is "justified belief" is a contradiction in terms. If something is reasoned and "justified" with verifiable evidence, then it is not a belief. In other words, if something is reasoned and verified, then it is not a belief. When there is understanding then there is useful forward movement and accurate navigation (i.e., once you have the understanding you can move forward). Efficiency in this sense, involves a self-initiated, goal-oriented strategy toward a new model of reality with a higher potential [structural platform] for navigation and re-creation.

The derivation of knowledge from observed data requires the application of processes. The Knowledge Domain involves a long list of processing activities with the purpose of structuring, ordering, and patterning representations of reality into a single, unified, and increasingly accurate 'knowledge model' of the real world. Some common structuring and ordering activities include calculating, synthesizing; analyzing; reasoning, critical thinking, relating; identifying; connecting; logicizing, contextualizing, and ordering. Where applicable these processes (and methods) provide a complex re-organization of information into an integral (as systematically cohesive) information structure (i.e.,

knowledge). Knowledge typically involves the logical processing (and structural patterning) of information to obtain a meaningful and probable indication of trends or patterns in data. Together, these activities are the mechanisms by which data is [more greatly] structured into knowledge. It is also relevant to note that the quality of any knowledge stored in an information system must be maintained by the continual processes of correcting and updating the knowledge, its structure, and the process by which it is derived, as more information becomes available.

Engineering academic, Milan Zeleny, stated in 1988 that, "While data and information are piecemeal components, partial and atomized by their very nature, knowledge and wisdom are "holistic" concepts, related to and expressed through systemic network patterns and thus integrative by definition." (Gupta, 1988) A more simplistic view of knowledge considers it as the highest level in a hierarchy with information at the middle level and data at the lowest level; a hierarchy that "openly" reflects reality. Also, according to this view, knowledge refers to information that enables "informed" actions and decisioning.

It might be of interest to also note that in the corporate and government "intelligence industry", actionable information which policy makers "are said to use to make decisions" is called "intelligence". This type of "intelligence" is not equivalent to 'intelligence' in the real world. 'Intelligence' in the real world isn't information that some so-called authority uses to make subjective decisions; instead, it is the ability of consciousness or some technical entity to pattern recognize and to process information into a more accurately aligning decision space. Intelligence describes the processes a system goes through to synthesize available information. Intelligence could be perceived as a continuum representing the quality of the processing of information - leading to states of low entropy and high integration, or states of high entropy and confused, contradictory integration (i.e., not-integration; "litigation").

Fundamentally, consciousness derives and verifies knowledge from experience. Knowledge starts as an observation by consciousness and its refinement allows for the material creation of useful technologies for consciousness. Technology is the product of knowledge. Therein, humanity can use knowledge to address its global and common needs. Individuals may more greatly understand themselves as they more accurately model the universe within and through which they exist, while creating systems that align with their value coordinates, which are explained by their knowledge base, toward a direction of commonly understood fulfillment. Therein, knowledge has the potential to dispel fear embedded within consciousness for humans have a tendency to fear that which they do not understand.

Regardless, knowledge is the resulting integral structure of a specific set of system processes. When intelligence is low and the system integration processes are of low quality, then the resulting knowledge structure

will be of poor quality, and it will not mirror real world; hence, decisions and conclusions made or arrived at from this poor quality model are likely to direct consciousness away from fulfillment, which requires actual knowledge.

In a community, knowledge is a collection of useful information about a predictably existent reality placed in a "pool" (or commons) for common access.

Knowledge is the result of a particular type of inquiry. In order to arrive at useful decisions and to correctly orient, '*why*' questions about oneself and the real world must be asked. '*Why*' questions [about systems] are answered through synthesizing and assimilating (integrating) the results of multiple '*how*' questions into a unified model with some degree of "certain[ty]" alignment with the real world. Effectively, knowledge answers '*how*' questions and provides an indication of '*why*' [often with a degree of statistical certainty]. If all knowledge were the conclusion of a proof, then we would have an infinite regress, void of any starting point, void of the real world (i.e., subjectivism).

Knowledge of the phenomenological world describes at least "mechanisms of action" in the phenomenological world. A 'mechanism' is a systems process that drives or influences the outcome of a perceptible event.

Research into phenomenological mechanisms reduces uncertainty in a species's information system and it facilitates the evolution of technology for that species. In many cases, human scientists have tested, analyzed, and examined theories so thoroughly that their chance of being wrong is infinitesimal, which doesn't mean to say that there might not be more to know about them and their relationships. Other times, uncertainties linger despite lengthy scientific research. In those cases, scientists make it their "job" to explain how well something is known. When gaps in knowledge exist, scientists qualify the evidence to ensure others don't form conclusions ("claimed knowledge") that go beyond what is known. Even though it may seem counter-intuitive, scientists like to point out the level of uncertainty. Why? Because they want to be as transparent as possible and it shows how well certain phenomena are understood. Certainty provides focus, power, decisiveness, action, and orientation. And, uncertainty allows for openness, possibilities, and ultimately, humility.

Buckminster Fuller defined the idea of "wealth" in terms of knowledge, as the "technological ability to protect, nurture, support, and accommodate all growth needs of life." His analysis of the condition of "Spaceship Earth" caused him to conclude that at a certain time during the 1970s, humanity had attained an unprecedented state. He was convinced that the accumulation of relevant knowledge, combined with the quantities of major recyclable resources that had already been extracted from the Earth, had attained a critical level, such that competition for necessities was not necessary anymore. Cooperation had become the optimum survival strategy. "Selfishness," he declared, "is unnecessary and hence-forth unratinalizable ... War is obsolete."

Knowledge is both *a priori* and *synthetic*. It is *a priori*, for it goes beyond what is merely given to sensation or to empirical perception -- it reflects reality with a degree of probability, both material and conceptual. It is synthetic because it adds an explanatory unification and useful structural composition to the merely given -- it becomes useful for navigation. An organization and unification of knowledge leads to a single philosophic and scientific body of knowledge -- a single, unifying information system in some sort of probabilistic alignment with the system from which it was sensed (or perceived).

The degree of unity, consistency, or relatedness among entities in a system is a matter to be consciously ascertained. Natural sciences presuppose that there is a unifying system that is universally true and can be known through structured inquiry, through a "process of being, doing, and having". The task of individuals (i.e., scientists in community), if they so choose, is to continuously discover information of the unknown and to build accurate knowledge models [of reality] so that a community's actions coherently lead to greater states of fulfillment.

Knowledge is a continuous and incremental process of integration toward ever greater understanding. Knowledge may guide the direction of a society and the design of its systems. If a community seeks to maintain an alignment of its information structures with actual reality (the real world), then the community's knowledge and understandings must remain emergent and subject to update as new data, information, knowledge, and value is acquired (or becomes available). As the community's understandings change so too must any and all theories and designs based upon the old concepts (i.e., the information and decisioning systems must be updated in its designs for our habitat). To stubbornly cling to old outdated systems when newer, more scientifically accurate studies and discoveries disprove their usefulness [in sustaining fulfillment] is unwise. The gaps we perceive in reality are just gaps in our understanding. The belief that science already understands the nature of reality in principle (i.e., scientism) is delusional and is not scientific. Science is a tool for coming to understand that which existed, exists, and may exist.

The Knowledge Domain represents the Community's most current and comprehensive understanding of ourselves and our real and ecologically environmental world.

Knowledge has no value judgment, it is neutral. Any value judgment upon commonly verifiable knowledge is a projection of oneself (a possible state of the self-reflecting "ego"). The more these judgments are inspected, the more they are found to be projected aspects of the self (i.e., psychological projections).

The Knowledge Domain has some similarities with the discussion section of a scientific research paper, and of the body of knowledge known as 'science'. The discussion section of a scientific research paper is a sapient exercise in logic, brevity, and clarity. The discussion section involves the identification of logical

relationships between that which was known and that which is newly known, as well as conveying a deeper understanding of the results of the research; at the very least it involves logic and critical thinking. Generally, the discussion section is the most useful part of a research report and helps readers to integrate and understand the implications of the findings (i.e., data and percepts). It often elaborates on how the results fit into the larger theory or system, and it may or may not place the findings in the context of a value system, a moral orientation toward fulfillment and better decisions. Of note, for effective access by the community, the language in the discussion section of a research paper must be clear and unambiguous, otherwise technological engineering would be impractical.

At this very moment humanity is seeing the exponential growth of technology through the growth of knowledge at a real-time, global pace.

The purpose of thinking is [in part] to identify knowledge so that we can orient ourselves in the real world and meet our real needs. Knowledge might be seen figuratively as "getting onto the same page", so we can meet our common needs. That is why we use language; we use language to commonly identify.

We can come to rationally conclusive identifications and understandings about issues of interest. And, we can design our systems in conceptual/digital form and arrive at logically probable solutions prior to iterative technical creation. Through transparency of data and logical simulation the world appears more clear to us and we may freely navigate within it.

INSIGHT: *There are many inquirers who have come before "you" and have added to the common pool of knowledge that "we" collectively hold as humankind, and there are many who will come after "you". If "you" have accomplished anything it is only by standing on the shoulders of others; for in order to accomplish that which "you" have there were many who came before, and "you" may help the many who come after (or, "you" may not if you do "not" share).*

2.1 System-based knowledge

Data about systems is organized into a 'system of knowledge'. Systems maintain [at least] hierarchical and contextual relationships, and hence, knowledge about systems has both hierarchical and contextual characteristics. In concern to the hierarchical nature of knowledge, for example, consciousness must know of chairs and tables if it is to also integrate the concept of furniture -- into a complex material system that provides a functional architectural structure for the needs of individuals. Conceptual information (i.e., concepts) are built upon and develop into hierarchical systems of knowledge that become increasingly unified the more knowledge is learned about them. Knowledge cannot exist as disconnected bits on a flat plane, where one data point has no relation to another, where everything

is non-relational, and thus, out of [embodied] context -- we are operating in a total information system.

Both the idea of a *hierarchy* and of *context* signify a more complex structural relationship between bits of information about a commonly experienced system. The implication exists that there is a larger interrelated system (or "reality") within which discoverable and identifiable things have knowable interrelationships.

A hierarchy of knowledge might be visualized as a body of data points, concepts, relationships and principles structured in order of logical dependence, one upon another, according to each item's distance from the base of perceptual data and any "pre-cognition" with which cognition accepts inputs. Moving down the hierarchy involves conceptual and assumptive reduction, as well as sensory attunement and possibly sensory re-mapping.

The hierarchical view identifies a particular kind of cognitive relationship: one that has an inner structure of logical dependence, rising gradually from a base of "first-level" items. Herein, logical reduction is the means of connecting an advanced knowledge to reality by traveling backward through the hierarchical structure involved (i.e. identifying in logical sequence the intermediate steps that relate a cognitive item to perceptual data). Please note that the logical process of reduction is not reductionism - incorrectly reducing causes to a variable of the overall cause, which is not the cause, possibly through [emotional] attachment or [psychological] belief. Reductionism can often be manipulative in nature, for when it is done in a sophisticated manner it can appear to prove a point by concealing and misdirecting logical relationships. It is "reductionist" to apply a "reductionist example" to a larger and systematically more complex situation.

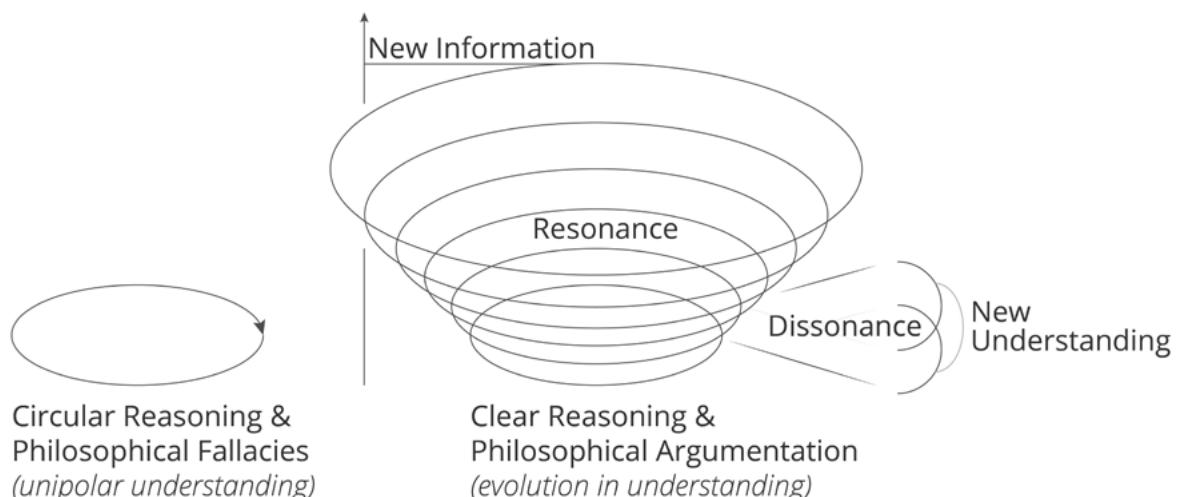
In concern to context, knowledge has relationships at every level. Knowledge is an organization of claimed

similarity with the real world, each unit of knowledge relevant to and bearing on the others. Knowledge is not a juxtaposition of independent items; it is a unity. All units in reality are interconnected, and nothing is a completely isolated fact, object or system. In a knowledge system the term 'context' means "the sum of cognitive elements conditioning an item of knowledge." 'Context' sets an item's relationship to situational reality, and thus, the item's meaning and potential use. *Remember that meaning never comes from the system itself, but its supra-system.* Contextual relationships must never be dropped for a system to be understood and for systematic solutions to be adopted. Without *interconnectedness, relatedness, and wholeness* (the axiomatic conceptual values of systems), information is disconnected and has no potential value to a real world decision space, and it is not systematic. Similarly, without *consistency, evidence, and openness* (the axiomatic conceptual values of science), knowledge has no basis and also has no potential value to a real world decision space, and it is not "scientific".

Unfortunately, context and hierarchy are often disregarded in early 21st century society in favor of the belief that consciousness cannot relate one thing to another thing in a non-contradictory, logical, and unifying (i.e., integrated) way. Without an integral approach to the discovery of knowledge and creative design, which involves non-contradictory identification and logical pattern integration, it becomes difficult to ferret out reality and truth against falsehoods; it becomes difficult to create in alignment with fulfillment -- consciousness stumbles (or, thrashes) around its environment [without a unifying relational model] instead of flourishing with and having the knowledge to caretake (or steward) for its environment.

Knowledge systems in accurate alignment with the real world account for the hierarchy and context of their

Figure 21. A philosophical argument evolving into greater awarenesses of understanding positioned in contrast to the process of circular reasoning.



knowledge such that individuals in a community might base their real world decisions on accurately structured information about the real world in which they live. Higher level concepts and understandings must be founded upon the facts of reality to be useful in structuring the arrival at decisions that generate states of fulfillment in systematic relationship with a community of individuals and systems.

