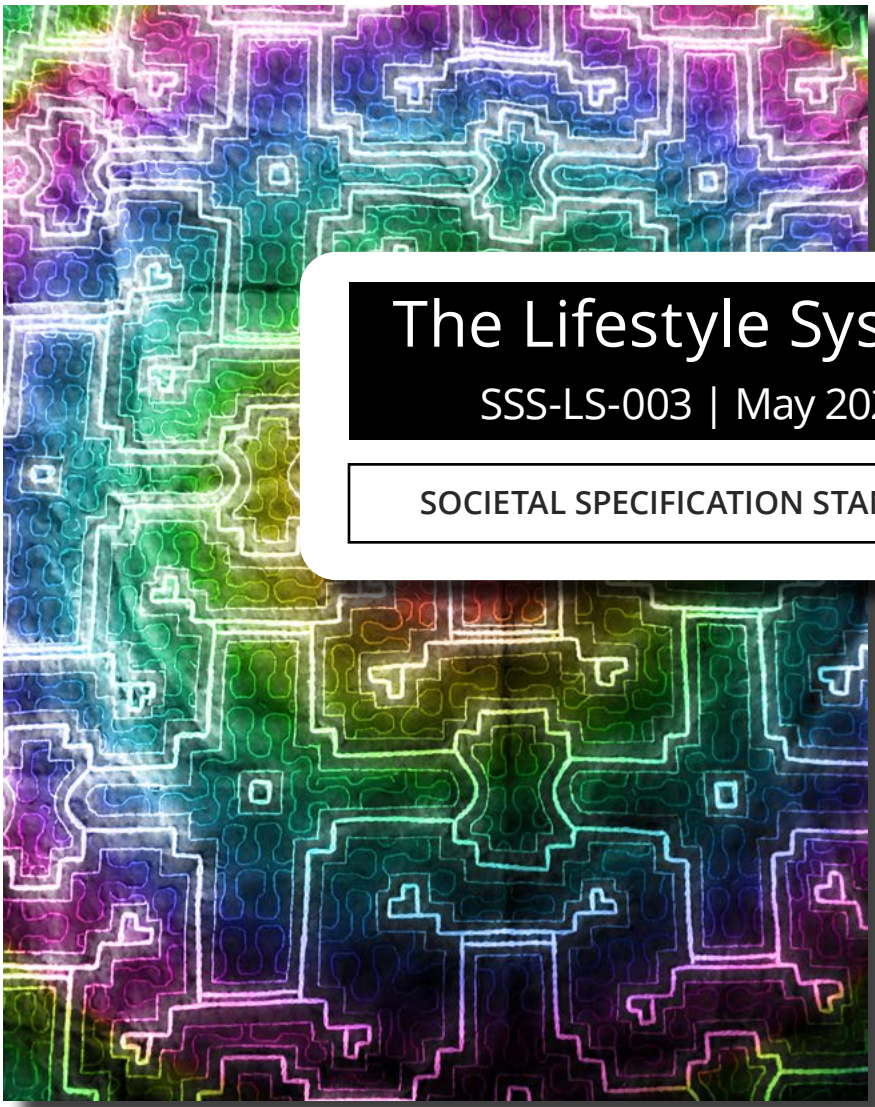
AURAVANA PROJECT

PROJECT FOR A COMMUNITY-TYPE SOCIETY



The Lifestyle System

SSS-LS-003 | May 2024

SOCIETAL SPECIFICATION STANDARD

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THE AURAVANA PROJECT

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THE LIFESTYLE SYSTEM

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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 type, 'community') **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: LIFESTYLE 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 lifestyle 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. Because of the size of some of these standards, they may be split into two or more publications.

Essential figures and tables related to this standard exist beyond what is shown in this document.

Figures and tables on the website are named according to their placement in the standard.

- Those figures that could not be accommodated here are readily accessible in their full size, and if applicable, in color, on the Auravana Project's website [auravana.org/standards/figures].
- Those tables that are too large to include in this document are referenced with each standard on the Auravana Project's website [auravana.org/standards].

Articles

Article Section Headings

Contents

List of figures

This is the list of figures within this document.
There are more figures 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.

List of tables

This is the list of tables within this document.
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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	SUMMARY (DESCRIPTION)
003	May 2024	The structure of this document has not changed. The concept of "nurturing" has been added to list of life phases in the "Lifestyle System Overview" article. "The Flow Cycle" article has had significant additions and changes. The "Education Phase" article has had the concept of "ungrading" added. There have been minor changes and additions throughout the document. Many grammar and spelling corrections have been made throughout. The contribution and employment sections have had minor changes to them. Citations have been improved throughout and are now at APA 7th generation.

GENERATION ON	NAME	CONTACT DETAIL
May 2024	Travis A. Grant	trvsgrant@gmail.com

The Lifestyle System Overview

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Version Accepted: 30 March 2024

Acceptance Event: *Project coordinator acceptance*

Last Working Integration Point: *Project coordinator integration*

Keywords: lifestyle, life cycles, human life cycles, living cycles, societal living, daily societal life, human living patterns, human life rhythms, living habits, life habits, life way

Abstract

This publication is the Lifestyle System for a community-type society. A lifestyle system describes the common behavioral orientations and interests of individuals among society, while identifying the cycles to which they entrain and that make up the daily motion of their lives. A lifestyle is how individuals spend their time; it is their pattern of living in the world as expressed by their activities, interests, and fundamental understandings about work and play. In part, a lifestyle refers to the decided timing of activities in individuals' lives. This standard provides a reasoned reflection on the lifestyle of individuals in a community-type society. It logically derives and discursively argues for a life experience that all humanity has in common. Humans participate in communities of practice, we all have interests and needs, we all contribute through our participation, we all seek self-integration and self-development, we are all active sometimes and inactive at other times, we all discover and adapt through our experiences, we all have routine patterns of behavior, and we all entrain to a cycle(s). Herein, learning is something individuals do through life experience and something which influences life experience. What would your life be like in community where goods and services are coordinated to be accessible without the need for any form of exchange or coercion? What is an optimal way of living in the world? It is interesting to think about what a lifestyle might be like in a society oriented toward self-development and contribution, and not stratified by age and the power positioning of oneself over others.

Graphical Abstract

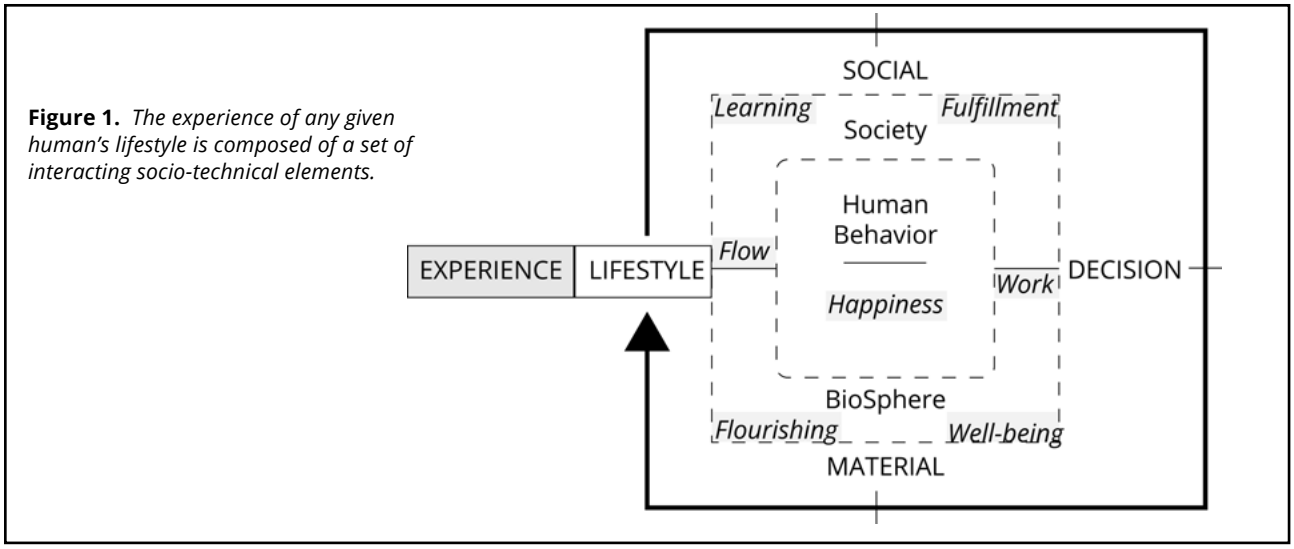

Figure 1. *The experience of any given human's lifestyle is composed of a set of interacting socio-technical elements.*

1 The lifestyle system standard

The Lifestyle System Specification Standard describes the common behavioral orientations and activities of individuals among community, while identifying the cycles to which they entrain that make up the daily motion of their lives. A 'lifestyle' is how we spend our time; it is our pattern of living in the world as expressed by our activities, interests, and understandings. This specification provides a reasoned reflection on our way of life, how we live our values, and the ways in which we express our world view. It logically derives and discursively argues for the life experience that we all have in common: we all participate in communities of practice, we all have interests and needs, we all contribute through our participation, we all seek self-integration and self-development, we are all active sometimes and inactive at other times, we all discover and adapt through our experiences, we all have routine patterns of behavior, and we all entrain to a cycle. Hence, this specification describes that cycling 'life space' in which we all experience our lives in a commonly fulfilling context. A life space is where all of the essential events and objects that compose a life experience are happening together. Herein, through accountable and restorative methods that facilitate the highest potential expressions of all involved, community, provides a potential for a more full life. It is important to note that this specification does not codify a lifestyle. Instead, it provides context for the lifestyle of individuals in community, including a description of how the lifestyle is possible, and why it is preferable over other possible lifestyles. Among community, we share a set of common behavioral and lifestyle characteristics that sustain to our fulfillment, our longevity, and the well-being of our ecology. Fundamentally, lifestyles are lived experiences.

The Lifestyle Standard is divided into four principal sections. The first section describes the flow cycle to which we entrain that facilitates the sustained expression of our highest potential. The second and third sections are dedicated to learning. Learning is an important part of a lifestyle oriented toward fulfillment and self-development. It is something we do through life experience, and something that influences life experience. The final section describes work in the context of human fulfillment.