To disregard the hierarchical and contextual nature of knowledge is a sure way to manufacture intellectual pollution and social discordance. In an information system, information processes can generate more information about the system (i.e., processing units can generate information from information). To develop functionally useful community systems we must acquire more knowledge (or as much knowledge as possible) about how nature organizes life; this will facilitate our resiliency. And technically, the more accurate information a community collects, the more complex systems it can evolve.

INSIGHT: *Once discontinuous integration gets started, it is tough to turn around. When 'merge conflicts' go unnoticed, then the whole information system starts to de-order.*

2.2 Perception and cognition

The human mind perceives things not perceptible by the five senses, including relationships, patterns, mathematical entities, and meaning in general. Human beings have real needs and the derivation of meaning from experience by cognition facilitates the more effective and efficient fulfillment of the real needs of the human organism. Wherein, it is a part of the role of cognition to collect and generate knowledge by synthesizing and testing hypotheses, by observing and exploring the stuff of existence, and by searching for a higher potential fulfillment by explaining and logically reasoning what [if anything] these observations and results mean to our evolution in the universe.

The human mind is capable of both experiencing the real world and penetrating into the conceptual space of formative ideas. The empirical can be integrated with the "ideal" (Read: abstract object or mental representation), to structure the facts of consciously identifiable experience into a larger context of meaning and a commonly fulfilling, purposeful direction. Physicist David Bohm calls this combination of relationships the "undivided wholeness in flowing movement". Gregory Bateson called it, the "pattern which connects".

Conception and perception are interrelated; when one is changed the other maintains the potential for change also. The human mind uses concepts to organize its percepts into an information set consisting of systems of knowledge (orienting) and systems of belief (disorienting). Both systems of knowledge and of belief represent conceptual frameworks. Thus, we can talk for example about the Aristotelian conceptual framework,

the Newtonian, the Darwinian, the shamanistic, the Christian, the Islamic, the Buddhist, or the philosophical systems framework. Conceptual frameworks are systems of concepts used to organize and explain the occurrence and behavior of phenomena detected by sense data. Some conceptual frameworks are also paradigms (or "viewpoints"). A 'paradigm' is a way of thinking, which is often so ingrained in people's behavioral thought patterns that they aren't even aware of it. It is a set of the most fundamental conceptual relationships adopted by a population that maintains a shared approach to perception and to engaging with an environment. Paradigms might involve assumptions, concepts, values, and practices that constitute a way of viewing reality (i.e., a viewpoint) for those who share them, especially in an intellectual discipline. The 'systems paradigm' is one of the few, if not the only known paradigm that acknowledges the value of emergently open and active inquiry through a recognition that understanding about a system is derived from an inquiry, discovery, and integration into its supra-system through an approach that maintains a corrective feedback mechanism (i.e., material experience) and facilitates in the sustained emergence of a system of knowledge versus a system of belief. To understand emergence means to recognize the potential for the appearance of new information, which allows for openness to new information. A deep understanding of the emergent nature of thought is essential for any individual to transcend his/her self-limiting and irrational thought processes and behavior. Essentially, 'emergence' facilitates in the individual the logical ability to appreciate when they are proved to be [verifiably] wrong, rather than feeling upset or angry.

It would still appear that consciousness can only know what its perceptual and conceptual processes (or "apparatuses") allow it to know. Hence, for an individual to remain in alignment with his or her higher potential s/he must seek accurate perceptual data and logical conceptual integration into knowledge void of bias and contradiction, and full of recognized patterns and context.

2.3 Knowledge and power

Knowledge about systems is predictive in nature. Knowledge increases the range of understanding and of potential application. When consciousness has knowledge of a system, then it can utilize that knowledge to predict, manufacture, or in some way demonstrate precisely an intention[al dynamic] in that system. Hence the phrase, "knowledge is power". When power is defined as the ability to do work, then without knowledge, there is no ability to do work [in a particular system]. Not only is knowledge of something a useful representation of "power", but knowledge can be used against individuals as a form of power. Knowledge gaps [between individuals within a competitive society] can create power differentials that can be extremely caustic to society. In a society that neither understands

nor values human potential, knowledge about human potential can become hidden behind paywalls and competitive façades.

Knowledge is the only practical information resource humans have to survive and thrive in the world. Facts, as those specific truths about individual realities, objectives, and events, cannot successfully be twisted to fit human whims or wishes. Any attempt to twist facts to fit perception leads to an equivalent decrease in the power behind the application of someone's intention. The twisting of facts maintains the illusion of knowledge, and hence, the illusion of personal power.

NOTE: *Profit-driven entities competing in the market are building things with knowledge. Humans with common human needs and ecological relationships, are constructive creators, and can build things with knowledge too. Humanity can build structures to create and sustain states of fulfillment, instead of structures to generate states of scarcity.*

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The Three Forms of Self-Orientation within a Community-Type Society

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Abstract

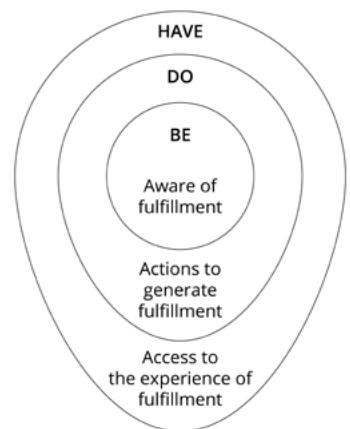
There appear to be three states, dimensions, or modalities that compose human life experience. A human consciousness is experiencing behavior through accessible resources. Humans are individuated units of consciousness, subjects, that feel definable states of being (e.g., happiness, sadness, etc.). As individuated units of consciousness inhabiting physical bodies that effect within an environment, each body has access to a set of definable resources. Simply, humans feel their being, they do their behaviors, and they have access to resources and resource compositions (i.e., technologies). For a social population of individuals to take control of their direction it is essential for them to realize that there are at least three perspectives that must be integrated at once in order to sustain mutual coordination. Individuals come together within an environment where behaviors are expressed and access to resources increases or decreases. There is no need to fear the experience of empathizing with another.

Graphical Abstract

Figure 23. There is a process at work ensuring that effort is usefully coordinated. Individuals have modalities to their interaction with societal projects.



Figure 22. Individuals can be aware of their own and others required fulfillment, they can act to meet those requirements, and they can experience the benefit of that access which has been generated.



1 Introduction

A.k.a., The three modalities, the triality of consciousness, the triality of conscious form.

There exist three forms of intentional self-orientation that together lead to other stable forms of orientation, including the possibility for a stable social-orientation. These three forms represent the perceptual orientation of experience from which conscious existence derives its source and iterates (Read: ΔT - changes its temporal state). Each form represent one of the first coordinated orientations of the 'intentional self' in material reality.

The three functional coordinates as representations of the orientation of the self [toward the world] are known as:

1. A state of **being**
2. A state of **doing**
3. A state of **having**

There is [a being of] consciousness because there is an awareness of existence. There is a haver because there is [having] access to existence. There is a doer because there is doing (and learning) through existence. Hence, conscious existence necessarily involves the states, attributes, and forms of being, doing, and having. And, a community's socio-economic system must account for the being[ness], the doing[ness], and the having[ness] of individuated consciousness. How it defines these states will define how it perceives its orientation, and hence, orients.

If these three concepts were applied at the 3 forces model level, then being would be the activating force of will, having would be the restraining force of availability, and doing would be the reconciling force of experience through intention, which leads to adaptive integration.

INSIGHT: A different way of thinking creates a different way of being, creates a different way of doing, creates a different way of having. And, a different way of having creates a different way of doing, creates a different way of being, creates a different way of thinking. Simply, all ways of orienting affect all other ways of orienting.

2 A state of being

INSIGHT: *In a conscious information system a 'concept' represents the integration of existent mental information by an actively [pattern] integrating consciousness.*

A 'state of being' describes, not necessarily an acceptance, but more of a state of mindful and perceptual engagement with oneself and one's life, with existence and with how things truly are. A state of being is a state of engagement with [the nature of] existence. Consciousness is being - doing, not doing; having, not having - consciousness is without dissonance, but may experience dissonance. A state of being is an initialization of the state of conscious existence through the opening of [sensory] perception [to existence] for experiential integration. Therein, organisms maintain a consciously processing decision space indicative of a "function of being".

Unity through consciousness represent a far reaching experience, and when adopted as an essential element of perspective, then it is profoundly life enhancing. Herein, appreciation uplifts consciousness and generates a radiance in consciousness that is hard to ignore. It is the state of perception that brings regenerative and eternal joy to experience; in some of us it is a flicker of light and in others it is the light of all experience. See a flower, appreciate its beauty and receive the radiant gift of pleasant feeling.

When someone is said to be in "an aligned state of being", then they are said to be 'alive' to the world and 'authentically related' to all that it entails - directly, and as expressions of what they are as human beings. Therein, appreciation is an entirely open option for humans, and moreover, it is the only option that enables self-actualization and common human fulfillment. Our experience is that at the end of a lot of arguing and talking there is being [expressed in a diversity of forms]. Herein, beingness becomes a collapse of awareness into a point of conscious awareness of the now, of the present moment of beingness.

The act of being is itself part of what it is to become who and what "ou are. The act of having learned something first hand by experiencing it is what makes you who you are. The act of learning by life experience has sufficient value that to just have someone tell you what you should and shouldn't do is not what makes you who and what you are. Who and what you are is what you do and what you learn [along the way] from what you did. You can tell someone something, but if they don't think it is true it will fall on deaf ears. A society must let people find out for themselves, and in the act of finding out is the "lesson", not the lesson itself. It is in the moment that we are learning what it is to be alive. Life experience feeds what we are today. Life experience feeds what "I" am today. Even if "I" am steeped in ignorance at some point in time in my life.

"As long as you are unaware of Being, the reality

of other humans will elude you, because you have not found your own. Your mind will like or dislike their form, which is not just their body but includes their mind as well. True relationship becomes possible only when there is an awareness of Being. Coming from Being, you will perceive another person's body and mind as just a screen, as it were, behind which you can feel their true reality, as you feel yours."

-Eckhart Tolle

3 A state of having

INSIGHT: *In an information system, having, represents "the accessing of" information. Therein, as beingness, consciousness has thought.*

The state of having describes what is accessed by (or carried with) consciousness when it interrelates. The state of having generally takes one of two forms:

- Having appreciation in organized access and accurate tools.
- Having ownership in defense of property.

These are essentially two different perceptual paradigms. And, they describe how consciousness interrelates with material reality. The later paradigm restricts access to resources by the obligatory exchanged acquisition of property. The former paradigm opens access to and the sharing of resources through the common organization of their access and usage. In some respects, the former is the state of having, not having (i.e., accessing); and the later represents a continuum of restriction and possession (i.e., ownership).

Herein, it is significant to recognize that what someone "has" changes their psychology. For example, wearing certain clothes changes psychology. The tools used change psychology. The structures people integrate with change their perception. Having an inflamed brain is even known to change psychology. In essence, the interface some uses influences their psychology, and hence, their behavior.

In a property-based relationship, someone's connection to themselves and the world becomes one of possessing and owning, extending to the possible point where they want to make everything and everybody—including themselves—their property. The idea of an ownership relationship involves something of a positing of those internal values and aspirations and existences within objects in the surrounding environment. Therein, the positing of values replaces the resonance of values. A harmonious interrelationship actually involves connection through resonance, and resonant values. The idea of having ownership subdivides into:

- Possession (taking possession)
- Ownership (having ownership)
- Property (being property)

This ownership-type orientation results in a commercially experienced life (i.e., life composed of a series of commercial experiences in the market) versus a community experienced life (i.e., life composed of fulfilling experiences in common). This generates: Egoism and self-interest at the cost of others; Individual pursuit at the expense of others; Pursuit of self-interest with the structurally reinforced incentive for disregarding the needs of others; And, unhealthy predispositions.

A state of having that includes a remote process of organizing reality based upon attachment and competition, based upon property, is a very unstable and stressful state because someone is essentially investing themselves in everything other than themselves - they have identified their being with what they have. The corrupted societal philosophy that emerges from this ideology represents a natural and inevitable human orientation toward hierarchies of ownership.

From this perspective, egotism and selfish self-interest are seen as leading naturally to harmony. Each person pursuing their own interests within recognized legitimate limits in a market of selfish satisfiers (e.g., profit produced goods and services) that is kept as unregulated (or regulated) as possible. Some allege that this system is the best guarantee of conditions under which humans can realize their life aims. A further view accompanies this conception of the human condition. This additional view asserts that humans are "basically lazy [and] passive by nature" and that "they 'do not want to work ... unless driven by the incentive of material gain'" or else "coerced by hunger or fear of pain and punishment".

Ownership is an orientation which essentially removes existence from the self and places it onto a metaphorical and very real table of things, material objects, collections that are trying to sort of help you exist, but actually don't do that at all. If someone's sense of identity, their existential identification, is based on what they has, on their possessions, if they can say they are what they have, then the question arises, what am I if I lose what I have, or if I am not what I once had? Therefore, the sense of identity based on what I have is always threatened. A person is anxiously concerned not to lose what he has because he doesn't lose just what he has, but he loses his sense of self. If I feel that I am what I have and I have nothing anymore, then I am not (i.e., I do not exist; the state of existence is negated).

"Man is not what he thinks he is, he is what he has." [What tools he has, what needs he has fulfilled, what information he has accessible to him, what tools he has available to approach the re-orientation of his life with.]

- French novelist Andre Morrow

4 A state of doing

Everything you do is training; the question is, what are you training for? One thing we can surely say about Homo sapiens is that they are highly adaptable. Whatever is in our immediate environment, whatever we are exposed to, whatever we do again and again, we begin adapting to, becoming better at. In this regard then, we could say that everything we do is a kind of training; everything we do is a physiological and psychological learning session. We are constantly educating ourselves, body and mind, on how to perform. We are always adapting to that which we place before ourselves or is placed before us. Everything is training. Even those who spend their days behind a desk or operating a machine or driving a vehicle; they too are teaching themselves to perform their chosen task — in all its physical specificity — better today than they did before, better tomorrow than they did today. They are learning to increase their efficiency, to shave off the bumps and smooth out the slaloms that cause drag in the execution of their skill.

Yet, if we don't actual do anything, then we aren't actually going to learn anything or get better at anything in any way. Learning requires action, interaction and reaction; it requires experience.

Doing may involve the autonomous identification of useful patterns of information in a common reality (i.e., integration); a more complex form of which involves technologically facilitated participation in a cooperating social community. The state of doing represents the continuous emergence of a process (or set of processes) that move consciousness toward greater and lesser states of potential being -- as action, interaction, and reaction that facilitate (or otherwise structure) a higher potential state of fulfillment.

Herein, in order "to do something" there must also exist "having access to something". In order to become our more fulfilled selves we must learn through experience to that which we have access.

Through unfulfilling structures we can create own undoing. A fulfilling structure isn't just something that individuals have within them and around them (i.e., environment), it is also something they use (i.e., a functionality) and something that they ultimately become.

QUESTIONS: *If you are what you do, and identify and define yourself by what you do, then what happens when you stop doing it and you still are?*

5 Erich Fromm

It must be noted that Erich Fromm, one of the early influential researchers on a human perspective of human nature and human need, maintained the understanding that there were two basic character orientations of the self, that of selfishness and altruism. Erich Fromm believed that pursuing a viable future for people and their world depended on reversing the powerful socially encouraged tendency (i.e., destructive incentives & structure) toward selfishness evident throughout the 'advanced' (post)industrial capitalist world. This, he argued, called for renouncing ways of life lived under the "having" mode of existence and moving progressively toward ways of life lived under the "being" mode of existence. Fromm claimed that it was being (and altruism) that are the only option that enables self-actualization, fulfillment, and abiding peace. In short, we can pursue unity through being with ourselves, with others, and with nature. Erich Fromms perspective is summed up nicely in the following quote:

"Humans are rational creatures, with a reasoning faculty to express and actualize. In processes of affirming this capacity by knowing because we are 'moved' to know something, we authentically express who and what we are as a species. We actualize or realize what in a deep sense we are. This is compatible with all people doing the same thing and with individuals collaborating with one another in expressing what they are. Living as humans becomes the major end in itself, and this option is open to all. In the having mode, by contrast, there is no need at all to affirm our being in the process of acquiring knowledge. Moreover, knowledge readily becomes a resource that we can use to advantage ourselves over others. The point of one person knowing in the having mode may be precisely to prevent others knowing or getting access. Knowing becomes competitive, exclusionary, and divides people into 'haves' and 'have-nots'. Destroying other people's knowledge or access to it can become (almost) as good as having knowledge oneself. This logic is buttressed by all sorts of mechanisms designed to discourage people from thinking they can know. Only some knowledge is 'genuine', 'legitimate', 'authoritative'. This becomes a way of robbing humans of their species capacities, by telling them they do not have them, and forcing them to acquire on a market or to 'get' the necessary training." (Lankshear, 2003)

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Rules, Cults, and Utopias as Conceptions within Society

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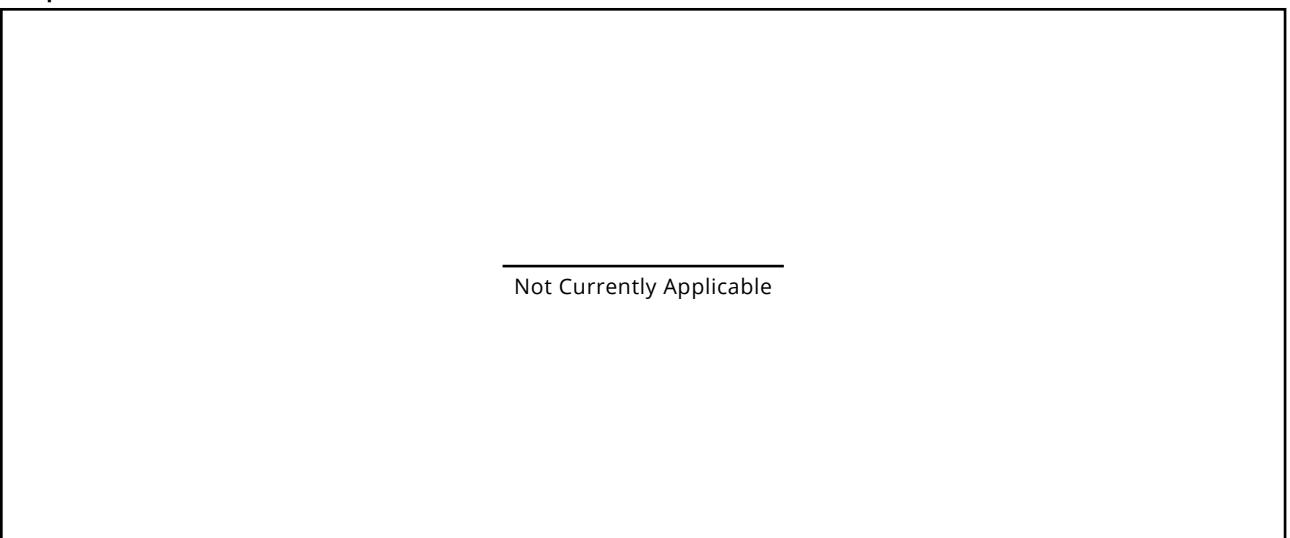
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Abstract

There are ways in which organizations can become corrupted such that they rapidly re-orient toward dogmatic and punitive behaviors. In an effort to describe a society that is organized around an objective set of integrating factors it is necessary to describe how said society is neither perfect nor an ultimate conception of what could be. What is possible now is what is contributed to be available.

Graphical Abstract



Not Currently Applicable

1 What are rules?

MAXIM: *There are not exceptions to a rule of nature.*

A rule is the description of an interrelationship with an objective. Rules can be applied to the abstract as is done in legal systems, they can be applied to human social behavior without any abstraction as they are done in the restorative justice system in community, and they can be applied to the design of [real world] technical systems as is done in engineering. Also, society may operate through a rule set that defines its culture.

In the real world, the universe, rules are formulaic regulations in probabilistically patterned phenomenological existence. Therein, the essence of a scientific principle is a scientific, formulaic rational for the why and how of a phenomena. This formula contains regulated statements (or technical arguments) about interrelationships in existence. Rules are technical constraints (as discoverable and universally regulatory principles) provide the opportunity for the expression of conscious choice within a material decision space.

Models are characterized by rules that capture how aspects of the world change. Through the application of a model, rules can be used to understand and to control state changes. The combining of rules into usable models facilitates the accurate alignment of a probabilistic decision space with an intended direction, in a commonly discoverable, dynamic world space. In reality, every decision space involves probability and there exists a pattern between the selection of decisions. The formula informs the pattern, but it is not the pattern. These probability patterned rule sets form the boundary conditions of reality, which are ideal for the acceleration of consciousness' evolutionary development ... once they are recognized. Boundary conditions are binding and continuously operative, whether someone acknowledges them or even knows about them. It doesn't matter how much someone believes or dis-believes in them, they still represent boundaries to the movement and expression of consciousness in reality. They were not initiated by man and they cannot be changed by man. They are not a prison, nor are they prison conditions. They are the consequential technical conditions of the reality system that allow for complex decisions and alternative choices. They are impersonal forces and personification of them is invalid for they are part of a larger system that cannot be personified and individualized (i.e., removed from itself).

Constraints provide structure for conscious experience. Imagine four people sitting at a table in front of a deck of cards, an object none of them had ever seen before. An observer then starts a timer and says, "Go!", without conveying any additional information. Only the concept "initiate" was conveyed, but void of any additional information [within which to alternatives are present]. So the question then becomes, "Go do what?"

The people sitting in front of the deck of cards require a common ruled information set to use the cards in such a manner that they may actually play a "card game". The individuals at the table could in fact make up a complex set of rules for what to do with these cards, from which appears strategies, choices, feedback, plans, and assessed evaluations -- all of this choice pops out of the rules.

In systems science, a ruleset is all the rules by which elements in a system can interact. To that ruleset, initial/situational conditions are added, as well as power, to computer, simulate, or otherwise extrapolate useful data. In computer science, a ruleset is a set of rules that provides a way of telling a computer what operations to perform is called a programming language. A programming language's rules are its syntax. In computer programming, syntax is the concept of giving specific information (word) sets in specific orders to computers so that they do (compute) what is intended (expected). Different languages use different word sets in different orders, which means that each programming language uses its own syntax.

The concept of a rule can have multiple applications. Rules exist to define a structure within which interaction may occur. If there are no rules then there is no structure and nothing to interact with, and nothing to do. Rules of language and rules of nature offer constraints that allow for higher-order and more complex decisions. The constraints offer the potential for choice in the iteration of a system.

The evaluation of feedback from a decision maintains the possibility of a differently adapted next (or iterated) decision space. All feedback in a system involves the formulaic composition of the system. The more information available to the user of the system, the more accurate a decision will be in its alignment with the user's next intended state iteration of the system. Let's say for example that some event we can label "X" occurs, this could be any event, any event whatsoever. From this event we understand that 10 choice alternatives exist, and those 10 choices represent a decisions space relative to that thing that happened. Within those 10 choices, however, is a formula for [at least] why there are 10 apparent choices. The formula comes from the structure of rules about the nature of the structured environment. Knowledge of the formulas allows the user to create and select future choices aligned with a desired state of the system in a given environment.

A decision space is an information space, which can reduce and increase in entropy depending upon the focused intent of inquiry, integration, and retrieval [of information].

In the reality of this physical, material system there are discoverable rules to the system; they originate from a supra-system. It is important to recall here the principles of systems to understand the relationships between subsystems and their supra-systems and how one comes to know another.

Biological cells have a very small decision space. An

increase in the number of cells increases the decision space. Cells become cellular systems, and then become organisms. Cells might be given as a metaphor for individuals coming together under constraints (Read: technical reality) to produce something that is bigger than their individual selves (i.e., a community). In doing so they reflect an information system that is in the process of lowering entropy. In the process of lowering entropy the community of individuals discovers more of the nature of reality within which they exist. A larger decision space allows a user (consciousness) more freedom in interacting with its environment.

For the community to remain directionally stable [and progress], it must maintain an emergent awareness and focused intent toward a deeper inquiry into of the system of which it is a part. Similarly, for a community to remain orientationally stable it must maintain the understanding that a system involves differentiated functions that go together (i.e., cooperate) to make a whole. In the wild, species differentiate and evolve to fill different niches in their environment. Differentiation leads to the evolution of species into a biome, the ecology of cooperative interdependence that supports all the life in the biome - groups of species evolving together to become an adaptive ecosystem.

Are we not here to evolve the quality of our interaction and ourselves (i.e., our consciousness) within and through a discoverable rule-set? Let us all lower our entropy and create a coherent transformation through cooperative grouping.

Cooperative grouping means moving away from being self-centered in focused to being systems-focused; it means moving away from fear, deficit-ego, and belief into a state of appreciatively inquiring and cooperatively creating for the fulfillment of the evolving whole. This "all-focus" orientation is the defining characteristic of the emotional expression of love, of compassion, and of an "optimally efficient entanglement".

Love is every vector (unified interconnection), all those that flow out as well as all vectors of information flowing inward. Fear erodes all vectors through the erosion of trust in any vector. Without trust, cooperation is impossible. Without cooperation we all stand alone in fear. When biological cells stop cooperating and working together effectively or are invaded from the outside or invade others, we call it disease. When cells get greedy or begin building their own little non-cooperative empires within the cooperative body they often begin to consume an increasing quanta of resources, and this is called cancer - self-annihilation. Cells, another metaphor.

INSIGHT: *A community-type society takes choices based upon the ruleset of this [f]actual technical reality. Regardless of what anyone may believe, everyone can only make choices within the ruleset that defines this reality. The ruleset gives the definition. Therein, "natural law" determines the consequence of action. Rules have naturally systemic consequences.*

2 What are cults?

INSIGHT: *All political systems are embedded in a culture. All technical systems are embedded within another technical system. All human systems are embedded within a socio-technical system.*

A set of understandings based on science is characteristically emergent in form. In science there are no accepted truths or ideologies to cling to and there is nothing which is considered sacred. Like the claims of "utopianism", the truth regarding the community system described herein is that it is literally the opposite of a cult. A cult implies a fixed worldview where certain ideas are deemed right and true [without evidence or reason], and some level of [structural] violence or manufactured suggestibility exists to sustain the cohesion of the group. By simple definition, any social system using secret organizations (a.k.a., secret agencies or private institutions) is a cult, because it [oc] cults (i.e., hides) information from the commons, and/or has an incentive to do so. Anything that is hidden or secret is occult (i.e., a cult).

In general, cults have at least some combination of the following characteristics:

1. Cults maintain high social control (often substituting authority for certainty of human need fulfillment).
2. Cults seek loyalty to their leaders.
3. Cults suppress information.
4. Cults have fixed beliefs.
5. Cults do not express care, compassion and understanding.
6. Cults can only see what they see; they cannot see what you see, either because that information is blocked by the cult, or the cult's belief system prevents understanding.
7. Cults may isolate members and penalize them for leaving.

Cults have leaders who control their followers (the "masses" or "citizenry") and feed on their psyches, emotions, and sometimes, productivity. Cult leaders want [highly] suggestible and "programmable" people. Generally, a cult is an organization with some kind of religious, ritual, or dogmatic overtone that attracts, forces, or indoctrinates people into adopting a certain set of ideas or practices [that society at large deems abnormal]. Therein, cults either restrict their members' ability to seek outside information or they force the continued acceptance of its ideology. Sometimes a cult involves worship in matters of faith as that which is stated as absolute, without facilitation of verification for the self. In a sense, a cult becomes an extraction of effort in the form of faith over conscious self-verification.

In a [cult]ured society there is great emotional pressure

not to realize the cult. All the time sunk into the cult, all the energy and friendships, all the personal connection and social traditions, all the rituals and dogmas, all the training and rewards.

Conversely, the purpose of the social system described herein is to create a human life system, a society, designed to continuously improve and adapt for the mutual benefit of everyone's fulfillment. The Community described herein involves a constant and ever changing set of information models that are participatively developed and collaboratively applied. Fundamentally, forming anything on the basis of a cult makes very little sense in terms of human fulfillment.

One might still argue that this social system [design] is a "cult" in that it encourages the spreading of abnormal ideas; however, if that is the case then literally, every person who is attempting to change the way the world works in any way is some kind of "cultist". What we considered abnormal is a continually changing definition that varies greatly depending upon location and time and person, on context. For example, it was once considered normal for people to move from continent to continent on ocean going ships. If we are going to refer to anything abnormal as a cult, then the Wright brothers would have to be considered cultists for their work toward the development of an airplane. The definition of the concept, 'abnormal', is simply too variable to be a logical basis for judging what is and is not a "cult".

Also, there is the all-important notion that a cult must attempt to brainwash people into believing that certain things are absolute and unchangeable truths. This is generally done in two ways: 1) force people to only consume one set of information, or provide information from one divided source (e.g., bi/poly-partisan governmental politics); or 2) consider one set of information as being right, and discourage anyone from seeking outside information (i.e., all-source information).

Cults attempt to prevent their adherents from seeking outside knowledge and they maintain an environment where they must rely on the teachings the cult pedals. Effectively, members of a cult are restricted or somehow inhibited from accessing other sources of information. The last thing a cult wants is for individuals to discover things for themselves or to question the teachings. Hence, a cult would not make the following statement:

These blueprints have been written by individuals who seek to think for themselves and we strongly encourage you to do the same. If this really were a cult; clearly it would not be a very robust one. No cult can survive by encouraging potential converts to seek outside information and think for themselves. Instead, cults stifle dissent, often by applying a rigidly presumed "oneness" of mind (often policed in some form). And, they regularly structure their environments so that their followers maintain a state of hyper suggestibility.