Our community lifestyle is possible because of a comprehensive understanding of what is required in order to maintain optimal human well-being and sustained movement toward a higher potential dynamic of lived experience. Here, an information 'lifespace experience' is formed of tasks that are repeated to maintain the construction of a lifestyle. There are requirements for maintaining our 'lifespace experience' (we call these 'needs'), and there are 'decisional action mechanisms' that maintain the required constructions (we call these 'tasks' or 'task resolutions'). A simple illustration may be the relationship between nutrition, survival, and the behavior of eating: humans require nutrition through eating for the maintained construction (e.g., cellular repair and replication) of their bodies, which are complexes capable of performing more precise action-tasks, such as, the construction of 'fire'.

Of note, through advancements in scientific understanding and technology, our lifestyle reciprocally changes. This has been the trend of history.

Herein, a collection of habits is a daily routine. The current results in life are, in part, a natural byproduct of the lifestyle in place. Habits are patterns of repeated decisions.

> **INSIGHT:** *We are all basically collections of experiences.*

1.1 Phases of life in community

> *A.k.a., Ordered life phases, orderly life phases, socio-economic access-type phases.*

There are three phases of life for most people in community, all of which become oriented toward optimization through the conception of flow. In this model, contribution to the production of societal service system occurs after an education phase. Upon conclusion of the contribution phase, there is a leisure phase, where someone who has benefited others, now benefits, from others' labor.

The three (or, four) life phases (a.k.a., priorities) for humans in community are:

1. **NURTURING: The early post-birth and societal weaning phase** (childhood in community; maturation) - post-birth nurturing could be considered its own phase, a separate fourth phase where parents (and other adults) express love in the caring for their offspring. In community, every baby that is conceived is wanted and has a home -- community knows these conditions are important and community creates life-radi that are giving of the conditions. For a complex socio-technical society, the importance of nurturing the young in order to produce secure, sound, healthy and positively socialized- and self-directed adults remains paramount -- nurturing is crucial in producing a functional community-type human. Nurturing is the instinct to care for and facilitate the thriving of offspring. From a genetics view, nurturing is a genetically selfish trait to ensure genetic reproduction into the next generation (survival), and yet, from an observer's point-of-view nurturing appears to be unconditionally selfless behaviour (i.e., giving selflessly to another for their well-being; love). In particular, nurturing builds healthy and trustable members of society. Healthy humans can access their natural, nurturing, loving

instincts. Appropriate nurturing takes parents in combination with society (i.e., with community). Healthy nurturing facilitates the development of moral community behavior in the young; it reduces alienation and increases morality by having parents and society meet the full spectrum of young individual humans' needs. Researchers into child development have sought for decades to alert the global population to the fact that every human infant must have unconditional love; for without it, an infant's health and growth will be stunted. ('*Freedom*', 2023)

2. **EDUCATION: The education phase** (focused learning) - continuous learning, study, and apprenticeship at a young age - young people participating in continuous education. Youthful play, learning, and education; knowledge and skills development before contribution to community service. These individuals are growing and becoming educated in community and skilled at a service(s), eventually expected to enter service and then retire (or not) with full access to community services. This is a time to play, imagine, and become educated. Education is the instinctual priority to learn about the world.
3. **CONTRIBUTION: The contribution work-service phase** (contribution to community service, focused contribution) - adults participating in continuous contribution. Adults enter into service, and then after some calculated (duration), they retire from [contribution] service. Once retired, they enter the leisure phase of life, and yet may still continue to contribute. Those contributing have accountabilities on working groups and habitat teams. These individuals have chosen to perform necessary work tasks for the community. Dignified duty to give our ability to contribute to community -- in a sense, contribution is seen as dignified work and duty to complete it before we can fully devote ourselves to the higher exercise of our faculties and to the full spectrum of community opportunities. This is a time to do work diligently. Contribution is the instinctual priority to care for others and contribute to society.
4. **LEISURE: The liberation/retirement [leisure] phase** (retirement from contribution) - liberty to choose leisure entirely, or leisure and continued contribution as a phase of life. Leisure is play, the way education and contribution can be when those activities are enjoyed. Those in retirement are full community members with access to the whole spectrum of community services. Here there may be self-improvement, recreation, as well as continued contribution. This phase most often includes, but is not limited to: travel, social relaxation in the company of friends and family, cultivation of all manner of human abilities, the pursuit of recreation and further exploration, and the continued pursuit of contribution. A time for the leisurely and unperturbed appreciation of the good things of the world which they have helped to create. Every society capable of reproducing itself needs to support its non-working and less-working members. Leisure is the instinctual priority to explore and play as an adult. Leisure, as a phase of life, means not having an expected duty to work

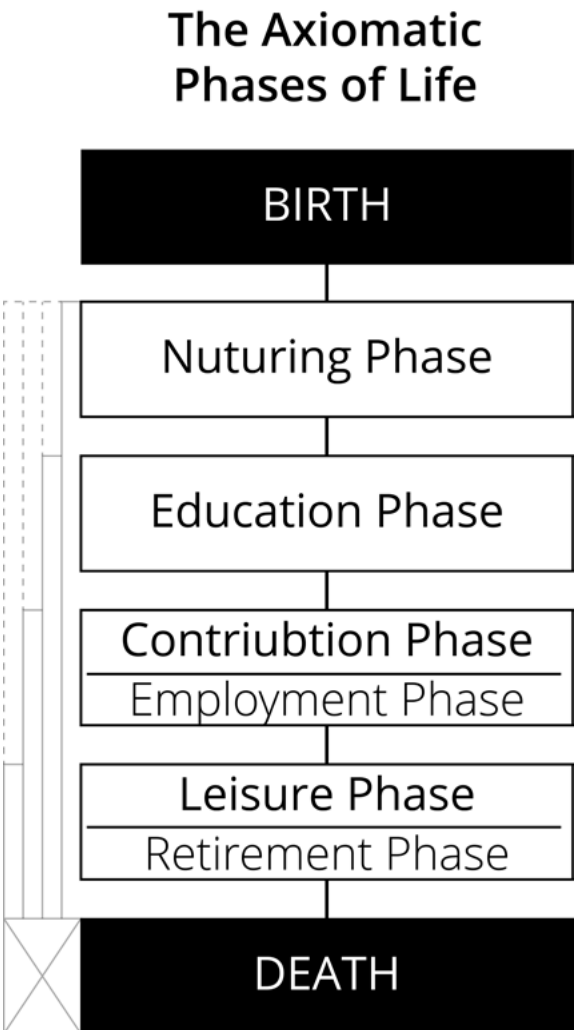

Figure 2. *There are four general phases of life in community: birth and nurturing; education; contribution (or, employment); and leisure (or, retirement). The three self-directed productive phases of life are: education, contribution and leisure.*

any more (and possibly, if society is so constructed, have access to leisure-only habitats). Of course, individuals in the other phases of life in community also experience leisure activities, such as video watching, sightseeing, sports, games, and other exploratory [habitat] support services. There is both a leisure phase to life (i.e., the leisure phase of the four phases of life), and a cyclical phase of leisure for those in the education and contribution phases of life (i.e., vacation and full-service dwelling facilities). In other words, there is both a leisure phase to life, and phase of leisure in life for the education and contribution phases of life (e.g., "hobbies"). In the education and contribution phases of life, leisure may be a weekly, monthly, or yearly cycle of activity (or daily, but less so in general than someone in the leisure phase of life). A leisure location is where contributors do all the dwelling and habitation work for the user, a "full-service amenity facility".

NOTE: *Likely, all life phases are necessary for all individuals.*

The optimization challenge is how to create more flow in people's lives throughout all three phases. Here, flow is effectively human potential optimization. It is relevant to note here that the "flow" is also conceived of as a cycle. It is a more rapid cycle that takes place at a shorter time period than the larger three life-cycle phases in community. A more unified societal system is more likely to be able to reduce the amount of contribution needed to sustain an optimally fulfilled global population to an existent minimum.

Note that some lifestyle habits (e.g., learning) may be continuous throughout all three phases; and, there may also be lifestyle habits that are most regularly practiced in one phase or another. Here, contribution is an outcome of education, and liberation is an outcome of contribution.

1.2 Lifestyles in community

Community represents one common and extended family. We recognize life as an internal and external journey, and so we have created an environment where living and learning have become one and the same. Curiosity flourishes as nature intended, and as self-directed individuals are supported in the pursuit of their interests and their highest potentials. Through common and accurate organization an environment of universal benefit and mutual fulfillment arises. Herein, individuals become continual benefactors of contribution in a community that facilitates their self-directed, flourishing-oriented lifestyle. In community, we enjoy a fulfilling lifestyle that simultaneously makes the world a better place for everyone. We control our destiny through our lifestyle choices. It's the things we do on a cyclical basis that determine our outcomes.

NOTE: *There is always individual influence in a social network where are individuals are interconnected by informational and spatial relationships.*

The Community, itself, represents an environment where individuals learn and share and grow from one another, while they pursue their interests with limited stress, meaningful desire, and empowering challenge. Community is the realization of an evolving individual potential among a larger unity of evolving potentials where we, together:

1. Expand awareness.
2. Experience more of our total self.
3. Express more of our total self.

Community is a lifestyle commitment to oneself and all earthlings. It is a commitment that one's participations and experiences are going to be types that maximize the best of humanity, including but not limited to: the fitness of body, human compassion and love (extensionality), human intellect, social interconnection and belonging, nutrition for the brain, mitochondria, and cells.

INSIGHT: *Our lifestyle is the manifestation of our outer life. Our consciousness is a manifestation of our inner life.*

1.3 What is a life-style?

INSIGHT: *It takes a community to live well; I shine more brightly amongst the brilliance of others.*

A lifestyle is the things “you” do on some regularly cyclical basis. A lifestyle is a lived experience in the world. A ‘lifestyle’ is a way of living in the world; it is the collection of activities we do for ourselves and others on a daily basis with the acknowledgement of an attitude and orientation to life. It is where someone lives, and the quality of life available to them. It is a component of the total information set that describes our routines and our reasoning for them. In other words, it is a description of the routine behaviors of our lives. A lifestyle is how we “spend” our time; it is our “pattern of living”. It is those things that we equate with living a life, at the present. Primarily, lifestyle involves behaviors that make sense to oneself and others at a given time and place. A lifestyle is a person’s pattern of living in the world as expressed by their activities, interests, and understandings. Our lifestyle is how we live our life; it is what happens on a daily basis, though there is more to it than just the characteristic of momentary presence. A lifestyle is also access to something that is emergent and generational, something that provides a potential of opportunities.

What facilitates a higher potential of access to a fulfilling system? There is a simple saying, “When knowledge is accessible, then people will use it”. Similarly, “when time

is available, then people will play". In community, we use what is available on a routine basis to meet our needs, and this is organized for. Sometimes we are available to contribute and other times we are not. And, when we do engage with the community the system is designed to enrich all of our lives, incentivizing further contribution.