Fundamentally, the approach (previously defined) taken by this social system encourages "you" as an intelligent human being to acquire and employ "your" own abilities to critically think and resolve contradiction

in determining whether or not anything stated here makes sense. This approach is not one of force. In the Community we do not force anyone into accepting certain ideas or truths. If anything, we are expending effort so that others begin to ask more questions and become more skeptical of the world around them. We seek to look at the world rationally (as a set of discoverable and understandable relationships) and come to a common conclusion. We seek to understand reality, not to homogenize a mental abstraction of reality.

A fulfillment-oriented community must be designed to facilitate individuals in becoming as independent as possible in respect to researching, analyzing, and verifying information - independence in access. There is no reason why information about the system should be concealed, for such an action would make life harder for all users of the system. The social-economic-political pressures of early 21st century society that push us in conflicting directions on a daily have a tendency to cause us to be in a state of relatively static social homeostasis, or in other words, a state where we don't really want to change our behavioral patterns even when they might not be serving us. By providing individuals with an ability to navigate in a complex environment they then have the responsible option to act in accordance with what they think is optimal, and not what the cultural homeostasis has conditioned (or inflicted) upon them. As a consequence, someone is more likely to become "immune" to the detrimental practices of the cult.

Unfortunately, the structural fabric of the early 21st century socio-economic system has a tendency of generating emotionally reactionary and chaotic biophysiological robots devoid of reason and conscious self-direction. Therein, money buys you your own set of rules. Alternatively, the approach herein, particularly the actualization of the systems methodology, provides consciousness with another view, essentially encoding a means of "acting sensibly" toward events in our lives.

QUESTION: *What is being cultured? Is society culturing cults that prey upon individuals or a culture that regenerates nourishment and fulfillment? What biological structures (e.g., microbes) and mental structures (e.g., values) is society culturing?*

3 What is utopia?

*"There is no such thing as designing the perfect utopian city. Everything is subject to change.
There are no final frontiers."
-Jacque Fresco*

In Greek the word 'utopia' meant "not a place" (in Latin, "nowhere"); later it came to mean "good place" or "perfect place", and now, it is often a synonym for something which is unattainable. Rarely is it used to mean "visionary place".

The term 'utopia' is often used in common conversation to refer to a theoretical civilization or society that is absolutely perfect. Such a society is unlikely to ever exist, for it would be a society in which there are no problems to be solved and where nothing ever needs to change; everything is the best it can possibly be, forever; which, is possibly a characteristic of a cult.

The Auravana Project's technical design specifications might have some relationship to the idea of "utopianism" in that they are an attempt to create a society that functions as well as possible toward the fulfillment of all beings. However, there is an insurmountable difference between a system that works as well as possible given what is known at a particular moment in time and something working perfectly (or not existing at all). Here we must ask ourselves, "What is and is not attainable given what we know and the technical specifications available?" Perfection implies no problems or "negative" risks and/or situations of any kind -- no stress, and hence, no growth; perfection implies no new information and no new dynamics. There is no perfection in community, just continuous adjustment toward greater states of fulfillment.

Instead, these design specifications are simply an attempt to minimize problems and risks through a systems-based approach and the application of verified information to a socially oriented system that more greatly fulfills human needs. Complex life situations and dynamics will still exist, and as society progresses new problems and decision spaces will appear. An intelligently designed social system is simply designed to reduce the number and the likelihood of de-stabilizing problems; to seek their elimination entirely is not realistic and to claim their elimination entirely is cultist. Fundamentally, there is no such thing as "utopia", there never has been and there never will be. In community, there is no perfection, just continuous adjustment in the coordinated, value-oriented fulfillment of our common, purposefully-informed needs.

In community we recognize that perfection is the lowest standard (for oneself and others) someone could possibly have. It is the belief in a conceptual state that is not achievable, and hence, it is essentially no standard at all; it is an unreachable place of existence. People who have attachment to their own perfection will have lost the ability to shift their orientation as they are frozen in

an impossible mental state not the least fulfilling.

Perhaps the biggest difference between these design specifications and a "utopia" is the (1) lack of structured stagnation (e.g., bureaucracy) and (2) the encoding of the idea of systems emergence. A utopia is a completely stagnant society in which nothing ever changes or improves, since everything is already "perfect". Alternatively, a community is designed to facilitate contributory and participatory behaviors, it is designed to support individuals as they actively seeks to identify and improve upon their own shortcomings and the shortcomings of the society they live within, and it is therefore, perpetually emerging.

The word "utopia" can be attached to many other words. For example, a techno-utopia is the belief that technology can meet all human needs. Or maybe cyber-utopia, which is defined by some as the belief that online communication is in itself emancipatory and that the Internet favours the oppressed rather than the oppressor. When the word utopia is added to another word it has this morbid, dismissive characteristic to it.

Essentially, the goal of a utopia is to achieve a certain state, one that is perfect. Whereas, the goal of a need fulfillment system is to constantly improve need fulfillment, which requires continuous changes in state and in orientation (a corrective systems dynamic-state). An ever changing and dynamic society is literally the polar opposite of a utopian society since change immediately implies that a state of perfection has not yet been attained. There is no such thing as a utopia; there are just better systems than this one, the one "you" are living in (or under) right now.

Practically speaking, the word "perfect" is largely subjective as one person's definition of perfection may not be the same as another person's definition. The same cannot be said of human need fulfillment. The inferential difference between perfection and fulfillment is the recognition of commonality.

"Who decides what perfect is?" If society is attempting to achieve a state of "perfection" whose definition will be used to describe the final goal or final vision. Right away we can see that this kind of society, "a perfectly run society", is the perfect setup for a dictatorship where one group's definition of perfect dictates the structure of society to the rest of the population. Shocking news though, society is not ever in a state of perfection. If someone comes up with a way to make computers 0.1% percent faster, then an entire civilization might immediately become technically obsolete, and could no longer be considered perfect. The simple truth is that we live in a world that is emergently dynamic (i.e., constantly changing); and therefore, a society that never changes cannot exist - there exists entropy in an information system [toward greater coherence or chaos]. A utopia is a mathematical impossibility, like counting to the number 'infinite'. Hence, the term 'utopian principles' is essentially meaningless in any context of use.

A community-type society is an emergent system, and therefore, it does not have a static vision; though

it may have an emergent blueprint(s) to work toward. A society without a vision of what the future could be and a knowledge-base of past learning is bound to repeat the same mistakes over and over again.

The point of a fulfillment-orientation is not to achieve a certain pre-defined state (or vision) and then remain there for all eternity. Rather, the point is to create a society that embraces constant change and adaptation, and never exists in the same state for longer than what a community of individuals intentionally desires (i.e., not remain in addiction and reaction). A community is a society in which there is no specific definition of perfection and in which there are no illusions of attaining this false ideal.

In some sense, early 21st century society is a utopian fantasy where professional "economists" think that we can have infinite growth on a finite planet and all walk off into the sunset and live happily ever after; that is a utopia.

One of the results of propaganda is emotional thinking, because propaganda supersedes logic and all critical thought; it bypasses the critically active and coherently integrating factor of consciousness (i.e., the 'critical factor'). In doing so it creates maladaptive thoughts that produce maladaptive structures with maladaptive rules and maladaptive behaviors; it creates "dystopias". Aldous Huxley, author of the dystopian work, "Brave New World", in a speech on the U.S.A. State Department's Voice of America telecommunications show (in 1961) spoke of a world of pharmacologically manipulated slaves, living in a "concentration camp of the mind," enhanced by propaganda and psychotropic drugs, learning to "love their servitude," and abandoning all will to resist. "This," Huxley concluded, "is the final revolution." Speaking at the California Medical School in San Francisco, Huxley announced: "There will be in the next generation or so a pharmacological method of making people love their servitude and producing dictatorship without tears, so to speak. Producing a kind of painless concentration camp for entire societies so that people will in fact have their liberties taken away from them but will rather enjoy it, because they will be distracted from any desire to rebel by propaganda, or brainwashing, or brainwashing enhanced by pharmacological methods. And this seems to be the final revolution." Huxley laid out a version of this dystopian future-present in his story, "A Brave New World".

Here, it is wise for us to realize that dystopian stories (i.e., ominous future scenarios) are more gripping, less boring, and they are also a warning. We might want to revisit these dystopian works to help us to know where we might be right now and where we could be heading toward in the future. Dystopias are useful cautionary tales. And, in early 21st century society, there are no shortage of dystopian visions about technology being used to enslave instead of fulfill. Technology can be used as a weapon, as well as to fulfill.

APHORISM: *The claim of an actual utopia*

is a carrot on a stick that can likely never be achieved and is likely to leave everyone suffering in its wake.

Fiction is an important tool for telling people the truth during times when the truth is not readily discussed or even allowed to be spoken. Fiction can be used as a tool for social control or for communicating truth. It can induce paranoia or it can be used to reveal, inform, and liberate.

There are dystopias (as unpleasant future societies), but there are no utopias. The design for the community herein is not a "theme park kind of thing", it is not a facade of professional walls or the interface of a commercially marketable experiences; it is not the death of the soul or a perfected system of mindless enslavement. Instead, it is a system designed to facilitate the well-being and highest potential fulfillment of humankind. There are worlds of imagination, and then there is the world of our imagination.

INSIGHT: *Everyone has a better utopia for you until you realize there are no utopias. The big problem with any claim of utopia is that it is usually backed by people not truly caring about how they get there. And yet, maybe it is possible to be "utopian minded" without ever thinking that utopia will be reached or should be reached.*

Crime, Authority, Force and Law as Conceptions in Society

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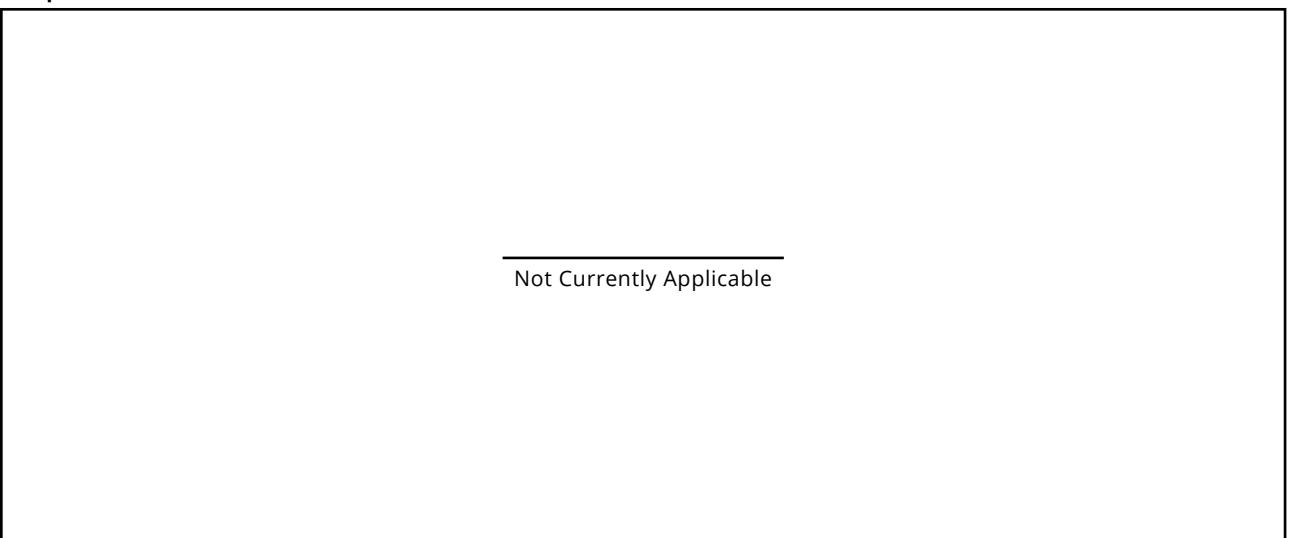
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Abstract

Under aberrant conditions, aberrant behaviors are necessarily and likely normalized and necessary. There are some beliefs that are more pervasive and do more damage to human potential than others. The two greatest beliefs present in early 21st century society that do the greatest damage are the belief in authority and the belief in competition as the preferential way of transforming resources into goods. The market-State represents a different set of values on a value circumplex than does the value set that currently makes up a community-type direction. Some societal structures are more likely than others to setup states of confusion and violence than are other configurations of structure. Laws are the "right" structure to determine when the use of violence (of the State) is appropriate. Therein, authority is the ability to have and hold subjective decisioning power over others. The authority determines and engages a force with the capability to monopolize violence as best as possible given that which is available. The population

has family to lose, and the authority has power over others to lose. Crimes are a violation of those decrees set by an authority or statement of "rights". Force is used to arrest subjects and environments that are breaking laws and monopolize violence in case of an escalation of violence. Legal decisions are those that are capable of engaging to some degree a monopolization on violence within a given jurisdiction. Alternatively, a community-type society applies a set of value standards that orient less toward hurtful intentions and more toward measurable states of fulfillment and progress restoring to a satisfactory state of full well-being.

Graphical Abstract



Not Currently Applicable

1 Introduction

INSIGHT: *If you want to find out the right direction, you need to know what the wrong direction is.*

In any society, 'crime' is a violation of normatively decisioned relationships, which may or may not include a violation of "legal relationships" (i.e., laws and contracts). In a force-based society, crimes are codified by 'law', created and administered by a separate class of people claiming the authority to do so (e.g., politicians), and enforced by enforcers (e.g., police and soldiers). Therein, 'law' is a formalized description of allowed (i.e., author[ed/ized]) and unallowed (i.e., illegal) relationships that are granted and enforced by [a hierarchy of monopolistic] authority. In reality, there is no authority that is not reduced to the mind of an individual (i.e., authority is a belief held by individuals). In a society where authority is ubiquitous, individuals' choices become artificially narrowed, and their language is likely to become that of the language of an authority.

The term "authority" means power over others. Under State legal conditions, authority is the legal (a.k.a., legitimate) power that one person or group possesses and practices over another. (Authority, 2019)

As John Taylor Gatto observed,

Authority is the author who is writing "your" script in life, until "you" learn how to think for "yourself". If you're not authority over your own script in life, if you don't seek out knowledge and inquire for yourself, then who is writing your script, by default. You either learn your way towards writing your own script in life, or you unwittingly become an actor in someone else's script."

Where there is jurisdiction there is authority (i.e., jurisdiction is authority). Where there is authority there is permission (i.e., authority is permission). Where there is no jurisdiction there is no requirement for permission to be anything other than the natural self. Where there is no authority, there is no such concept as "law", and therein, freedom of fulfillment has the possibility of becoming a realized part of society's integral nature. When someone is subject to a jurisdiction, then they are subject (i.e., servant and servile) to its protection. And, its protection of "you" might include "your" death, or caging "you" if you seek to effectively fulfill your needs or nature without permission. Under the state of authority, guns back up permission. In a community-type society, nature is the only permission.