If we are "free", shouldn't all of our time be discretionary? And, with our discretionary time we would naturally want to volunteer and support the community in completing necessary and scheduled tasks in teams; for, it is these teams that give us all of our discretionary time. When our time is our own then we are likely to be more authentic, being authentic to ourselves and others: there will be times when we will be available and be applying effort to facilitate the community's existence; but, let us not let these activities alienate us from our truly connected selves. It is possible to view 'work' as task-based effort in the construction of a space that allows for the expansion of our experience into an information space of a higher potential [of creation]. In other words, we work at something because it is fulfilling. And, those things that facilitate all of our fulfillment, we work at those together.

One could say that a lifestyle in community looks like a cycle of experience that generates ever greater states of itself and those experiential dynamics are so enjoyed that they are sought after. Here, we become what we chose and what we are exposed to. We live lives that are fulfilled by [self-]organizing for our fulfillment. What we do on a daily basis depends upon what we desire to do on a daily basis. And, we realize that what we do on a daily basis influences our desires. And, what we do on a daily basis impacts not only ourselves, but others on an iterative and generational basis. Hence, in community we think about what behaviors, systems, and thinking patterns might facilitate access to an intentionally fulfilling lifestyle.

When we have access, we don't need employment. Employment is giving your time and efforts over to someone else for their profit-based benefit. The employment-based lifestyle is a rigged system. Herein, there are benefiters, and then, there are those who are rewarded and awarded for benefiting the benefiters. The idea of employment as working for an owner in the market in order to remain a consumer in the market creates a specific pattern of lifestyle.

In order to facilitate an understanding of a community-type lifestyle the following questions may be asked:

1. What would a lifestyle designed for our fulfillment look like?
2. What does it mean to have a life based on the "style" that fulfillment brings?
3. What is a healthy lifestyle?
4. What would a lifestyle unconstrained by financial affordances look like? What if a high access lifestyle wasn't a "luxury"?
5. What would the lifestyle of a population that synergized its efforts look like?
6. What does it mean to have a life based upon being

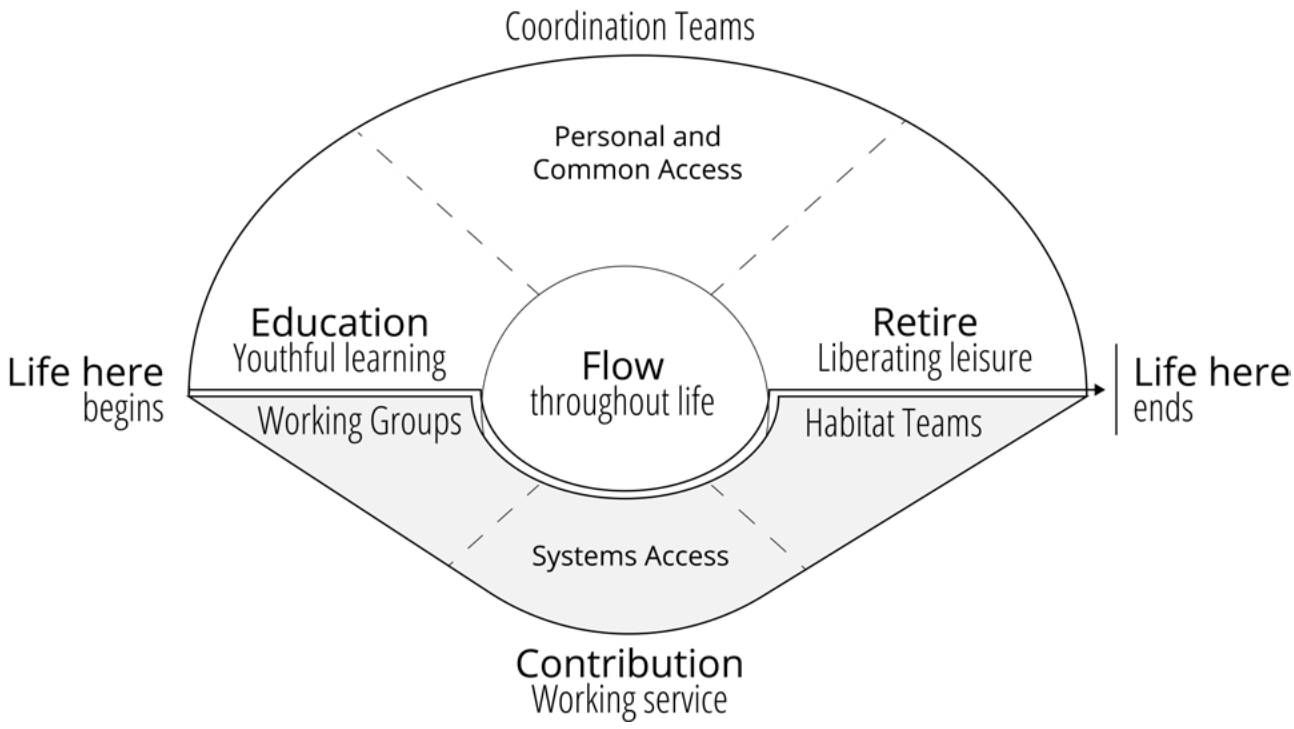

Figure 3. *The three phases of life in a community-type society are: education, contribution, and retirement.*

in a state of "flow"?
7. What does intrinsic motivation look like at a coordinated societal level?
8. What is a lifestyle that we want to live and share with others?
9. What does a lifestyle constructed through a recognition of emergence look like?
10. What does a learning community look like at the scale of a society?
11. How can we create a community at scale to facilitate our accessing of our higher cognitive, physical, and emotional potential?
12. If you won the lottery would you still do the "work" you do now? Do you only believe in work up until the time you no longer need to do it to earn money? What if money was taken out of the equation for your fulfillment, as well as your opportunity to learn, create, share, and explore?
13. How do we construct/accumulate a set of conditions ideal to our health, happiness, and longevity?
14. What does a lifestyle of access abundance look like?

Philosophically speaking, a lifestyle is a patterned derivative of a set of former conceptions. In philosophy, 'ontology' is that which is said to exist and is a view on the nature of reality. In other words, 'ontology' is the study of the ultimate nature of existence where existence is defined as that which consciousness is conscious of. Therein, an 'ideology' is a system of ideas that [recycle] the way people conceptualize the world. And, a 'lifestyle' is those ideas put into practice and describing the routine behaviors of our lives.

> **QUESTION:** *What is the life experience of an individual's typical, cyclical time period (e.g., day, week)?*

Online references (cited in document)

- *'Freedom' - Chapter 8 The Greatest, Most Heroic Story Ever Told*. The World Transformation Movement. Accessed: 23 January 2023. https://www.humancondition.com/freedom-terminal-alienation-destroys-our-ability-to-nurture/

The Flow Cycle

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Version Accepted: 30 March 2024

Acceptance Event: *Project coordinator acceptance*

Last Working Integration Point: *Project coordinator integration*

Keywords: flow, flow state, flow cycle, flow triggers, autotelic, optimal experience, the zone, optimal well-being, optimal engagement, deep embodiment, high achievement, peak performance, peak experience, happiness

Abstract

When understood and accounted for, it is possible to regenerate, enhance, and repeat more often peak flow states of life experience. The experience of flow is universal and has been reported to occur across all classes, genders, ages, and cultures, and it can be experienced during many types of activities. Different people require different stimulation and different nutrition in order to restore, recover from, and enhance the experience of flow. Together, individuals can organize their lives around that experience which is the most internally rewarding, in a safe manner, through community-type societal structures. The potential to develop and use the flow state can be hindered by limiting beliefs and damaging situations. Alternatively, there are societal structures that are more likely to produce flow, and its restoration, within individuals. Flow is a cycle of which one of the phases of the cycle is also named flow (hence, the cycle is named after its active "flow" phase). There are triggers that make flow more likely, and there are dangers that make flow less likely and more dangerous. The flow cycle can be engaged for play, learning, work, or any meaningful human activity.

In community it is possible to experience flow throughout all phases of life.

Graphical Abstract

Figure 6 on page 15

1 The flow-cycle

A.k.a., Flow experiences, autotelic experiences, the zone, a peak experience, deep embodiment, etc.

Among community we seek a lifestyle that increases the potential-actual "flow" in our daily lives. Flow is a peak state where we both feel our best and perform our best; it feels like "the best feeling ever". We recognize that the people with the most flow in their lives score off the charts for life fulfillment and well-being. Hence, the Community represents an intentional and informed lifestyle, designed to sustainably increase the amount of flow in our lives. Herein, inquiry into flow represents discovery into how we become a fully integrated consciousness, alive and alert in these bodies and brains of ours. For a human being, flow follows focus, and is essentially a conscious multi-modality state of massively heightened focus and feeling. The term flow is a phenomenological description for how the state itself makes us feel. The experience of flow makes life feel flowy and synchronous, where every thought proceeds effortlessly from the last with high speed and precision (Read: thought acceleration). Together, humans can build a society that builds a deeper and more frequent experience of flow. Flow is one of the most desirable states a human can experience.

CLARIFICATION: *Flow has different names depending upon the discipline in which flow is being spoken of, including: being in the zone, autotelic, peak experience, and engagement. Autotelic means to do an activity because the activity itself is enjoyable to the one doing it. The activity has a purpose, in itself, for the doer of the activity. Autotelic comes from two Greek roots, auto (self) and telos (goal). (Kea, 2008, p21)*

Flow is fundamental for well-being and overall life satisfaction. People who score off the charts for life satisfaction are those that have the most flow in their lives. The experience of flow can be built and enabled; it can also be reduced and disabled. Flow is optimal performance, and a healthy flow cycle regenerates and builds greater performance. Experiencing flow regularly is essential in achieving happiness for those who know what flow is and/or have experience flow previously.

Autotelic means an end in itself, or the source of intrinsic motivation. Autotelic means self goal; having a purpose in itself; doing something because it is intrinsically desirable; doing something because of the satisfaction/fulfillment that it brings. Flow provides motivation (a potent neurochemical release), learning (the more neural chemical that show up during an experience the more likely it is to more likely to move from short to long-term holding; learning rates in flow increase hundreds of percent - flow can cut time to mastery), and creativity/integration (massive boost). Autotelic comes from two Greek roots, auto (self) and telos (goal). The primary goal of an autotelic activity is experience for its own sake, whereas an exotelic activity is motivated by an outside goal.

Flow states are defined, technically, as optimal states of consciousness where we feel our best and we perform our best. In flow we become so focused on the task at hand that everything else experientially disappears. The experience of the state of flow maintains the following characteristics: action and awareness start to merge; our sense of self disappears completely; time dilates (sometimes it slows down and there is a freeze-frame like effect, and other times it speeds up such that hours pass in what seem like minutes); and throughout, all aspects of performance, both mental and physical increase rapidly. Most people in a flow state come to a point in time where they can no longer separate past from present from future, and they are plunged into what psychologists call the “elongated now” -- the merging of action and awareness. The flow state is a state of experiential “heightening” where individuals experience measurably higher awareness, creativity, learning, and productivity. In flow we can process complex multi-variate information faster and then act on that information more efficiently. Literally the state of flow surrounds creativity and research suggests that the state actually trains the brain to be more creative. Decisioning in the state is highly optimized. When you are in flow, every decision, every action leads seamlessly and fluidly from the last. Flow feels “flowy”, it just kind of “rolls”. In a sense, flow is the ultimate form of the strategy of “learning through doing”. Flow is a dynamic that facilitates emergence into a “higher potential” and we can entrain our lifestyle to its cycle. Everyone is wired for high performance; it is hardwired into human biology and, the current understand of flow comes, in part, through evolutionary biology and consciousness science.

Mihaly Csikszentmihalyi (2008), who named the psychological concept of “flow”, summarizes flow as a state where: “You know that what you need to do is possible to do, even though difficult, and sense of time disappears. You forget yourself. You feel part of something larger.

Flow is conscious immersion in self-directed effort. If you can access the flow state your task precision and thinking will be better, you will solve problems faster, you will get more done, and you will make connections faster in your brain. In flow, everything just becomes easier. For children in particular, and also for adults, flow represents the merging of work and play. Play is an experience where the work (effort) itself is enjoyable and mistakes are not a [significant] problem (i.e., mistakes do not significantly impact the continuity of the playing, or the life and technology support systems when it comes to playing hard a exploration). Play is underestimated in early 21st century society as a prime motivator. Many animals engage in play, that is, activities that enhance

learning of motor and sensory skills and social behaviors, but otherwise serve no immediate purpose.

The research shows that we are not only significantly more creative when in flow, more precise and efficient with our movements, but we learn significantly faster than normal while in flow. Hence, Martin Gladwell's famous 10,000 hours to mastery rule can be cut significant through the experience of flow. The experience of flow lets someone know that they are mastering (or, have mastered) some skill. From an evolutionary perspective, knowing when one is good at skills is important. Flow conveys a feeling of mastery and greater sense of control. In this way, is a peak transformational state.

Flow is also sometimes characterized by the term, 'deep embodiment'. 'Deep embodiment' means paying attention to all streams of sensory information at once. In flow we shut off the active chattering mind and detach from that which limits the unhindered flow of awareness into creation. While in the state, the self-editing part of consciousness is not active, and there exists free association without filter.

While researching peak experiences the historic psychologist Abraham Maslow found that highly successful people were using massively heightened attention that produced altered states of consciousness that allowed them to do some of their best work. Essentially, Maslow was looking at flow and he found it as a commonality among all successful people. It should be noted here that depending upon the definition of the term 'peak experience' what is known scientifically about the flow state may not be its equivalent.

Anyone can use what science now understands of the flow state to create these experiences for themselves. The state will show up in anyone provided certain initial conditions are met.

In the book entitled, *The Rise of Superman: Decoding the Science of Ultimate Human Performance* by Steven Kotler (2014) provides a relatively comprehensive description of what the flow state is and how to achieve it given what science presently knows. Therein, he describes that which is known about the cycle itself, those preconditions that facilitate flow, and provides a warning concerning engagement in the state.

Flow has many benefits beyond those mentioned above, including but not limited to:

1. Flow creates powerful intrinsic motivation -- by releasing the most addictive neurochemicals in our bodies. In other words, it is the source code of intrinsic motivation reinforced with the most potent neurochemical set we have access to.
2. Flow shortens the time it takes to learn something. Flow cuts the path to mastery (a.k.a., 10K hours) in half and accelerates performance measurably by hundreds of percentage points.
3. Flow improves and speeds up complex problem-solving (i.e., flow improves thinking).
4. Flow improves body coordination and body movement precision.
5. Flow induces deep insight and creativity.
6. Flow facilitates near perfect decisioning.
7. People with the most flow in their lives are the happiest people on earth.

1.1 Flow metaphysical disambiguation

The concept of flow has several metaphysical related concepts, some of which are related because they facilitate human organisms in entering the state of flow (for example, meditation):

1. **Flow** - Concentration is centration of awareness to action. Concentrate desire into action.
2. **Oneness** - Meditation is de-centration of awareness to stillness. Meditate stillness into consciousness.
3. From the **stillness** of consciousness, motion is generated through mental concentration.

INSIGHT: *Flow exists in the intersection of what you love and what you are good at.*

1.2 What does it feel like to be in a state of flow?

"Flow shows up when we push ourselves to be our best."
- Steven Kotler

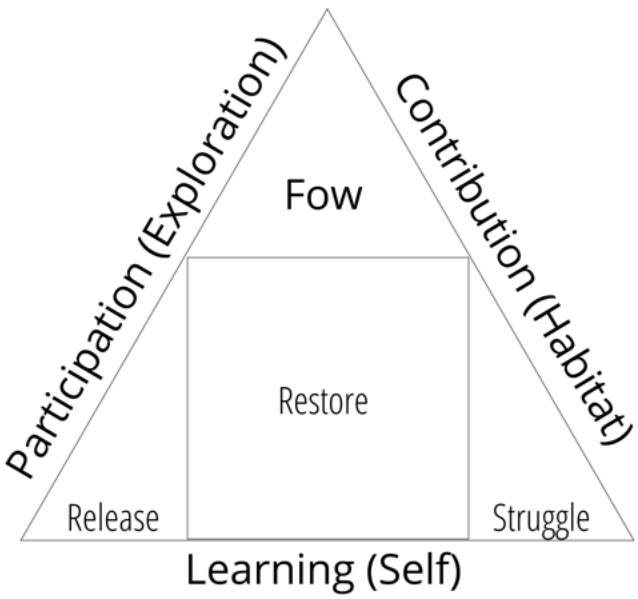

Figure 4. *The integration of the flow cycle into a lifestyle of participation, contribution, and self-directed development.*

Flow feels like a quickening of the body and/or mind. The process requires wisdom so that one doesn't lose conscious coherence in the seat of the mind, where it all comes together as a point. It takes time, patience, and practice to build up this capacity, and when it comes to quickening (flow) it is like doing something at an excellent or expert level. The world slows down as "you" speed up.

The following are some of the most common characteristics for consciousness experiencing a flow state:

1. A sense of absorption (high focus) - Completely involved in what we are doing - focused, concentrated. "Absorption" as a narrowing of awareness down to the activity itself.
2. Thought acceleration - where the speed of ones thoughts (and mental processing) is seriously increased [way] beyond baseline.
3. A sense of control - of being in control of oneself and one's environment.
4. A sense of ecstasy - of being outside everyday reality and feeling pleasure in doing the activity.
5. Greater inner clarity - knowing what needs to be done, and how well we are doing.
6. A sense of knowing - knowing that the activity is doable though difficult - that our potential is adequate to the task.
7. A sense of serenity - no worries about oneself, and a feeling of growing beyond the boundaries of the ego as we feel part of something larger. A loss of the feeling of self-consciousness: the merging of action and awareness.
8. Temporal distortion (tachypsychia) - distorted sense of time (i.e., time dilation); one's subjective experience of time is altered, and time is distorted such that it appears to either slows down or speed up.
9. Intrinsic motivation - that which produces flow becomes its own reward. The activity is intrinsically rewarding, so action becomes effortless.
10. Competence - the more competent someone becomes at an activity, the deeper the possible flow state when participating in that activity.

In order to experience flow states, a person needs to experience/feel certain conditions. By fulfilling these basic conditions, a person is more likely to experience flow states. These conditions include, but may not be limited to:

1. Absorption - narrowing of awareness down to the activity itself.
2. Challenge - experience challenge.
3. Clear goals - feel/have purpose.
4. Competence - feel competent.
5. Control - feel/have control.
6. Concentration - experience no distractions.
7. Empowering emotions - feel empowered.
8. Loss of the feeling of self-consciousness - the merging of action and awareness.

Conversely, the greatest inhibitors of flow include:

1. Fear - a base feeling of being in a dangerous situation that could be harmful to the self.
2. The primitive survival responses:
   A. Freezing - wherein the body freezes to escape detection from a predator.
   B. Fleeing - often follows the freezing state, and is a primitive response to run away from a predator.
   C. Fighting - wherein the body becomes violent in order to deal with perceived predation, which often occurs after freezing and fleeing haven't resolved the situation.

1.3 Peak performance science

A.k.a., Peak experience science, human potential science, etc.

The current information sets that compose the field of scientific inquiry into flow include, but are not limited to:

1. Consciousness science.
2. Psychological science.
3. Physiological science.
4. Pharmacological science.
5. Neurological science.
6. Human performance science.
7. Computational science.
8. Technological and bio-technological development.

1.3.1 Neuroscience

At the level of neuroscience, flow can be broken down into three distinct body processes, each of which compose and influence flow (both the state and the cycle):

1. Neuroanatomy - is a specific branch within neuroscience that deals with brain anatomy.
2. Neuroelectricity - is measured through brain waves with an electroencephalogram (EEG) and functional magnetic resonance imagery (fMRI) technologies. These technologies measure the electrical activity of the brain. Neuroelectric rhythms are also known as brainwaves. The primary electrical brainwave states are:
   A. Delta (1 Hz to 3.9 Hz).
   B. Theta (4 Hz and 7.9 Hz).
   C. Alpha (8 Hz and 13.9 Hz).
   D. Beta (14 Hz and 30 Hz).

E. Gamma (Above 30 Hz).

3. Neurochemistry - is concerned with the chemical composition and metabolism of nerve tissue. Neurochemistry relates to the "information molecules" that the body creates and releases to transmit information, which are usually excitatory (turn something on) or inhibitory (suppress something else). These neurochemical information modulators are also known as neurotransmitters, neuromodulators, and neuro-peptides. Technically, all neuro-chemicals are neuro-modulators and also peptides. In the literature, the terms neuro-peptides and neuro-transmitters classify two different categories of neuro-chemicals; and neuropeptides are a type of neurotransmitter. Neuropeptides are larger molecules, while neurotransmitters are smaller molecules. Neuropeptides are slow-acting (producing prolonged action), while neutotransmitters are fast-acting (producing short-term responses). Both neuro-peptides and neuro-transmitters are polypeptide derivatives.