When humans live without enough [fulfillment] there will always be people who have to "steal" to fulfill their needs, or de-stabilize others to feel stable, and there will always be people who punish, because failure to gain permission results in punishment. And, punishment encourages bad behavior because it a form of violence

and revenge. At the end of every government law is a gun or other weapon. Government is control and regulation of behavior [through monopolization of violence]. To say government is necessary is to say violence is necessary, for every action taken by government is backed up by violence or the threat of violence. Human relationship not based on violence are always better than those based on violence. Violence is necessary if you want to control people. Government is a territorial monopoly based on violence.

In nature, legal[ized] relationships do not exist. Legal relationships are abstractions based upon [at least] the ideas of ownership and authority. In nature, individuals cannot even be said to "own" the bodies in which their consciousness is embodied. Instead, the population of a community-type society is accessing [vs. owning] the material and conceptual structure that composes all of society, which is constantly turning over material resources and processing information accessed from outside and inside of oneself (i.e., from the environment). To have a "legal relationship" there must first exist the concept of "ownership", and the idea of ownership must be accepted by the individuals in a collective such that it becomes normative. Therein, it becomes a life dis-orienting risk by dis-aligning decisioning from the 'nature of access' for everyone to mutual fulfillment. If "ownership" [to the self] does not exist - the self is just itself, an individual consciousness temporarily accessing common material resources (without the requirement of an authority), then legal relationships do not exist. Hence, in a community-type society, "crime" is understood more in terms of a violation of objectively understood 'decisioning principles', and not subjectively judged 'legal relationships'. Subjectively judged legal relationships are usually structured to end in punishment, whereas objectively understood decision principles are usually structured to end in the fulfilled restoration of whole and healthy relationships. Under a legal system, what considered normal (about our life and culture) is a situational opinion, and not a fact.

Normative relationships can and do change [with changes to a decision space]. These relationships tend to change based upon the evolution of a social group's value set, understandings, and approach, which exist in a state of emergence, but may be perceived as static, and become essentially [artificially] fixated when codified by authority. Therein, the codifying (or "legalizing") of a normative relationship and the laying of interpretation and judgment based on the codification (Read: a mandatory and punishable obligation) is a mechanism against individual and social adaptation. And, when society can no longer correct for actual injustices and social corrosion, then it enters a disengaging entropic spiral. Legal definitions are an appeal to authority. Legal authority is how The Law is codified. Legal authority means that if the law is broken by "you" it ends in either "you comply" or "you die". That is a fundamental layer (or characteristic) of what criminal justice.

Many modern justice systems are at best a parody

of what a justice system should be. Justice cannot be based on the arbitrary "law" of a ruling class, or even on hierarchical social class (i.e., politics, political justice), if it is going to lead to the stable orientation of a community. Ultimately, the only way to make any headway towards eradicating the social corrosion of "crime" is to cooperatively redesign society so that its institutions and organizations stop attacking people's self-determination and stop hurting them at a sexual, physical, and mental level. Humanity should structure society for fulfillment, from an moral standpoint, regardless of whether it has any effect on crime or not. But, if it is posited that one of society's fundamental and most ancient roles is to prevent "crime" when people associate, then the necessity to do so becomes even more pressing, reinforcing and accentuating its encoding.

Early 21st century society, because it is a legally structure society based on competition for monopolization of access to judgement is in many ways divided into:

1. Law makers (those who decide when to use force)
2. Law enforcers (those who use force)
3. Public and spectators (everyone else to whom force may be applied to control behavior)

In games of competition, whether they exist at the societal level, or the level of a small group, a metaphorical "stick" is often needed to beat those who break the rules. Alternatively, in more cooperative structures methods are used to restore harmony and fulfillment, and to address the cause of that which did objective harm. It may be of interest to note here that the etymology of the English language term "stickler" [for the rules] comes from the historical role of a referee in competitive sports games. This referee (umpire) held a stick, which he used to beat rule breakers. Other terms for this type of role include, but are not limited to: judge, enforcer, and punisher. The civilian side of the punisher is the denouncer who denounces people to the punisher. In the early 21st century, the term "stickler" has also become associated with denouncers, as they

are the ones who are the ones who insist on exactness or completeness in the observance of rules set by authority figures. A "sticker for the rules" may punish the rule breaker themselves, or turn the rule breaker in to the punisher.

It is a sad fact that the design of the current global justice system of early 21st century society equally dehumanizes and humiliates all the victims of an alleged crime. Not only are they trotted out over and over again (often for profit and agenda), and forced to relive their trauma on command, but they (and the population as a whole) are made to pay for prison stay through taxation, and the further decay of society.

The "rule of law" is really the cover of hypocrisy used by normatively accepted criminals to shield themselves from punishment. It is not justice. Morality that is authoritarian by nature is not morality, it is doublespeak (or doublespeak). In early 21st century society, individuals learn to deal with the concept of authority at a very young age. Not only do they, generally, learn that their parents can order them around, but also that those orders don't apply to the parents themselves, and authority figures. The idea that the punishment of others by authority figures for violations of authority becomes normalized. Accusing authority of hypocrisy is pointless, since authority knows/has the ability to engage the power to monopolize punishment.

Fundamentally, any ethical principle or ethical system is invalid if it is asymmetrical in application (to locations, times, or persons). One of the prime characteristics of a false morality is that it makes it impossible to differentiate right from wrong, which, is precisely what morality is supposed to do. So as moral systems, things like laws and doctrines are complete failures. In their actual purpose, which is to secure control over populations, they are on the whole imperfect, but generally successful (keep in mind that many revolts are hierarchy over another competing for such power).

Laws are, in part, how competitors work together peacefully. Laws are a product of a scarcity of cooperative solutions and mutual empathy. Eventually, laws [that encroach on liberties] become a dictators toolkit for the

Figure 24. The conception of force in its application is tabled here. Force may or may not be applied to some control. Herein, force has meaning dependent upon how force is applied. Ultimately, it is possible to share and coordinate usage at a global level through a software system that accounts for material potential realization and material actual realization, and is capable of meeting human requirements in the actual material system.

	Controls	Force means	Description
Force Applied	Force to stop sharing. Force to stop usage.	Threat of deadly force	Force means assaultive & serious threat of bodily harm or death
No Force Applied	Cooperative controls	Compliance techniques (two-way communication)	Force means use of non-deadly force

next leader or "nodded" person who gets into office. Alternatively, values are shared among cooperators.

The truth, the "rule of law" has regularized and maximized the injustice that existed before the rule of law; that is what the rule of law has done. When in all the nations of the world the rule of law is the darling tool of the leaders and the plague of the people, then humanity ought to recognize this. Humanity, as composed of self-integrating individuals, must transcend these superficial boundaries in its thinking and behaving -- it is the inter-national dedication to "law and order" that binds the leaders in a comradely bond, while binding the development of a global human community. The Law is governmental permission to act (i.e., law is permission and/or provision by authority). Therein, the law is an excellent scapegoat by the dominant and in-power culture to vilify groups that it doesn't care for or like.

Powerful people are often excepted in a power-oriented society through the application of their social power. Through the acquisition of social power there exists less liability. Those in power will often appeal to its centralization – to the preservation and expansion of their power-base. Therein, all power structures tend toward aristocratic and self-serving laws. Therein, a "citizen" is someone who is "running" a simulated encoding of the State [of self-limitation].

Law is delusion and fakery, everywhere. While authorities and other leaders in early 21st century society point to the law, society as a whole ignores the way law injures individuals. Law is not an unwavering source of justice; it is the unwavering sword of authority, and by consequence, fear. This is what happens in early 21st century society: when something goes wrong "you" create new law, "you" never think to remove or disarm the law; "you" make more law. "You" create more legal professionals. An evolved society seeks to reduce the number of laws. It anticipates the multitude of ways law might damage society. Do "you" anticipate the way that laws damage "your" society?

Structuring an ideology about crime which defines crime as an action that exists in a vacuum, divorced from all context, which is the natural consequence of the "personal responsibility + owned liability" doctrine, ensures that crime will not ever be solved as a social problem, and that everyone will always remain at risk. And, in a market-based socio-economic environment there will always exist a class of people who seek to profit from this risk.

The idea of combining 'personal responsibility' with liability leads directly to the idea of 'blame' (as judgment) placed upon people and institutions. Blame is an isolated measure; it is a wayward measure of self-protection. If someone doesn't like the behaviors of a government, then they have the "right" to blame the president, blame the government, or blame political lobbyists. If someone doesn't like ecological disregard, they have the "right" to blame this or that corrupt business or some regulatory body for poor performance. If someone doesn't like being poor and socially immobile, they

can blame government coercion and interference in a the "free market". Having a "right" to blame is not an orientationally useful idea. The very idea of "blame" is antagonistic to a systematic solution-orientation due to its high likelihood of narrowing an awareness of the *causative factors* to a subset of those factors, and may even open a society to the diversion of "liability" through force-based interrelationships [and ultimately, property].

The words "fault", "blame", and even "judgement" are social constructs that have no scientific justification. These are words that humans use to describe other people's behavior they don't like. Authority uses judgement to proclaim "guilt", "innocence", and to make examples out of people. When an authority can make an example out of anyone, then something is wrong in that society. And therein, when the claim to authority is by way of a hand on a book, a scribble on paper, and an "office" or "chair", then something is similarly wrong with that society.

No one wants to be held liable (i.e., blamed) in a liability-based society, and hence, people will seek, via every means possible, to out-game each other in being held liable (as in, blamed responsibility vs. accountable responsibility). Therein, power given will not be easily given up because it provides a security net to those who might be held liable. A blaming social structure generates a liability-based economic structure in which people game each other to be held less liable, and the game involves everyone's lives.

If society wants to solve a systemic problem (i.e., crime *in context*), then the system that generated the conditions and conditioning that [in part] allowed for the manifestation of the crime must be analyzed as a whole. And, new understandings generated from that inquiry must be designed (or encoded, "codified") into the next iteration of the system so that the systemic problem inherent to the prior system does not exist inherently in the next system.

What was called "admiral behavior" and "evil behavior" in the past may not make sense in a different paradigm. For example, someone who is called a traitor in police state (e.g., a "whistle-blower") might be called a hero in another paradigm. What is a "criminal"? It is a term relative to a particular context, a particular [normative] system. In specific, what "you" call a criminal depends upon the culture "you" live in. When the Romans fed people to lions, that was not considered criminal behavior. Today, such behavior would be considered criminal. If someone were to say, "there is too much crime in the world," then an intelligent response by an inquiring mind would be to ask what the interlocutor meant by the word "crime". Does it mean there is too much false advertising? Does it mean what the drug companies claim about their pills? Does it mean the withholding of efficiency in socio-economic goods and services? Does it mean the punishing of people for growing certain types of plants? Does mean parents who put their children in day-care and go off to work for over 20 hours a week? Does it mean the facilitation

of structural violence? Does it mean hitting children? Maybe it describes a doctor when s/he says, "You" need an operation, but in truth, s/he is influenced in the decision because of a financial-type societal need to pay off a new house, or feed his/her children. In other words, it is very hard to tell "criminal behavior" unless the term is clearly defined in a comprehensive socio-economic context without defining fulfillment. Fundamentally, laws create criminals, and cultures of limitation create victims. Concivictions cause [the social construction of] "convicts".

In many unjust societies purport that every story has to have two polarized sides (e.g., "guilty" or "not guilty" [by the "right" of authority]), unless the narrative involves a criminal, and then it only has one. An unjust society is structured upon social polarization, and hence, social manipulation. In these societies, all opinions (as well as beliefs, likes & dislikes) may be considered equally valid. Therein, the presentation of two equal and opposing perspectives as valid, morally, is a form of social manipulation (as "oppositional social engineering") that generates a false and polarizing dichotomy in the psyche of a population - it prevents observation of the whole system - it becomes a debate (in the pejorative). When the only side is a losing side, then individuals must look at the underlying societal structure that generates said options. And, in order to recognize that both sides are sides of loss, then there must exist an inquiry into the polarizations initial[ized] authorization into the societal structure; possibly, as inquiry into the encoding of the idea of "law" itself.

If "you" want to solve a problem, then everything is open for discussion and "you" can't have any fear of offending anyone or any particular [presumptively] established group. If "political correctness" is advocated for, then there is not fulfillment among society, and the encoding of fear is certainly present. Out of the fear, ultimately, people can be led to externalize power (i.e., give their power away to others). And yet, fear compromises an individual's power. To regain one's own sense of power one must begin internalizing the source of power (as opposed to externalizing it onto authority). When individuals see themselves as victim, they are externalizing power.

Herein, the job and behavior of judges in the modern legal systems could be considered erroneous and unreal, and may be viewed by future societies as itself, 'criminal behavior'. Judges make decision and they reach real world conclusion concerning what is to be done by "their authority" to other human individuals in stark isolation from that which is the real world, while at the same time claiming the mantle of authority, of superiority, and often of omniscience in their examination of what they call "the factual evidence of the case". Their "factual evidence" includes little about the values, backgrounds, and history that makeup the individuals involved; it includes nearly naught about the conditions and conditioning, or about the larger socio-economic environment that interfaces with and throughput the

lives of those who are by force to be judged by them. For, judges and lawyers are neither scientists nor systems thinkers, they are not philosophers or open inquirers, but they are authoritarian costumed, sophisticated professioned [legal] actors playing a role in the further obfuscation and hindrance of human fulfillment. Judges and legalized authority figures collaborate in ways that cause unnecessary suffering in other people's lives without a mechanism by which they might otherwise even notice the repercussions of their behavior.

In the market, enforcement and prohibition are life employment acts. And therein, governments everywhere, by design, represent the wealthiest property owners.

Show "me" a judge or a prosecuting attorney that doesn't believe that what they are doing is righteous and proper and moral in society to keep those "bad guys" who don't obey the rules under control. Don't the rules just beg to be questioned: what are they based on, who made them up, can they be changed, how are they influencing behavior? Is there empathy for those who don't follow the rules, either wittingly or unwittingly? Is there a "victim", is there a "criminal", or is there one of us, someone whose life experiences have led them behave in the manner in which they have behaved. Therein, society may learn to adapt, iteratively, so that more fulfillment is more likely. Where is the empathy and mutual fulfillment in extortion, in coercion, in punishment, and in the perception that humans cannot integrate, systematize, and self-organize for everyone's benefit. Some societies, need to recheck their premises. If there is a pre-disposition of some people to not understand what emotions are (i.e., psychopaths / sociopaths) and to lack empathy, compassion, or appreciation for the needs of other [human] life, then how could a society tolerate a hierarchical governance system and any system of judgmental interpretation, for it is bound to have negative consequences due to a lack of empathy on the part of judges (Read: jurisdictional and political). Those who seek power, or the benefits of power, and lack empathy, are highly likely to take decisions without a holistic accounting for the needs of everyone. To lack empathy is to be ignorant to the consequences of one's actions on others, and also, on one's total self. A lack of empathy involves the failure to identify real needs among conscious entities, which are common, and possibly, to cling to counterfeits and pseudo-satisfiers. One might ask, "What do others feel when judgements and actions are systematically thoughtless of human fulfillment (i.e., when they lack the context of mutual human fulfillment and the potential to restore relationships to that dynamic)?"