   NOTE: *As of the early 21st century, there are now over 100 known neuropeptides and probably many more yet to be identified from the over 1000 predicted peptides encoded by the genome.*

Neuro-transmitters are the feedback system for reinforcement performance, learning and discovery. During the state of flow, the brain produces and the body utilizes at least the following neuro-transmission neurochemicals (a.k.a., neurotransmitters):

A. Dopamine.
B. Norepinephrine.
C. Endorphins.
D. Anandamide.
E. Seratonin.

1.4 The flow-cycle model

"I can almost assure you that you will work through your frustrations yourself. And only by working through them yourself will you learn anything."
- Clark Aldrich

The flow cycle functions as a map for the experience of flow. The flow cycle is a four stage process, which may be used like a map to navigate the regeneration of the state of flow. It is important to recognize that not all stages of the flow cycle feel "flowy". This understanding is particularly important to remember when feeling uncomfortably out of the flow state.

Here, a named definition is given to each of the steps of the method so it can be used systematically. The stages of the flow state are:

1. **Struggling (the front end, struggle)** - a period of struggle where the individual overloads the brain with information. This is a "loading" phase where the self is loading the brain with information. Here, we are "pulling in" a great deal of information while persisting despite a degree of struggle with comprehension and integration (of the information). It would be somewhat inaccurate to refer to this part of the cycle as a state of "stress", and more accurate to refer to it as a dynamic of tension. Growth requires some degree of tension.

2. **Release (intensification)** - once the mind is so overloaded such that it is at the threshold of frustration, then the self (i.e., you), removes the aware mind from the tasked problem so that subconscious processing may be allowed to occur. The experience of "dance"/relaxation. Here, it is best not to entertain oneself with television or movies. Flow involves the trading of the conscious mind for the subconscious mind; we are handing over information processing [duties] to the subconscious. The technical name for this is transient and temporary hypofrontality of the prefrontal cortex. And, this is done for a number of reasons: the conscious mind is very energy expensive, it is relatively slow; the subconscious is much faster and more energy efficient. Herein, we must remember that the brain is always trying to conserve energy.

   This release period triggers the flow stage which is the third phase of the cycle. In the context of a problem, release period is a period when the individual takes their direct attention/effort off the problem (or, working toward accomplishing the problem). This is the mind "wandering" stage. This is also known as the incubation phase where the sub-conscious mind has the time and space to process and sufficiently integrate what has occurred so far on the problem.

   Remember here that the brain has to be filled with enough ideas to start pattern matching. One could say that flow doesn't begin until the brain reaches a threshold of novel sensory information (or ideas). So, if someone were having a difficult time entering the state of flow, then one solution might be to load the brain up with even more information. Simultaneously, if it is not "clicking" even while the brain is sufficiently loaded, then one must understand that pattern recognition is fundamental

in the brain: it is what neurons do at a basic level.

It is relevant to note that mundane tasks allow the mind to daydream, which can facilitate future creativity. Hence, maybe there is meaning in the saying that a repetitive and mundane task, such as chopping wood or carrying water, may be good for us as a phased part of our life (when we desire a cycle that enhances our creativity and our flow).

3. **Flow** (a.k.a., the thought acceleration phase, "the deep now") - into the flow stage where new connections are made and performance is optimized; where thought seriously accelerates. This is the stage of abundant creativity and optimal performance where attention is brought into the now and optimization of 'pattern recognition' is simultaneously occurring. 'Pattern recognition' is the ability to connect previously unconnected flows of information (i.e., to link ideas together in new ways). Here, creativity is often (though not always) recombinatory - the result of something novel "bumping into" something old (i.e., a new experience connecting with an old thought) to create something new. And, for the novel thought to bump into the old idea there needs to exist pattern recognition. Herein, human actions can become extremely precise and optimally performed and coordinated.

   The neurochemicals that are released during flow heighten our attention, which we may use to focus our intention. With flow, there is natural[ly enhanced] focus. Flow makes focus highly efficient and highly effective. When focus is increased and we are paying more attention, then we are taking in more information, which essentially heightens our access to novel information. In other words, when we pay more attention to the totality of our world we have greater access to novelty, greater access to the "front-end" of the creative process. So, not only does someone in flow take in more ideas (or sensory signal information), but the brain is heightened in its ability to link these ideas together and to perform. When we are highly attentive and pattern recognition is "jacked up", then one idea can quickly lead to the next, and so on creating a novel synthesis and a heightened enjoyment of effort expenditure. Similarly, actions can flow from one to the next, creating highly precise and coordinated motions. In flow there is a massive amplification of learning, memory, and performance; wherein, work toward a goal feels almost automatic and effortless.

   During the state of flow the brain releases five potent performance enhancing reward [neuro-peptide] chemicals that drive focus into the now and reduce the signal to noise ratio in the brain so that pattern recognition is enhanced. Dopamine is one of the neurochemicals that is released during the state of flow. Dopamine is the neuro-peptide feedback system for the anticipation of reward, and the acquisition of a reward itself. Dopamine enhances cognitive pattern recognition and heightens focus (norepinephrine as another one of the neurochemicals does similarly). Effectively, dopamine lowers the "signal to noise" ratio providing more access to new and old ideas while improving pattern recognition (i.e., the linking of similar ideas together). In other words, dopamine allows the brain to see more patterns and make more connections between ideas. Anandamide is another neurochemical released during flow. It is known to increase lateral thinking (i.e., thinking "outside the box"), which is our ability to link tangentially and disparately related ideas together. Endorphins are released, which are powerful pain killers and powerful social bonding chemicals. Norepinephrine tightens focus so that the brain is capable of taking in more information per second while heightening access to novelty. And, Serotonin keeps the individual calm throughout the experience.

   These neurochemicals exist [in part] to tag experiences. Hence, a quick shorthand for learning and memory: the more neurochemicals that show up during an experience the greater the chance that experience moves from short-term holding into long-term storage. In other words, neurochemicals are essentially a big "tag" (as "this is important, save for later) on an experience. Flow has a radical impact on learning. Researchers have found that the time it takes to get from novice to expert can be cut in half through the flow state.

4. **Consolidate and recovery (restore)** - this is a period of recovery which involves building back up the expended neurochemicals. When we think we are learning we are not really "learning", which is to say that when we are "doing stuff" all we are really doing is collecting data. Most of our pattern consolidation and annexing of new skills is happening as we sleep. Memory consolidation occurs during the delta frequencies of deep sleep. Note, work that was done in a flow state should be double checked during this stage. This recovery

phase is excellent for going back and edit ones work [possibly to see what was a good idea and what was a bad idea].

The neurochemicals that the brain expended during flow are expensive to produce; hence, the brain needs nutrition and a period of restoration in order to rebuild them. In the sense of "feeling and being" in this phase of the cycle one might say that they are feeling "low", possibly an extremely deep low depending upon how far one pushed themselves while in the flow phase. Practitioners of flow need to learn that they "need to" go through the recovery phase, which is a learning in itself. And, if you are stressed during recovery because you aren't feeling as great as you are used to, then you will hinder (or potentially block) that recovery. We know scientifically that cortisol blocks learning.

The brain is a pattern recognition machine; senses take in and process information, and the brain pattern integrates. Flow is letting this process happen naturally. Knowing that there is a cycle and having the emotional control to deal with it is the best thing you can do to start producing more flow in your life. We must recognize that we cannot live permanently in a state of flow; or, at least we do not yet know how to safely maintain the state indefinitely.

2 Enabling flow

A.k.a., Flow triggers, flow pre-conditions, enabling flow states, facilitating flow.

The brain can be trained to go into flow, and an environment can be organized to make flow more likely. Flow states have triggers (i.e., pre-conditions, circumstances) that make flow more likely, and that lead to more flow. In other words, flow triggers are pre-conditions that bring on more of the state of flow. They are circumstances that speed entrance into the state. Essentially, all flow triggers are simply ways of driving attention into the 'now' in order to optimize performance. In "The Rise of Superman" Kotler (2014) describes a number of flow triggers (and the categories they fit within). The common triggering pre-conditions for flow are:

1. **Psychological flow triggers:** Facilitate an environment where positivity (and progress toward lower entropy) flourishes.
   A. **Intensely focused attention (i.e., deep singular focus, focused concentration)**: Producing flow requires long periods of uninterrupted concentration. Deep focus on a particular and intrinsically motivating task. Flow demands singular tasks (which may involve multiple subtasks) and solitude. A quiet and distraction-free workspace is essential. Flow takes time to build, and tiny distractions can "snap" someone out of a flow state.

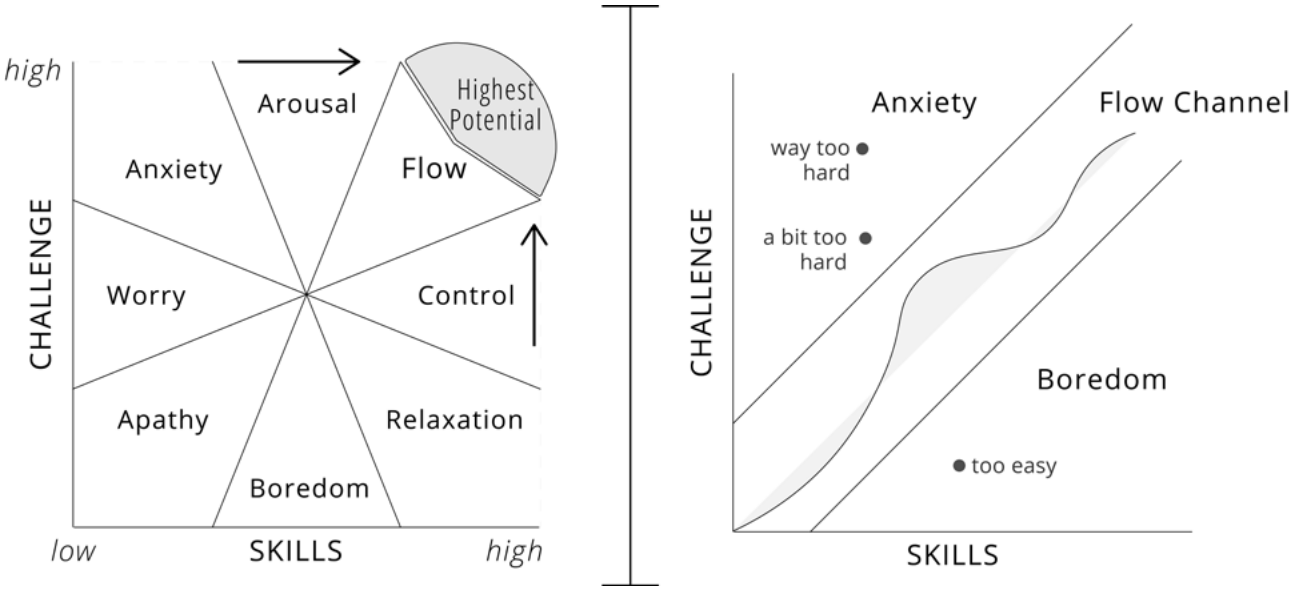

Figure 5. *Two graphs representing two different perspectives on the skills / challenge ratio and the "zone" in which flow is most likely to occur.*

B. **Clear goals**: Know what "you" are doing and why you are doing it. Someone has to have a clear understanding of what is required for a successful outcome and is working toward it. A goal/purpose directs attention. When goals are clear, the mind doesn't wonder what it has to do next, it already knows. Through the setting of a goal concentration tightens, motivation heightens, and extraneous information gets filtered out. Someone's focus can stay pinned to the present moment and the present action. Clarifying the reason behind what "you" are doing will keep "your" mind from wandering and from distraction. Clarity gives certainty, both in concern to what to do and where to focus. It is important to realize that sub-goals/sub-tasks may emerge naturally over time.

C. **Strong motivation**: To enter flow requires strong intrinsic motivation, which is likely to include curiosity, passion, and purpose. Both the product of the activity and the activity itself are the reward.
   1. **Desire to prove something, or prove someone wrong**: The desire to show how something is possible, or prove something wrong can be a strong source of motivation, and is strongly supporting of flow.

D. **Immediate feedback (unambiguous feedback)** - Receiving unambiguous and immediate feedback from the self and/or others is helpful. Feedback enables course correction in real time, allowing someone to push their boundaries and limitations beyond their ordinary experience, stretching, but not breaking. Note here that some activities do not have the ability to acquire immediate and unambiguous feedback from others. As a focusing mechanism, immediate feedback is something of an extension of clear goals. Clear goals tell us what we're doing; immediate feedback tells us how to do it better. Herein, feedback refers to a direct, in-the-moment coupling between cause and effect. If we know how to improve performance in real time, the mind doesn't go off in search of clues for betterment; we can keep ourselves fully present and fully focused and thus much more likely to be in flow. Tightening feedback loops enhances self-awareness of existing relationships.

E. **The challenge is appropriate to the skill (i.e., the challenge to skill ratio, risk to reward:** The activity undertake should be challenging and within someone's own perceived capability. It should also not be beneath one's current level of skill as this can breed boredom and apathy. Flow exists near (but not on) the mid-line between boredom and anxiety. The idea behind this trigger is that attention is most engaged (i.e., in the now), when there's a very specific relationship between the difficulty of a task and our ability to perform that task. If the task is too dull or easy, attention disengages (i.e., we stop paying attention), and action and awareness cannot merge. If the task is too hard, fear starts to spike and we begin looking for ways to extricate ourselves from the situation. Flow appears near the emotional midpoint between boredom and anxiety, in what scientists call the "flow channel"—the spot where the task is hard enough to make us stretch; not hard enough to make us snap. Essentially, the challenge needs to be slightly greater than the individual's present skills (or proficiencies). If someone can keep themselves in this state of dynamic tension then s/he will be most likely to drive attention into the now and maximize the amount of flow in his/her life. Here, risk can be generated by a learned or biophobic response triggered by a near and present danger (which can be both physical and psychological). Physical risks are not inert and cause physical harm. Psychological risks are inert and unable, unless accepted, to cause psychological harm; wherein, conditions make acceptance more/less likely. The defining difference between risk/peril and fear is the level of perceived threat and perceived control. During flow, experiencers have high actual control, and thus, a lowered perceived threat, regardless of whether there may or may not be any real threat.
   1. Flow is most often experienced mentally and physically, together, during activities with the following characteristics:
      i. Practicing a skill (education): Skill-learning is the training, development and acquisition, of skills. Practicing leads to the ability to do work.
         1. Doing a task with a skill (work): Perform tasks precisely with skill under pressure ("risk"). The ability to do work means that work can be done under risky conditions.
            a. Risking oneself (a challenge/failure condition while doing): Risk-taking is the courage to bring new ideas into the world and/or do a physical activity that involves some risk/peril.
   2. Engaging in these three categories of

experience (training, working, risking) facilitates the production of powerful neurochemical state-reactions that allows the brain to go deeper, into a full-flow (i.e., neurochemical dump) state.

2. **Creative flow trigger:** Facilitate an environment where creativity flourishes.
   A. **Pattern recognition (creativity):** When the brain links old information to new information, and arrives at an original idea; which, sets off a cascade of pleasurable neurochemicals. This is the creative-flow state. At a conceptual level,

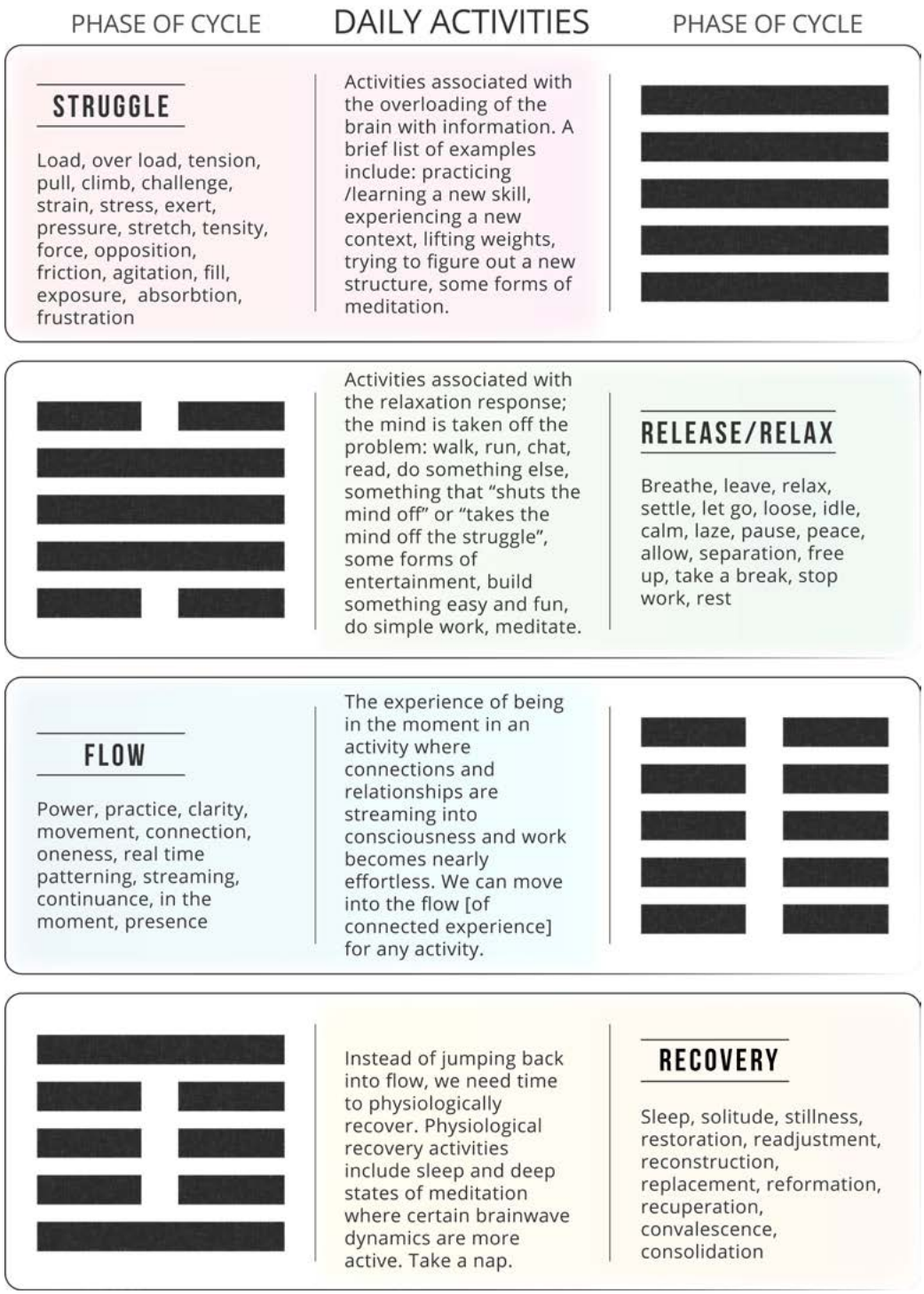

Figure 6. *Depiction of the flow cycle with four phases: struggle, release/relax, flow, and recovery.*

creativity is composed of pattern recognition and risk-taking. Pattern recognition is the brain's ability to link new ideas together.

B. **Novelty (new information):** Instead of tackling problems from familiar angles, go at them backwards and sideways and with style. Go out of "your" way to stretch your imagination. Massively up the amount of novelty in "your" life -- the research shows that new environments and experiences are often the jumping off point for new ideas (more opportunity for pattern recognition).