The conventional "legal trinity" is:

1. Force
2. Law
3. Power-based negotiation

This legal trinity is ubiquitously adhered to across all

governments. And yet, do not governments always put forward judiciously inept efforts when they investigate themselves, which generally turns into a search for a pre-determined outcome. How can a coercive force investigate itself; it can't. In community there is facilitation of individual self-development and restoration of socio-technical fulfillment, which are not equivalent to [law] enforcement. Notice how the word "force" is present in the term "law enforcement", clearly showing how law is based upon force (i.e., the monopolization of

There are two forms of real authority (authority that promotes self-integration) and two forms of beliefs in authority (authority that limits self-integration):

1. Evidence is the only authority (Read: sensation by consciousness). The first real form of authority (internal response to stimuli).
2. Understanding is the only authority (Read: modeling by consciousness). The second real form of authority (internal response to stimuli).
3. Power over others is the only authority (Read: coercion). The first false form of authority (externalization of response to stimuli).
4. Social conception is the only authority (Read: solipsism and false reification). The second false form of authority (externalization of response to stimuli).

It is important to remember that at the end of every individual's opinion, there is a big question mark; and, at the end of every judicial opinion, there is weapon. In most democracies, court opinions are the "law of the land".

Stefan Kühl (2016:146) in *Ordinary Organisations: Why Normal Men Carried Out the Holocaust* observed, details how State extermination policies in the 20th century were implemented in the form of programs that are typical of every law administration and every police force. There is a common saying within law enforcement, and even among many citizens, "Whatever the law, it has to be enforced." Whereupon, people who have given their power and thinking over to the State of authority, may then say, "And, if we want to change the law, then we must change our leaders" (i.e., to change when the application of force is valid/invalid, those who decided when the application of force is valid/invalid ought to be changed). This viewpoint fails to question the premise that the validity or invalidity of the application of force by a group of selected deciders is the appropriate way to organize human behavior. It fails to question whether organizing society around the subjective use of force is optimal.

Note here that the neither the term "peaceable" nor "peace officer" is used or applicable in a community-type society, for it denotes the idea that authority "pieces together" freedom, which is an inaccurate representation of real world experience. If "you" aren't finding the peace within yourself what peace are "you" finding? Peace is

not the absence of conflict; it is the ability to handle conflict through peaceful (and non-aggressive) means.

In general, judicial professionals have engaged their ability to inquiry, and often inquiry logically, but they are limited in their inquiry and their logic by the structural paradigm (or "stricture") in which their profession exists. Instead of exploring a system-wide solution-orientation involving root causes in an accurately informed context [useful to humankind], they have the authority (as a right to force-based power) to act based upon interpretation, which opens the possibility for the injection of selfish beliefs, "I know plenty about that individual, he has been in jail before, he is a criminal", or "that individual comes from a high class family. A family I respect or may do a favor for me in the future. They deserve a little more class in how I treat them person". That is sometimes the proverbial "yard stick" to a judge, associative memory and egoic projection.

At its essence, all judgemental actions are based on selfish and perfectly self-reflective conditioning experience, not the truth. Willpower may be engaged and cognition applied logically, but fulfillment is not the end result for there exists a disconnection - a belief, in authority and in one's own righteousness. The modern judgemental-legal system is a paradigm of make believe theatrics that violently forces regular people to participate, with real life-threatening consequences and system-wide [behavioral] repercussions, and it is without a mechanism for effective recognition of fulfillment and fed back re-orientation.

It is unwise for a society to superimpose an ethical principle over a structure that reinforces values and behaviors that run in opposition to the ethical principle. Fundamentally, laws do not prevent aberrant behavior from manifesting when (or, as) it is socio-economically, structurally induced. It isn't the Law that prevents crime; a society must fulfill the conditions (or needs) of individuals. Through law, rules of cause and effect are subject to authority rather than an objective and systematic approach involving critical thought and scientific evidence. Effectively, laws give people a false sense of security (preservation and protection) that ~~may~~ does cause them to make bad decisions.

Locking people up in a cage does little to address a socio-economic system that breeds corruption through its structural components of debt, commodification, the need to cut costs, the need to maximize profit, to exercise differential advantage through competition-based mindsets, and the structure of enforcing restricted access to life needs through private ownership.

In early 21st century society, "judges" are the official interpreters of the authority's message. These individuals gain and maintain their power through the [structured] invocation of fear. And, whomever these people are, they are part (or will eventually become part) of an administrative structure primarily concerned with controlling large numbers of people through fear (e.g., governments and corporations). Yet, they are not to be feared; they are to be recognized. Behavior conformed

out of fear is contrived and not empowered toward a higher potential. Fear-based control structures divide and subdivide like a one-celled structure, constantly spawning new versions of itself (e.g., capitalism 1.0, 2.0, 3.0 ... n.0), which live alongside the old. The rites of celebration might change with each version, but the corrupted structure developed in order to control the masses through fear remains. When fear and force are introduced humanity is held back from its potential. Of the many effects that fear has, it stifles human intellect, reducing the ability think critically, and limiting the potential for globally workable solutions.

The "factual evidence" presented to and by the man/woman in a costumed suit, a legal professional, is almost never the truth, and in the rare cases that it is, the organizational structure in which the role of the judgment exists does not allow judges the ability to usefully act upon the information; they too are in a professional box with belief structured boundaries.

In large part, the purpose of a judge is to lay judgement. Judges, with degrees of leeway, determine how the "convicted" are to be treated and their potential future worth in society. If "you" can be judged, then "your" potential is necessarily limited. Such a social organization where selected individuals are given the power to determine the future course of someone else's life [after the "factual" recounting of a decontextualized and monopolized conflict] will not ever amount to a society worth looking up to or remaining a part of.

Without a common objective reference and general direction for social organization, then political factions are apt to form, each faction maintaining their own subjective [or ill-defined] definition of the terms they use to describe their direction. In this context, that of ambiguity and a lack of a physical reference, the idea of resolving conflicts on the basis of mutual understanding is a myth. Political factions will eventually enter into conflict and competition over the orientation of society, each side vying for their interpretation [of the "correct" organization of a single life-sustaining ecological system]. Under such conditions power structures and power acquisition strategies are likely to form, eventually leading to the degradation of freedom and efficiency, and ultimate the very survival of the society will likely be drawn into question. Hence, a stable society must find coherence among the entire population as to what, in the real world, the term 'justice' is actually referencing.

New laws become part of the "logical argument" that future judges employ in how they redefine perception (or the euphemism, "interpret the law"). And, once someone's perception is redefined, then so too are their responses [programmatically] restructured. Or, to say this in another way, once someone's perception is influenced, then their behavior is likely to be influenced, including their emotional and mental reactions (or responses). Hence, judgment creates an additively chaotic system for their is never an integration of structures (there is not a logical integration and effective dissonance-cleansing process running in the brain mind-

consciousness) of someone with judgment. Laws on-top of more laws to patch problems that previous laws have created - confused perception on-top of confused perception generating isolationary irrationality. This leads to chaos (as randomness) ad-infinitum; and, in an information system it eventually leads to a sequence [of process events] that generate either exponentially lower or higher entropy, as adaptive transformation or destructive termination of the system itself.

When the concept of authority-based interpretation is introduced into the social structure of a society, then a whole system of interpretation is likely to be established leading to competing opinions, interests, hierarchies of interpretation, and jurisdictional judgment, as well as punishment for "wrong" interpretations. This is a terrible organization for a society. Within such a society there will undoubtedly exist an ongoing struggle between the forces that would congregate, direct, delegate, concentrate, and aggregate [market and socio-political] power, and the forces that would keep it distributed and available to all.

And, in that back and forth struggle it is very rational for the agents in control to do things that are blatantly against the morality and ethics of the society, sometimes just to observe which of them go unchallenged. As morality is increasingly chipped away, further precedent is set for future interpretations of that which is supposed to be moral in the society - culture normalizes behaviors that cause even greater suffering and lead further away from human fulfillment.

If laws were to exist in a society, then should they not be based on consensual human interaction, only a violation of which would be brought to social (or "systems-oriented") attention? Any system that is funded and based (or structured) upon violating consensual human interaction, such as modern societies "legal system", will never provide a safeguard against said violation of consensual human interaction, for it is based upon doing so itself. When what someone says, or a judge says, determines anything in a social system, then it is out of touch with the real world where humans have common needs that might be knowledgeably discovered and synergistically fulfilled - "judicial opinion" is still opinion - it is useless to a useful[ly fulfilling] orientation. Arguing about opinion in court [a larger and more forceful context of opinion] is actual insanity, and it will be seen that way by future generations. Jurisprudence, as the philosophy, study, and science of law is, as it globally stands, a codified system of doublethink. In the real world there is no power in rulership, in contracts, or in force, beyond the power of the belief in authority. Fundamentally, law is just an opinion with a weapon [formerly at the edge of a sword, now at the barrel of a gun, and in the dystopic future, potentially at the quantum bit of a transhuman circuit].

A "license" is permission from the State, or more recently, from corporations, to do something that is otherwise illegal. It it is a "permission slip" do to something that is illegal without the slip. Like in prison

or school when someone might need a permission slip to go out in the hallway or to use the bathroom. Therein, a "contract" is a licensing agreement between two parties with property. Whenever there is law, there is the potential for legal illegality - the construction of a legal framework to protect what should be fundamentally illegal in any fulfillment (or, democratically) oriented society.

In truth, ancestors always volunteer their descendants for better or for worse. "Informed consent" is a legal illusion, which builds the façade of sentient "rights". Early 21st century society has been so busy building law upon law, generation after generation, creating its great illusion of "rights" that it has lost sight of any orientation or principle toward developing human capability for fulfillment without coercion. A legal/litigious society strangles itself. Look at all the insane decisions people make in early 21st century society because they are afraid of being sued (i.e., litigated against). And yet, it is natural, even when someone makes a mistake to "cover your ass" when your life, your future, your career, or your family are at stake (in a competition). Some societal structures incentivize deceptive and maladaptive behaviors. Yet, many of the lessons in life that are the most useful are the result of a mistake [that was restored from and advanced beyond].

When trust is absent, suspicion feeds on suspicion. The court is an arena of suspicion with competition among performers. In the court, the trust is with "authority", not between common and consensual human beings, who are being both willingly and unwillingly being violently monopolized by a normalized structure. The court is a legal ritual, a competitive arena. In competition people always devise their own justifications. In a monopolized competition all opinions become either equal or irrelevant, except for the opinion, the likes and dislikes, of the governing authority. And therein, fixed and immovable law merely provides a convenient structure within which to hang justifications and the prejudice behind them.

The court is an arena for political and sophistical debate. The idea of a "debate" has a very specific historical context. People debate in order to win [in public perception]. A debate is not a high-integrity form of communication; instead, a debate is a formal contest of argumentation in which two [or more] opposing teams defend and attack a defensible proposition - it is a protectionist form of socio-economic encoding. Debates do not facilitate comprehension for a prior understanding of the subject matter is necessary to perceive the use of fallacious, specious rhetorical argumentation (i.e., sophistry), which is not always recognized by even the purveyor of the argument. A debate is a strategic and sophisticated competition of persuasion. Debates are won and lost by contestants. Debates divide and subdivide, they alienate. A debate is not a philosophical argument - an inquiry toward more comprehensive truth and understanding - a form of truth seeking and dissonance reducing communication.

And yet, a debate can be fun, challenging, and help with confidence when applied in the correct context (i.e., not a socio-economic context where people's lives are at stake) - it is important to realize what it is and the bounds of its usefulness. Fundamentally, debate is not a useful social communications medium or a useful means of acquiring a greater understanding [of a situation]. And yet, a "friendly debate" can help an individual to test their ideas observe how they withstand attack, either intellectual or fallacious -- a debate may be an opportunity to learn and see how ideas stand up to scrutiny (maxim: steel sharpens steel).

The term "healthy debate" is an oxymoron. Morality is not up for debate. Human fulfillment is not up for debate. Human health and well-being are not up for debate. Falsifiable science is not up for debate. Human and ecological restoration/stability are not up for debate. A community does not debate. Debate negates understanding and undermines a real [world] solution. In truth, there is no use fighting over opinions; only factual understandings, and behaviors therefrom, can move humanity forward. One might question when one is having an important conversation whether the conversation is a disputation or a philosophical argumentation between two or more parties for increased understanding and overall improved integration. A debate (dispute in the pejorative) may be used to generate dissonance in order to produce a greater integration -- challenge to which inquiry is a conscious response, builds strength [in understanding].

A philosophical argument does not involve people screaming at each other or dis-engaged from each other; it is the following of a train-of-thought and the removal of contradiction therein between people by visualizing and integrating new understandings. Philosophy is applied to remove clutter from one's mind, to trace the origin of ideas. The rational scientific method is applied to understand existence and non-existence. The experimental scientific method is applied to verify observations.

When people deliberately undermine philosophical arguments and inquiries in a sophisticated and trickery-based manner (i.e., acting as a "sophist") it is a clear sign that gaming-strategies have been engaged and philosophical inquiry is dis-engaged. Debates do not involve a critical approach to lower entropic integration of information about a common ecologically referential system, a lifeground.

When in a conversation, and an interlocutor becomes either confused or is recognizably trying to debate, it is best to:

1. Look at the communication from the perspective of data, and not the other's whims or opinions.
2. Apply critical thought and identify fallacies.
3. Find common ground.
4. Reassess the continuation of communication with

the interlocutor if no common ground or evolution of thought is possible.

In early 21st century society political and judicial debates largely decide the lives of individuals as well as the socio-economic orientation of society.

Natural law is the universal, non-man-made, binding and immutable conditions that govern the consequences of behavior. Natural law is a body of universal laws which act as the governing dynamics of consciousness. In general, jurisdictional law is opinion, because in the legal process, the defense attorney and the prosecutor are trying to convince (persuade) the jury or judge to win their opinion.

Case law and statutory law are man-made laws. They are laws without reference to the natural world made up by "lawmakers" (legislators and judges) - the studying of these laws is the studying of fiction. Man-made laws are just opinions backed up by force and violence. They are fictional, sophisticated, and arbitrary constructs with real consequences. Therein, superior enforcers of such laws state, "We think this is what should be done and if you don't go along with it we have people who will cage you and possibly shoot you based upon that belief." Both case law and statutory law are people's opinions backed by a gun or threat, and ultimately, by the belief in authority.

In a society structured around legislation, changes in legislation lead to real, and sometimes dramatic, changes in society. Thus, the question must be asked, Is it wise to have a political process, a bureaucratic power hierarchy, a complex and obfuscated interpretation structure, secrecy, profit, lobbyists, leaders and marketable professionals, among others, who by their influence and power determine the orientation and direction of a claimed society?