3. **Environmental flow triggers:**
   A. **Autonomy**: Individuals are more focused when they are in control.
   B. **High consequence (risk)**: The elevation of risk drives focus. As risk increases, two important neurochemicals are released from the brain that help us focus and perform better (i.e., they optimize focus and performance). Yet, in order to make progress, the risk needs to be perceived as a challenge [to be enjoyed] instead of a danger [to be recoiled from in fear]. There are mental (intellectual) risks, emotional risks, creative risks, social risks, as well as physical risks. Since survival is fundamental to any organism, the brain's first priority is to scour all incoming information for any sign of a threat and focus intently upon it. To reach flow one must be willing to take risks.
   C. **Rich environment (including novelty, complexity, unpredictability, and spontaneity)**: Flow can be triggered through a rich, sensory stimulating, and/or novel environment. A rich environment involves a combination of novelty, unpredictability, and complexity, all of which attract and hold our attention in much the same way as risk. Human brains are wired to pay extra attention to anything that they haven't encountered before. Novelty means both danger and opportunity. To our ancestors, a strange scent in the wind could be prey or predator, but either way survival required paying attention. Unpredictability means we don't know what happens next, thus we pay extra attention to what happens next. In other words, if we don't know what happens next, then we are likely to pay more attention to the next. When we are in a complex environment where there is a lot of salient information "coming at us at once", then our attention is more likely to be held upon the incoming sensory information. Spontaneous actions are well-known to trigger happiness and can also be a trigger of flow.
   D. **Deep embodiment:** Deep embodiment refers to the experience of total physical awareness where action and awareness merge. There are very few words for this experience other than the sensation of literally becoming a part of the flow of the surrounding world/environment. This state has often been linked to a feeling of oneness with your surroundings. We can experience deep embodiment by paying more attention to our sensory nerve inputs. Various types of meditation, agility training, video games, and awareness arts (e.g., martial arts) facilitate the development of a greater sensitivity to nerve stimulation.
4. **Physiological flow triggers:** Facilitate an environment where humans are physiologically healthy and in optimal physical form.
   A. **Physiological and neurophysiological health and optimization:** A healthy physiology, and particularly, neurochemistry (including flexibility in shifting into gamma brainwave states) can make the flow state more likely to experience, and also, more powerful when experienced.
   B. **Chemical supplements:** There are specific chemical supplements that can facilitate the onset and depth of the flow state, including but not limited to: caffeine, paraxanthine (metabolite of caffeine), tetrahydrocannabinol (THC), ketone di-ester (R)-1,3-butanediol (BH-BD) combined with ketone monoester d-β-hydroxybutyrate (beta-hydroxybutyrate, BHB), nootropic stacks, etc.
5. **Brainwave flow triggers:** Facilitate an optimal entrainment environment throughout the habitat (e.g., bio-cymatics, geo-cymatics, etc.).
   A. **Gamma brainwaves specific for the flow phase** (30hz and above) - are highly associated with being in the flow phase of the flow state.
      1. Meditation facilitates the production of gamma brainwave states. Long-term mediators have been shown to produce more gamma.
6. **Sociological flow triggers** (i.e., social flow triggers to experience group/shared flow): Facilitate an environment where education flourishes.
   A. Shared, clear goals.
   B. Serious concentration.
   C. Equal participation (and skill level).
   D. Sense of control.
   E. Shared risk.
   F. Familiarity and single-minded thinking.
   G. Good communication.
   H. Good listening.

I. Additive.

Both passion and the risk of consequence drive focus into the now. Hence, we need to pay attention to the things we are passionate about, and we need to remain attentive to situations and experiences of high consequence, if we desire more flow.

One of the easiest ways to drive attention into the now is the 'challenge / skills ratio' - when you approach a task, the challenge of the task should be slightly harder (or slightly exceed) the skills (or information) you bring to complete it (i.e., to bring to bear). Here, to find flow frequently, "you" want to constantly be putting yourself into situations where you are stretching, but not snapping. It is a slight gradient, but a gradient none-the-less. However, by doing this someone is essentially climbing the metaphorical ladder of escalating risk. As we push ourselves slightly farther day after day we eventually get to the edges of real physical boundaries and potential social consequences [in context]. As we seek greater challenge we encounter (or "run up against") capacity. Hence, one of the dangerous of flow is this escalating ladder of risk. But, the risks we take do not have to be physical risk, we can also take emotional risks, creative risks, and social risks. The brain itself does not differentiate.

From a design perspective these triggers may be seen as the principles of designing an environment where the state of flow is likely to occur more often and regenerate more quickly.

Of note, there are three major contributors toward the conscious mind's instability to define an element or solves problem. The three contributors are: conflicting information (psychological confusion); sensory overload (too much going on); and, the intellectual stifling emotion of fear. These are contributors to our inability to solve problems and define elements of problems. Oddly enough, a degree of frustration, sensory overload, and risk are also conditions that facilitate a movement into the state of flow.

Humans practice/train in order to get better at knowledge, skills, and activities in general. The carrying out of an intrinsically enjoyable activity can be done in a state of flow (Read: optimal felt experience). Through practice of various skills greater mastery/competence is achieved at that particular skills, which leads more easily to a flow type experience for engagement in that activity Entering flow while carrying out an activity also rapidly builds skills and ability with that activity. In other words, the developing of a skill will allow for a better flow-type experience with that skill, and experiencing flow while carrying out an activity will rapidly build competence/ mastery with that skill (i.e., flow is the often sought out idea of "super-learning").

QUESTION: *What societal design will facilitate flow among a population?*

2.1 Flow enabling and disabling categories

A.k.a., Categories of human optimization.

The common categories of life that can help or hinder (block) flow include:

1. **Physiological** quality and characteristics.
2. **Mindset and psychology** quality and characteristics.
3. **Social environmental** quality and characteristics.
4. **Physical environmental** quality and characteristics of the environment.
5. **Lifestyle**, as the things done daily (or, regularly).

2.2 Flow facilitating practices, technologies, and environments

A.k.a., Human optimization practices, biohacking, bio-hacking, personal growth, self-help, self-transformation.

Flow facilitating practices include the tools and techniques to produce more flow, well-being, and fulfillment in life. Flow is a complex psycho-neurological state that represents optimal conscious interface and co-control of the body interface with reality (full, or more complete immersion in real-/universal-world). Flow is a highly sought after and desirable state if handled well. The flow cycle has four phases, each of which can be optimized to produce more flow in our lives. Flow is one of life's highly enjoyable states of being. It is important to remember that humans have the ability to design the environment around them. In return, the environment can shape their life experience and increase the probability for flow.

There are a set of best practices, and even technologies that can assist the production and restoration of flow. More flow can be produced from the use of various technologies, many of which also facilitate (speed up and make more likely) human healing. Flow can be optimized through training and adaptive technologies. Here, the principle human optimization questions is: How do we change the body (internal environment) and external environment to change the signaling profile to optimize human performance and well-being?

When individuals feel their best, they perform their best. Universities and life-spaces ought to be environments that facilitate greater experiences of flow. Places where flow is integrated into everyday life. It is possible, particularly at university settings, given the freedom to access and use technologies and practices that facilitate the production, increased frequency, and most optimal restoration of flow in our lives on a whole student population (of campus) basis.

NOTE: *The general purpose of human optimization (a.k.a., "biohacking") is to use available technologies and natural principles*

to optimize biology to experience more health, well-being, and flow in life. Effectively, biohacking is changing the environment around "you" and inside "you" so "you" have more control over "your" biology. Biohacking is all about the optimization and self-control of [one's own] biological systems. "Biohacking is about finding shortcuts that will take you to an optimal state of energy and strength so that you can unlock the best version of yourself." (Asprey, 2023)

It is possible to cultivate more flow in life through a better understanding of natural principles and a better arrangement of life circumstances, materials, and technologies. There are technologies that will get people into flow states more quickly and help them recover more quickly afterward. There are specific configurations of the environment that allow for more flow in life. It is possible to optimize the stages of the flow cycle (and therein, flow) through the optimization of (i.e., optimizing the well-being of human beings requires optimization of):

1. **SLEEP - Optimization of flow by optimizing sleep (restoration phase of flow cycle):**
   A. An environment that optimizes for pre-sleep and sleep.
      1. Appropriate temperature and humidity.
      2. Appropriate bedding.
      3. Appropriate sensory environment (e.g., red light at night, no disturbing noises or motions, etc.).
2. **FOOD - Optimization of flow by optimizing of food:**
   A. Optimization of nutrient consumption over time in a complex feeling-state of [need-fulfillment] 'satiation'.
      1. Appropriate foods and water.
         i. Species appropriate diet - to live optimally, the optimal nutrition must be eaten.
         ii. Sufficient supplementation - to maintain a species appropriate diet, and/or to improve upon a species appropriate diet. Supplements may include, but are not limited to: collagen, minerals, micronutrients, etc.
         iii. Appropriate meal timing - to live optimally, nutrition must be eaten at (generally) the appropriate time(s) of day.
         iv. Optimization of water - to live optimally, the optimal water must be consumed. Relatively low deuterium water optimizes mitochondria. Water with appropriate electrolytes (a.k.a., minerals) optimizes conducting electrical impulses across cells, regulating fluid balance, and supporting various bodily functions. Electrolytes are minerals that, when dissolved in water, form electrically charged ions (i.e., elemental atoms that have one more or one less electron, resulting in a net [electron quantity] "charge".
   B. Optimization of mitochondria and bacteria (general).
   C. Optimization of blood sugar (and insulin) by monitoring blood sugar using a continuous glucose monitor.
3. **ENVIRONMENT - Optimization of flow by optimizing environmental exposures:** this includes giving the body positive exposures as well as not exposing the body to things that make it weaker.
   A. Optimization of chemical exposure.
      1. Appropriate peptides - are molecular strings of amino acids that act as signaling molecules and replace tissue.
      2. Reduced toxins - are molecules that harm human cellular functioning.
   B. Optimization of sunlight - sufficient daytime sun exposure and not over exposure (i.e., burning). Appropriate and sufficient light during the day is necessary for optimal daytime and sleep functioning. The sun represents the single largest energy input into the body, and it has for millions of years.
   C. Optimization of artificial light.
      1. Yellow, orange and red lights at night (except, in cases of emergency).
      2. Additional red, infra-red, and other frequencies of light applied to the whole body. These include, but are not limited to red light tables, red light squares, etc.
   D. General environmental optimizations may include:
      1. Optimization of the ambient environment (i.e., temperature, humidity, etc.).
      2. Optimization of the acoustic environment.
      3. Optimization of the visual environment.
      4. Optimization of the daily life-radius.
4. **ELECTROMAGNETICS - Optimization of flow by optimizing electromagnetic exposures:**
   A. Pulsed electromagnetic fields (PEMF).
   B. Earthing (a.k.a. grounding, touching the ground, touching an electrical conductor touching the ground).
   C. Electrical [muscle] stimulation (EMS).
5. **MEDITATION - Optimization of flow by optimizing meditation (release/relax phase)**: meditation is significantly necessary for optimizing human potential. In a sense, meditation is mental fitness. Meditation is inward conscious awareness un-/

focus -- as in, focusing awareness inward (toward the expansion of thoughts or toward the touch of material) and also unfocusing of awareness (on any ideal (thought) or material (object). Consciousness may process thoughts and move awareness through materiality. To meditate necessitates specific conditions and may be facilitated by various technologies:

A. **Brain entrainment sounds/tones (a.k.a., neural entrainment or brainwave entrainment; e.g., binaural beats, monaural beats isochronic tones, infra-liminal sounds, spatial angle modulation sound, tuning forks, instruments, etc.)** - is a process that involves the synchronization of neural oscillations (patterns of electrical activity) in the brain with external stimuli, such as rhythmic sounds, light pulses, or electromagnetic fields. The idea is that when the brain is exposed to repetitive and rhythmic sensory stimuli, it tends to synchronize its electrical activity with the frequency of that stimulus.
   1. **Light and sound machines** - these devices flash lights toward the eyes (closed or open) at various frequencies and may be combined with sounds at the same frequency. Light can also be flashed on various points on the face.
   2. **Neurofeedback training (and biofeedback training)** - eventually, able to transition between the different states through complete, fluid brain control. They can suspend themselves in a specific state (leveraging a specific brain wave). Neurofeedback is a technique that provides the user with a recognizable signal of the brainwave state that they are currently in. The user has control over the fedback signal by controlling their brainwave state (by keeping it stationary and/or moving it to a different brainwave state).

B. **Meditation techniques:** Specific types of meditation, for example, the following four basic/foundational meditations combined with some "breath awareness technique".
   1. **Breath awareness control** - maintain awareness of the breath (following a breath technique), with a focus on the breath only. If the mind wanders, imagine it being cleared like a whiteboard and then return to the awareness to the breath. This is an awareness technique; it is a breath awareness technique. Breath awareness may be mixed with other meditation methods, such as progressive relaxation (i.e., have an awareness of the breath while progressively relaxing all the various parts of the body). This is a technique for controlling the focus of awareness. Note that in normal everyday and most meditative breathing, the inhale and exhale ought to always be through the nose, and should not incorporate the mouth. During states of significant or unique physical experience (intense fitness), the breathing may incorporate the mouth. There are many forms of breath control. Breath awareness provides consciousness with control over breathing, whereupon over time, the breath technique becomes autonomous. Four common breath awareness-control techniques are:
      i. 3 inhale, 3 hold, 4 exhale, repeat (note: this is the most common and useful breath technique).
      ii. 3 inhale, 3 hold, 7 exhale, repeat.
      iii. 5 inhale, 5 hold, 5 exhale, repeat (a.k.a., triangle breath)
      iv. Rapid deep breathing (for some number of seconds) with a longer inhale, then exhale, with a breath hold for as long as possible (note: never do this under water, or with too much intensity while walking, because it is possible to become unconscious for a few moments while doing this).
   2. **Progressive relaxation** - move "your" awareness around "your" body and relax each part of "your" body, slowly, until the whole body is relaxed. Move through every macro and micro part of the mody (flowing awareness throughout the body, generally from heat to toe, and reverse. The tissues can be relaxed, the organs can be relaxed, the bones can be relaxed, the blood can be relaxed. As awareness is moved through the body relaxing every part of it down to the cellular level, the awareness may become white light, healing and regenerating as it is moved through by consciousness. Over time, a practitioner of this meditation may get to the point that s/he can put the body consciously to sleep, and/or begin to gain significant awareness and control over its nervous system.
   3. **Pore breathing (a.k.a., skin breathing, chi breathing, etc.)** - first imagine breathing air in and out through all "your" skin. Over time imagine the air turning into light, and breathing the light in and out of all the pores of the body. Then, over time, increase the vibration of the light that is breathed

in and out. This exercise may also be done by imagining vibrating “your” whole body slightly as “you” imagine the light vibrating, and also, separately, train by vibrating only “your” envisioned “energy” [light] body. Pore breathing may be done in sequence with a breath technique. Note that this technique can be applied to individual organs and brain regions (i.e., breathing light into these organs). This is a technique for gaining conscious control over the vibratory state.

4. **Thought streaming (a.k.a., zen no-mind meditation)** - focus on breathing while moving thoughts through “your” mind. As a thought comes up, imagine moving it out of “your” mind; eventually, get to the point where thoughts "steam" through the mind (arising, connected to another thought, then moving through and out of awareness. Do not become affixed or attached to any thought (or expand any thought) simply move thoughts through and out of "your" mind, after awareness of the thought has fully arisen. With concerted practice, eventually, no thoughts arise, not even that of breath. Through practice, this is one technique for discovering consciously patterns of contradiction/conflict during the day that were previously not perceived; in other words, this technique improves daily pattern recognition and during the meditation itself, patterns previously unrecognized may become thoughts that stream through the consciousness awareness[ing]. Additionally, this is a technique for releasing the focus of the self from this real-world physical body.
5. **Color streaming and attachment disconnecting** - color streaming involves imagining an egg of color (an "aura") around "your" body. Then move colors in PROYGBIV order (or reverse) order through the "auric energy field". Imagine pulling/pushing/moving red light from above the head to below the feet. Then go the opposite way with the next color (pink(P)>red(R)>orange(O)>yellow(Y),..., or reverse). Attachment disconnecting involves moving "your" focus of awareness around the physical area of the "auric energy field". Move it spirally (note: L / R direction doesn't matter) around the body. When a feeling of friction ("stuckness") is encountered, then in that area imagine a cable connecting from outside the aura in-to that area of friction. Imagine white light at the point of the friction as "you" disconnect the cable, and release it back to someone/something outside of "your" field. There is no need to focus on who/what it connects to. If a thought arises while disconnecting, allow it to arise, and then let it go. Attachment disconnection is a technique for releasing the focus of the self from this real-world physical body.
6. **PHYSICAL FITNESS - Optimization of flow by optimizing physical fitness:**
   A. **Physical exertion (functional movement):**
      1. Weight/resistance training.
      2. Interval-type training:
         i. High-intensive interval training (HIIT) - on off type training. For example, exert for 20 seconds, rest for 10 seconds, then repeat for 8 intervals.
         ii. Reduced exertion high-intensity interval training (REHIT).
         iii. Varying intensity interval training.
         iv. AI guided cycling
      3. Exercise with oxygen (EWOT) - breathing hyperoxic gas through a mask while exercising. An EWOT system uses an oxygen concentrator to fill up a bag with oxygen, which is breathed while exercising. There are two forms of EWOT.
         i. Pure EWOT - just breathing high oxygen air.
         ii. Contrast EWOT with low and high oxygen - breathing both high oxygen air and low oxygen air at separate intervals. A contrast EWOT system uses two bags; wherein, one bag is filled with oxygen and the other maintains the low oxygen air.
            1. Contrast EWOT may be combined with HIIT on an exercise bicycle. An example procedure of contrast EWOT combined with HIIT on an exercise bike is as follows:
               a. Peddle for 3-4 minute as a warm-up with high O_2.
               b. After the warm-up period, peddle at an appropriately comfortable speed with low O2 until body O2 saturation is between 85-80%. Note that people with better physical fitness will take a longer period of time to decrease their O2 saturation. Adjust the speed at which “you” are peddling so that the O_2 saturation is reduced to between 85-80% within about 4 minutes.
               c. Then, switch to high O_2 and peddle as fast as possible for 20-30seconds.
               d. Continue peddling gently with high O_2

for 30 to 60 seconds.
e. Switch to low O_2 and peddle gently until body O_2 saturation is between 85-80%.
f. Then, switch to high O_2 and peddle as fast as possible for 20-30seconds.
g. Repeat process for a total of 4 intervals of fast peddling, then peddle gently to finish with high O_2 for 3-4 minutes more.

4. Blood-flow restriction band training (a.k.a., pressure cuffs) - involves bands that are placed around the upper arms and legs and gently restrict blood flow while gentle exercises are done for less than 20 minutes.
5. Rebound (trampoline) training - jumping up and down on a trampoline.
6. Whole body vibration platform training - either just standing on a vibration platform or doing gentle exercises upon the vibration platform.

B. **Thermal extremes exposure:**
1. Cold immersion (i.e., ice baths, cold swim, cold plunge, cold showers).
2. Hot sauna (e.g., infrared sauna, dry sauna, etc.). Note that it is important to be cautious with wet saunas, as: they can be moldy; they are often cleaned with harsh chemicals linger after cleaning; and the water used will be inhaled, which if there isn't a quality water filter in the system, may be unsafe.

C. **Physiological recovery:**
1. Massage (in the form of an electric percussion massager, and/or family/friend).
2. Hyperbaric oxygen therapy - enter into a pressurized chamber and breathe pure oxygen. Studies show that hyperbaric oxygen therapy can increase the speed at which wounds heal (Lam, 2017), reduce inflammation (Thom, 2011), increase mitochondrial biogenesis (Suzuki, 2017), and improve VO_2 max (Hadanny et al., 2022).

Of note, if "you" want to see consistency with beneficial health practices, and particularly, human optimization technologies, then "you" need to:

1. Know that bio-hacking requires some degree of bio-tracking (i.e., bio-monitoring), such as blood work monitoring, heart rate monitoring, glucose and insuline monitoring, etc.
2. Have access to the technologies within your walkable life-radius. In the market-State, generally, that means "you" need access to the technologies in "your" home, because otherwise "you" will likely have to drive somewhere to rent/use the technologies, thus reducing the consistency with which they used. In community, that means you need access to the technologies within the local 15-20min walking life-radius of the local habitat, and have access to more frequently used technologies in your home.

2.2.1 Sleep optimization techniques

> **NOTE:** *There are things that seem like "hacks", but they are actually not, they are just realigning our biology. For example, exposing "your" eyes to the sun in the morning and throughout the day, and not having lights on at night of a color other than red (or orange).*

Sleep, restoration, is one phase of the flow cycle. Sleep optimization is one the most important states of life, because a lack of sleep affects all aspects of one's life, affects recovery and performance. Note, someone who takes longer than approximately 10 minutes to fall asleep on any night has technically had insomnia for that night. What someone does during the day can significantly impact the quality/efficiency of sleep at night.

The following key terms relate to sleep science:

1. **Sleep onset latency** - the amount of time it takes to fall asleep; with approximately greater than 10 minutes being an event of "insomnia").
2. **Sleep pressure** - the feeling of needing/going to sleep.
3. **Sleep efficacy (a.k.a., sleep efficiency)** - how effective the period of sleep was in facilitating deep restoration of the body. Sleep efficacy gives an overall sense of how well someone slept. Sleep efficiency refers to the percentage of time a person sleeps, in relation to the amount of time a person spends in bed. Sleep efficacy can be measured, in part, by:
   A. Subjectively, through individual body feeling.
   B. Objectively, through monitoring of:
      1. The duration of time spent sleeping.
      2. The duration of time spent in each stage of sleep.
      3. Brain electromagnetics.
      4. Brain/body chemicals.
4. **The roll-over signal** - the feeling of needing to role over (and change the position of the head) to continue to fall asleep. The roll-over signal can feel like a pressure (leading up to a dull ache) that is corrected by rolling over and repositioning the head in relation to gravity.
5. **Glymphatic system** - the lymphatic system of the brain that cleans out waste from the brain. The head repositions itself in various ways to help clear out the glymphatic system most efficiently.