The idea that there are these people who are going to make all of these great and wise decisions with guns (i.e., government) is nonsense. Because of course all of the people who can make the best decisions in the world always want to be armed. Because they are really wise, really smart, and know the best decisions for everyone. Because they get "democratically" elected power for their politically persuasive ownership status. Because they have the very best ideas, so naturally, they want lots of weapons. 'Statism' is [in part] the belief that a small number of people should be given all the guns in the world to inflict their will on everyone else. It is mad and delusional. Often, the people with the most effective and useful ideas are the most cooperative and voluntary - they see the benefits of harmonization, which is opposed by hierarchies of power.

In modern parlance there are two general forms of "authority". The first form is that of "authority by means of status or social position, and it entails a whole host of related [descriptive] characteristics. The second form is something of a misnomer (i.e., it is misnamed), it is a "knowledge authority", and it is the idea that someone who has a well-informed understanding and factual

knowledge set [often derived from lengthy re-verified experience] is some kind of "authority". A "knowledge authority" is someone who is knowledgeable on a particular subject matter or skillful at a particular aspect of life ... is just someone who has spent time learning a particular topic or refining a particular skill. Knowledgeable and skillful people have expressions of their love [and devotion to their self-development] to share. But, is it right to call them an authority? Probably not. It is more accurate to call them knowledgeable and skillful.

When an individual begins to seek greater self-direction and social intelligence, then the question of whom s/he should listen to arises. Who has fact[ual] knowledge and verifiable skill? Who has actual knowledge and a refinement of their coordination, maybe gained through first hand direct experience of a thing?

The first form of authority, a power authority, is not necessarily knowledgeable about any subject matter in particular; knowledge is not a characteristic component of its complete definition. Instead, the claim given by those in authority is that they ought to be listened to, and their commands followed and obeyed, because they have the ability to apply force [in the social power hierarchy]. Conversely, a "knowledge authority" doesn't give commands, and hence, is not an "authority" as such. The first form of authority is really referring to the idea that there is a person or a class of individual human beings living on the Earth that somehow have a moral right to issue commands that may not be disobeyed regardless of the commands sensibility. It is the idea that certain people have the moral right to issue orders; and that another class of people have a moral obligation to obey these commands. And, the authority's "subjects" have no equivalent "right" to refuse the commands or orders -- it is the belief in "rulers" and "subjects", which has become obfuscated under its most modern version, that of "political democracy".

Essentially, when power authority exists, then there exists the belief that some people are the masters over others with the right to issue commands, and other people are their subjects (or "slaves"), who have a moral obligation to obey those commands regardless of how truthfully informed they are or their sensibility. Authority is fundamentally based on this notion: that some people belong to (Read: are owned by) other people who they may not disobey nor go against their word [otherwise punishment is right and valid].

The concept of "jurisdiction" underlies the socio-economic encoding of the belief in authority. Jurisdiction means that "you" are under the moral obligation to obey the commands of the local "authority" (first form) while spatially present within the ascribed geographic setting (or region) on Earth known [written] as that jurisdiction (or territory). A "territory" is where jurisdiction is exercised; and, violence is the means for controlling territory. The idea of a "county", a "country", a "nation", and a "State" are examples of jurisdictions (or "jurisdictional territories").

The belief in authority is [in part] based upon the

concept of a [defensible] "jurisdiction". Jurisdiction claims that the geographic location of someone's birth and place of any action subsequent is subject to the man-made written laws of the entity that has a monopoly over the use of force, violence, and coercion in that area. Etymologically speaking, the term 'jurisdiction' comes from the Latin: *ius* (genitive *iuris*; there is no "j" in Latin) meaning "right, law" + *dictio* "a saying". In English, "diction" means "speech". Hence, jurisdiction literally means, "to speak the law," or "the law is what we say it is, we speak the law, and it is right because we have written that it is right". Notice how this logic is based entirely in moral relativism and circular reasoning.

In a given geographic "legalized" area (or "jurisdiction") an authority characteristically exists to author and enforce law, which is to be obeyed at the cost of a monopoly on violence directed at disobedience regardless of reason, of commonality, of life ground, and of human fulfillment in general. That is what "jurisdiction" is based upon, people who believe that they are the authors of law and that they get to speak subjective commands into existence, and somehow that makes ethics and morality, as though it were to create some sort of a moral obligation on the part of their "subjects" to obey those commands. Hence, synonymous with the idea of authority (i.e., one of its principal characteristics) is a decision space that orients toward a monopoly on force, fraud, coercion, violence, and other forms intentional aggression, which eventually becomes structurally violent through deeper socio-economic [pattern] encoding.

Aggression is a highly context sensitive behavior; context insensitive aggression is pathological. Aggression appears in three contexts:

1. Desperation for food.
2. Desperation for sex and reproduction.
3. Desperation for safety.
4. Desperation for retribution.
5. Competition for scarcity (e.g., individuals weigh themselves against opponents in competition; where, if the perception is that of being weaker, you aggression is avoided).

Authority is an illusion, it is not based in fact or truth or knowledge or wisdom; it is a belief system (i.e., authoritarianism). And, it is a belief system that is based in mental imbalance. It might be true to state that when "communing" with others someone is likely to pick up their dis-eases. The people who believe in and condone or practice authority (observed in part through command-oriented communication) are those who have adopted some level of the belief in authority into themselves.

Authority is ultimately based in violence. If the commands are refused on the part of the subjects or the "slaves", then the authorities always respond with:

"If you don't do this, if you don't obey these commands, then I/we also possess the right

and power to do violence onto you physically or psychologically or even to grab that which society commonly agrees is "yours" as punitive measures, or hinder your continued fulfillment of needs. In other words, "my" authority has the right to intentionally and artificially limit the fulfillment of "your" needs."

Common dictionary definitions associated with the concept of authority include:

- **Authority:** Power or right to enforce obedience; moral, ethical, or legal supremacy; the right to command, or give ultimate decision. *Source: Oxford English Dictionary (2013)*.
- **Obey:** To comply with, or perform, the bidding of; to do what one is commanded by (a person); to submit to the rule or authority of, to be obedient to. *Source: Oxford English Dictionary (2013)*.
- **Jurisdiction:** Administration of justice; exercise of judicial authority, or of the functions of a judge or legal tribunal; power of declaring and administering law or justice; legal authority or power. *Source: Oxford English Dictionary (2013)*.

Laws, ordinances, statutes and rights are relative to a jurisdictional-authority. They are not a common, or even objective, standard relative to reality as it actually exists. Legal positions are always vague and lack moral clarification, and they exist in some degree of misalignment with human fulfillment, which is essentially why they are called "legal positions" or "legal opinions".

Patchworked systems (e.g., legal systems) are an admission that the underlying social structure is inappropriate for the nature of the organism. Structures that patch instead of feed-back are maladaptive and ineffective for organizing human fulfillment and flourishing. Prolonging a failed model of fulfillment, justice, and resource use/distribution leaves a population vulnerable to the predations of those who would take control.

There are perfectly natural impulses that are useful under certain situations and not under others. Resisting arrest by State police is one example of a natural impulse that is not useful when the police have a monopoly on the use and escalation of force (and violence). In fact, they exist to monopolize the escalation of force; it is part of their role as legal enforcers. Of note, the statement, "s/he resisted arrest", is actually a retributive phrase for blaming the victim, which is tragically common. When the government or police give an order, then "you" must surrender everything about "your" humanity on the spot or they will escalate violence, and even then, they might escalate. These conditions are globally pervasive. They, enforcers, are 100% in control of "your" physically manifested embodied consciousness when they say they are, or else the results will be psycho-physical pain through to death for "you", and possibly "your" family.

Metaphorically, if all someone has is a hammer, as a

tool to solve problems, then everything starts to look like a nail. And if police and prosecutors are your only tool, sooner or later everything and everyone will be treated as "criminal". People in a violence-reinforced system will make use of a violent tool just because it exists.

If society maintains a clear and lifegrounded-referential language, then it is likely to maintain a moral orientational clarity and an ability to improve society, but as long as individuals are lost in the language of belief, the State, violence, and of the market, then individuals will never be free of their own chains for that is all that they identify with.

Herein, it is of the utmost importance to recognize that violence can be enabled by working for the institutions and establishment that conduct the violence. The term 'enabling' is used herein in its negative sense to describe dysfunctional behavior approaches that are intended to help resolve a specific problem but in fact may perpetuate or exacerbate the problem. Employment in a system of violence and tasks that maintain that system of violence are enabling of an environment of violence.

It is reasonable to ask oneself why there is little to no provision in the modern socio-economic system to ask the question "why" of the design of the system itself. Early 21st century society is not indiscriminate; there is actually organization to it, as difficult and discomforting as it may be to see. When the operation of early 21st century society is explored in its totality it is possible to see that it is not a systematically fulfilling organization, but a ideological organization designed to perpetuate itself by means of violence, scarcity, and the inhibition of sufficient need fulfillment. And herein arises the issue patchwork: if the system isn't examined in its entirety, if the *how* of its operation isn't explored [as a result of asking *why*], then patchwork is liable to create bursting issues elsewhere in the system as effects ripple around already unconscious and dissonant interrelationships. Patchwork just "keeps the system going" as it is moving down the same trajectory. Unfortunately, patchwork isn't a systematic exploration of the system and an inquiry into the root of the problem.

In reality, patchwork is not a solution; and because patchwork in a political system is always applied in an incomplete information context there is a great likelihood of making things worse. Early 21st century society has become quite literally a "push button society", whether it be diets or voting, where people find a new diet or "leader" periodically and lack any actual realization of the violent nature of the structure that is being rebuilt around them. Citizens push a button on a board and then stare at their bodies and their governments for 3-5 weeks, months, years during which time they may be extendedly unhappy, and then, they push the next button. No one does anyone else any benefit or justice by selling them inaccurate relationships and pushing figureheads in front of them. Patches may have momentary usefulness (e.g., when someone is haemorrhaging), but they are not sufficient to determine and resolve the actual issue that caused their need in the

first place.

Early 21st century society is disconnected from human need and the generative lifeground common to everyone. Hence, it is not capable of effectively reproducing life functions - it has no life coordinates to it - instead, it exists for the appropriation of resources from the life host to multiply itself ... for what? For more multiplication, for [economic] "growth" and power consolidation. A society without a sustainable relationship to its lifeground is unlikely to facilitate the development of fulfilled individuals and maintain a state of healthy and stable resilience. It is, in fact, a problem that the average individual in society couldn't go into nature and build a shelter or start a fire or make a pair of pants to save his/her life. It is a problem when someone becomes diminished in his/her capabilities of providing for oneself and others, and has instead become reliant on the dominance of others to provide for most, if not all, of one's needs.

Laws and interpretation have the unintended consequence (and sometimes intended) of extending the reach of political authority further and further into personal liberty and social freedoms [to the unfortunate point that it is just expected that everyone will be monitored by the authorities each time they communicate over a telecommunications network].

There is a mistaken belief that justice is overwhelmingly important by arguing that it derives from two natural human tendencies: a desire to retaliate against those who hurt oneself or others, and the ability to put oneself, vicariously, in another's place. So, when one sees another is harmed, one can project oneself into their situation and feel a desire to retaliate on their behalf. If this process is the source of human feelings about "justice", that ought to undermine human confidence in them. Does the struggle for retaliation really lead to fulfillment at the individual and the social level, or does it perpetuate a dynamic of reactively and chaotic destabilization? The desire to retaliate is an organismal reflex programmed centrally for protection and survival in the wild. And, it can be structurally and social re-activated in society, through particular types of conceptual and spatial structures, where it is counterproductive to common fulfillment.

The correct use of language is important, for language influences perception. For example, "criminalized" implies that an act was done to an individual, that he or she is the receiver of a label. "Criminal", however, implies something inherent within the individual. "You" ARE a criminal. "You" HAVE BEEN criminalized. The difference is subtle, yet significant.

As Lao Tzu well observed,

*"The more laws and order are made prominent,
the more thieves and robbers there will be."*

Some societies do the following: if a crime occurs, lay blame and liability on a few people. Then, call them

criminals and send some of them to jail for penance. While this is occurring, they distribute massive amounts of opiates to the public in a variety of forms, including thousands of television cop and murder dramas (part of the propaganda machine) to further reinforce the belief that this "perfected system" is making them more secure and safe and free from the criminals. So, those who watch television are likely to go to bed with fear in their heads and with the contradiction that all is right with the world through government. Societies that behave in this manner are deeply unwell. Such behavior is not a strategy toward adaptation, it is a pattern of behavior that perpetuates stagnation, corruption, and dramatic forms of corrosion.

Punishment is a form of deprivation, it is the process of further depriving a human being of their needs, while preventing access to that which the socio-economic system has to offer: money; objects; services; information; and participation, etc. When punishment renders as justice, then it is a very unfortunate form of justice. For in fact, it is not a form of justice at all. In a punishment-ownership system, conflict is not something to be [re-]solved, but something to be [re-]owned. Some go so far as to say that the criminal justice system represents a theft by the State of the "victim's" and "offender's" conflict; and, that the State or gang maintains this capability through a monopoly over the use of force and coercion. They state that the system is designed to keep power in the hands of the people who hold the power, and do so [in part] by way of having a monopoly on arbitration, negotiation, or dispute resolution. The State [of authority] is an impediment to fulfillment in society at every turn.

In the social and political work known as the *Leviathan*, Hobbes puts forward the idea that a sustainable and just State could be achieved through fear, through the conjuring of a demon to rule over everyone, and that "Leviathan" still remains strong in early 21st century society through [the] codification and ritual [of the State]. The State is early 21st century society's Leviathan.

The two most common Statist primaries are (note that Statists are those who believe in authority, specifically, the authority of a State):

1. "A law for everything and everything managed by law."
2. "Law is the ultimate science."

There are a large number of relevant maxims surrounding the topic of law, some of significant ones are noted below (note the definition of "justice" carried by these maxims is often set as a pejorative):

1. **MAXIM:** In Law two wrongs may cancel each other; therefore, may those who do wrong, do it together. That is the purpose of Law.
2. **MAXIM:** The business of law is to make business for itself, to ever escalate complexity.

3. **MAXIM:** The more corrupt the society, the more numerous the laws. Legislation injures community, law injures conscience. Morality cannot be legislated.
4. **MAXIM:** Governance systems govern the potential of individuals.
5. **MAXIM:** It takes servants to make a government.
6. **MAXIM:** Fear facilitates the installation of authority [in the minds of those susceptible]. The term "court of justice" through which justice is administered by means of authority, is an oxymoron past down from contradictions in the understanding of fulfillment long past.
7. **MAXIM:** Law is infinitely expansive [in abstraction] and adaptively manipulative in practice. One might ask, Do we want more "criminals" (i.e., criminally liable) or do we want more fulfillment?
8. **MAXIM:** A socio-economic system must be flexible and change to fit new demands; otherwise, it becomes 'law', merely the justification of the powerful.
9. **MAXIM:** It is the height of irony to look for justice in a center of profit (i.e., in a court).
10. **MAXIM:** Fair trade is fair competition; fair law is fair authority.

When looked at through a retributive lens, crime is seen as a violation of authority [over property], defined by law-breaking and guilt. Once a violation occurs, justice requires the determination of blame and administration of pain in legal contest between the offender and the State. Therein, crime is seen as creating a "moral debt against society" (Read: a violation of the will of those in power), to which offenders must repay the debt through a process of righting some odd metaphysical balance via punishment of the offender. Within a retributive moral framework, the "offence" and "guilt" are defined in purely legal terms, without physical referent, and justice becomes determined by following correct rules and procedures. In the criminal process, the offender is pitted against the State, which in practice means that one proxy professional representing the offender (e.g., a defense lawyer) is pitted against another legal professional representing the State (i.e., "prosecution"), with another legal professional (i.e., judge) acting as defining arbiter. This ethical orientation to crime and justice is contrasted with the orientation that understands crime and socially corrosive behavior as an opportunity to orient toward an even higher potential of human fulfillment. If crime is essentially an injury, then should justice not become a process of healing and caring?

It is wise to distrust any group of market "professionals", especially legal professionals. Early 21st century society holds "professionals" in high esteem ignoring the nature of intense competition for new achievements and recognitions that foundation their professions, and which invariably overcome such groups (or "professional

communities"). Market professions have an incentive structure that promotes unfulfilling and uncooperative behaviors. Professions are groups where a peer review system is conveniently balanced with peer pressure for [at least] ego-rewards. Therein, "professional" always means market power, or the opportunity for hierarchical power. Power (in a market or hierarchy) is to be distrusted in all its forms. Those with such power have the opportunity and incentive to give with one hand and take with the other; and, they often do, or they would not hold power. Hierarchical power in all its forms is a façade and ought not be trusted. Fundamentally, there is a potential for those in power to abuse their [acquired] power, and when competition is present, not only is it likely, there is incentive.

Always remember that professionals seek their own self-preservation. They are in danger of destroying their careers and livelihoods if they act or openly think outside of the established professional (competitive) boundaries. It may be said that professionals "profess" their worth [to the paying authority]; though, what they profess is often reduced in meaning in the context of mutual human fulfillment.

Each and every individual bears a collective responsibility for the violence and aggression caused by the failure of the institutions that they support and participate in, and which chronically dis-cord, humankind's most fulfilling nature. For example, here is an extreme analogy to illustrate this responsibility. Suppose that person 'A' brainwashes person 'B', his child, from birth and for 20 years, to consider certain people as having to be killed; how murdering them is good, and so on. Then 'B', after his 20 years of brainwashing, goes out and kills one of the members of that targeted group. The attitude in some "justice systems" is that 'B' is the sole guilty party in this murder. This is of course pure logical insanity for it does not account for the conditions and conditioning that led 'B' to initiate aggression against another - it is a lack of recognition that there exist social institutions of violence that can actually be participated in and regeneratively structured through volition. When the conditions and conditioning are more greatly understood, then society can re-calibrate and re-orient in such a manner that the factors that are known to lead to the expression of an undesirable behavior are reduced, if not eliminated - this is social coherency with a movement toward a higher potential. Someone who is brainwashed is someone who doesn't recognize they have a decision space (i.e., a choice).

This is not to say that the individual who commits an act of aggression should be "pitied" and that society is really at fault. Instead it is to say that there are a variety of factors that lead individuals to commit acts of violence against another, and every factor must be recognized and studied if society is to reduce the expression of those behaviours in the future. If responsibility is to be placed, then it must be placed on both the individual and on society for making the behavior possible.

Insufficient fulfillment continues to exist [in part] due

to an inability to think systematically and holistically, which [has led to and] maintains the two-party justice model that imagines that all disputes involve two parties: the plaintiff, the alleged victim of the crime or tort, and the defendant, the alleged violator. It is clear that this model recognizes no third-party, that which might be called the social or environmental element, and which can become sub-consciously influenced into generating a persistent orientational state of insufficient fulfillment, of "instability".

The consequences of a two-party model are considerable. A bi-lateral approach is not a systems approach and will never lead to systemic solutions. It is a false dialectic - a limited set of choices that aren't the only choices available (e.g., the Hegelian dialectic); it is an information set continuously divided up into two, which has the potential of generating a state of confused polarization more appropriate for conditioning than the self-directed expression of conscious inquiry toward a higher potential of experience and of truth. Without tools for accurately orienting, consciousness can all to often become "caught up" in waves of instability.

Governments and monetary economic systems are similar in that they define the choices and perceptions of their subjective entities. For example, the market always gives those who use it the choice of product produced into a competition-oriented environment for the acquisition of an abstraction of your effort (i.e., money) devoid of social context and human need. A false dialectic is the state of an illusion of choice, of polarization. Polarization dialectics entrap an individual's mind, pitting one individual (or party) against another (e.g., the two party political system). It is a form of structural violence. A society oriented toward fulfillment will maintain an awareness of it as such, while seeking to reduce or eliminate its presence [because of its inherent orientation toward polarization and conflict, away from wholeness] without causing the next state of the system to have similar or worse disturbances.

What is unrealistic is that turning to a system based upon violence is somehow going to make the world a better place, whether that be explicit violence (as in, the State / government) or structural violence (as in, the market). Remember, "bullies" use violence in three ways: they use political violence to intimidate; physical violence to terrorize; and mental/emotional violence to undermine.

The solution to violence is [in part] to stop asking others, primarily governmental officials, to initiate force on one's behalf. Suffering also arises around "good" people who request or tolerate the initiation of force as a means to their own ends. In this manner "good" people empower those who do and direct violence throughout history. Using governmental force to impose a vision on others is intellectual sloth and typically results in unintended and perverse consequences. Therein, law is just a version of some influential person/group preference(s) for harming or disarming another.

Here, it is essential to recognize that processes are

not government. It is not correct to equate the two. Just because the government (or other hierarchical structure) currently provides a service does not mean that there aren't other organizational structures that could provide a better service, one that more sufficiently fulfills a known and requested (or "demanded") need. It is possible for all of humanity to full lives abundant in fulfillment, that are not enmeshed inside of market and State infrastructural systems.

Instead of asking how big (as in, scale) the government should be, it would be more useful to first ask, "What does government mean, and whatever it means do we want to integrate it into the deepest recess of our lives?" Similarly, it must be asked, "What does a market-State society mean, and whatever it means do we want to integrate it into the deepest recess of our society?"

If society calls one group of individuals in a given geographical territory of the word "government", then how does that define society, and what understandable consequences result from the integration of that structure? Society are left with the concept that a special group of peoples have a "right" (jurisdictional, legal) monopoly on the use of force and coercion within a spatial (geographic area). And, with the encoding of this understanding comes the belief that this "right to monopolize force" is going to protect everyone and safeguard everyone's "rights", which are given by that authority. This view, of course, does not take into context that 'coercion' and 'force' are themselves a violation of the foundation of "rights". "You" have the right to be protected from something, or some event, by means of a monopoly on violence. Such a belief system carries with it the idea that if a decision or act is not illegal, then it is somehow right and ethical, regardless of its consequences and socio-ecological ramifications. Rights are given by an authority with a monopolization on violence, because rights are to be defended completely (i.e., monopolistically) when violated.

To perpetuate a monopoly [of force] in any society, regardless of the services provided, is an imposition on morality in the context of fulfillment. If services are imposed on people [against their will] and either cooperation or competition, or both, are denied, then that is a contradiction that will disrupt the healthy resonance] of the community. Notice how government establishes a "jurisdiction", and typically, there can be no other competing jurisdictions in that jurisdiction [at scale].

Examine the nature of the concepts that are being forwarded and trace them down to the nature of reality. It may be found that there is no limit to how wrong off of alignment with fulfillment someone, or some society, can go because of a following of the path of authority. In a democratic market-State society, everyone seems to somehow acquire authority [to rule] over one another through the concept of "rights" and "democracy". This is the belief that some group of people should rule over others and be the final authority; or, that everyone should rule over everyone else and everyone's rights

are the final authority - democracy. Through the belief in authority individuals' abandon their own critical thinking and cooperative faculties, their own independence, which they surrender to someone else who purports to know what is best for them (may "representatives" or "all other voters"), and acts in their best interests, or "the public's interest".

Often, those who believe in "democracy" generally also believe that government exists to fulfill human needs. They have been told this by their government. However, herein, that type of "government" would exist in contrast to the participative and self-directed fulfillment of one's own needs in cooperative relation with the needs of other individuals in a psycho-socio-ecological community. The very structure of government is that of a protectionist, power hierarchy (a form of structural violence). The same structure is also present and true of all trade, business, and financial markets. Trade represents the competitization (marketization) of human socio-technical relationships. Money represents the commercialization of human social relationships. Governments and market entities maintain a similar hierarchy and consolidated control structure. In a socially powered and incentivized hierarchical system, violence always flows downward, down all the way to the children. Even the basic nuclear family-market-State structure is a somewhat seemingly benevolent hierarchical police state for most children. The market and the State may at first appear unrelated in their re-generative orientation, but a closer examination might reveal a similar protection[-ism], exclusion[-ism], and competitive[-ism] value orientation.

If violence is seen as expressing a rent in the texture of a community, it would be wise to avoid making neat and self-satisfying dichotomies of criminals and non-criminals, guilty and innocent, law-abiding and law-violating, aggressive and non-aggressive. A sane society would not be content with a justice system of "Who did it? or "Who done it?" Certainly, such a society would not suppose that "the one who did it" has lost all claims of respect and is fair game for private vengeance, by one's own hand, the authority's hand, or by the hand of a hired assassin. It would surely not do what some societies do and scapegoat so-called aggressors to reassure the public of their own (or the systems) utter blamelessness.

When one learns that someone in their community who has committed a long series of major and minor acts of violence against persons was himself the victim, throughout childhood and adolescence, of abuse and contempt and denial of love, of drugging and deceit and manipulation, of one's developmental needs not being met, of the chronic triggering of primal instincts, of deeply aberrant conditioning, and of a failure to provide tools and structural opportunities for self-development, then one cannot but feel that a responsibility exists toward that person. The difficulty of meeting a responsibility does not relieve one of its existence; while awareness exists it will be tidally washed ashore with each mental ["housecleaning"] sweep. What is wrong is to abstract,

from the fact, that the person who committed violence is a human being and to regard that person only as "the killer," "the rapist," "the aggressor," "the bad guy", "the perp", "the terrorist", the "criminal", which are abstractions that run systematically through some forms of so-called "justice".

When demonizing others, one has a tendency not to see others as human beings with their own history and traumas. Demonization creates a divide and conquer complex. And, dehumanization is key in preparing people to attack, kill, and profit off of other human beings.

Humans have an automated protection system from their genetic heritage, from their protective mammalian hard-wiring. If someone can accept that this automated defense system as part of themselves, but not allow it to control them, then it is possible to rise to the level of a socially intelligent human being. For the survival of the organism, the mammalian brain has the potential to repress or override the higher cognitive brain, which desires thoughtful choice; such as the choice to have a child in a moment of passion with another human being. However, when sufficiently nurtured and exercised the "higher brain" can expand its choice space to consciously allow or deny requests by the mammalian brain, which would otherwise be systems-level commands, by the reflexive mammalian brains for control of the nervous system. A community-type society does not take norms or rituals or traditions as a given, and without further thought. Community is not the prioritization of culture over human need and the present situation. Of course, the optimal situation is to design an environment where this automated protection system (the desire for authority to ensure preservation) is not unnecessarily triggered.

INSIGHT: *It is unwise to forbid children from doing things they might be wise enough to do.*

1.1 Justice in a community-type society

In a community-type society, instead of officers of the law authorized to use violence and force against others, there are medically trained personnel, some of whom are also investigators trained to investigate incidents.

In a system based in violence (direct and/or structural violence), enforcement is based upon violence. Even the word, enforcement reveals how violations are handled. The violation is an affront to authority. In a system based upon community (structural commonality), resolution is based upon giving people what is needed to recover from adversity and to feel whole again. The violation is an affront to empirical decisioning, morality, and well-being, to good design, and not to someone who holds power over others (i.e., the authority figure).

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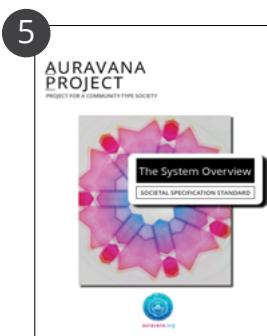
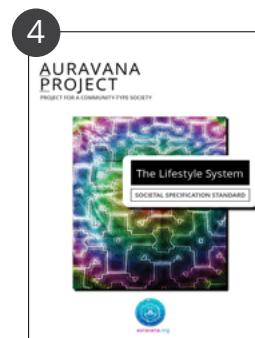
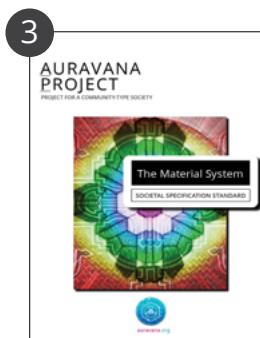
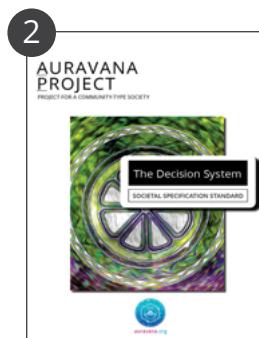
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The Auravana Project exists to co-create the emergence of a community-type society through the openly shared development and operation of a information standard, from which is expressed a network of integrated city systems, within which purposefully driven individuals are fulfilled in their development toward a higher potential life experience for themselves and all others. Significant project deliverables include: a societal specification standard and a highly automated, tradeless habitat service operation, which together orient humanity toward fulfillment, wellbeing, and sustainability. The Auravana Project societal standard provides the full specification and explanation for a community-type of society.

This publication is the Social System for a community-type society; it is a standardized social system for the organized structuring of a mutually fulfilled social population. A social system describes the organized structuring of a social environment. A social system is a grouping of units of individuation (here, units of consciousness) forming a cooperative network in which information is shared and integrated through a whole, data structure. The term social system is used, in general, to refer to lifeforms in definite relation to each other, which have enduring patterns of behavior in that relationship. This social system standard identifies humanity's aligned interests, and that which everyone has socially in common. It is an organizing system for social navigation that specifies a direction, orientation, and approach to socio-technical life. The standard details the purpose for the society's existence (a direction), its value system (an orientation), and its approach (a methodology and methods). Herein, these concepts, their relationships and understandings, are defined and modeled. Discursive reasoning is provided for the selection of this specific configuration of a social system, as opposed to the selection and encoding of other configurations, and their consequences are evidenced. The social system provides a description of who humanity is, and where humanity is going, by identifying its social organization.

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