## Guide

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## CHAPTER ONE

### *Chapter:Worldviews*

#### 1.1**About worldviews**

*Notes*

This is a note for “About Worldviews”

#### 1.2**Truth**

**Correspondence Theory of truth**

**Coherence Theory of truth**

#### 1.3**Models**

**Why models matter**

**We use models in many ways**

*Synopsis*

We use models both explicitly and implicitly to describe just about every aspect of our world. Claims of divine revelation aside, most religions are based on models. Models are an inherent element of psychology, a means of expression based on commonly understood terms and symbols. Jung

**Models help us understand reality that is too complex to understand directly**

*Synopsis*

We can often only understand the world through models, representations of a reality that is too complex or indeterminate to directly comprehend. In Myths, Models, and Paradigms, XX Barbour describes a model as “a symbolic representation of selected aspects of the behaviour of a complex system for particular purposes”, and “an imaginative tool for ordering experience, rather than a description of the world.”

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[1] Myths Models and Paradigms — p. 7

**In science, models are often mechanical constructs**

*Synopsis*

Models can be, and often are, mechanical— they illustrate some phenomenon in conventional terms of time and space (for example, the model of the atom with electron shells in orbit around the nucleus)

**Standard model of particle physics, intro**

#### 1.4**Epistemology 1**

*Synopsis*

We can reasonably speak with certainty about what we currently know about the state of matter. It is therefore credible to hold at least provisional epistemic certainty about much of science (although less so, probably far less, of philosophy).

## CHAPTER TWO

### *Chapter: Contemporary Western Worldview*

#### 2.1**Classical western model**

*Synopsis*

Introduces the basics of classical physics as described by Newton, Maxwell, and Einstein— a conception of reality that was unchallenged by the vast majority of scientists and philosophers for almost three centuries— and continues to be the foundation of the dominant western worldview held by most contemporary scientists and philosophers.

**Brief summary of the scientistic worldview**

**Accidental, random**

**Physicalism**

*Synopsis*

Physicalism is more of a fundamental presumption than a model, but it has some characteristics of a model (explanatory framework, albeit with boundaries that cannot be breached)

#### 2.1.1**Brief history of scientistic worldview**

**Aristotelian Origins**

*Synopsis*

Introduces and summarizes the basic elements of Aristotelian conceptions of the universe and how they dominated western thought for two thousand years.

**Copernicus, Descartes, Galileo and Bacon**

*Synopsis*

The Aristotelian worldview began its collapse with the heliocentric cosmology introduced by Copernicus and the objectification of nature introduced by Galileo and Bacon.

**Revolutions of Copernicus and Descartes**

**Copernican and Cartesian revolutions**

**Copernican revolution: transition to to disenchantment**

**Heliocentrism and perennial philosophy**

**Appleby, critique of Cartesian worldview**

**Copernican model had huge consequences**

**Francis Bacon**

**Galileo Galilei**

**Galileo removed qualities from science: Phillip Goff**

**Galileo's conception of mathematical reality**

*Synopsis*

Galileo was the first to propose that the world could best (only?) be described through mathematics.

**Objectification of reality**

*Synopsis*

Galileo’s premise that the world can only be meaningfully described through mathematics had the consequence of objectifying the world, and eventually led to the belief that only that which can be measured is real.

#### 2.1.1.1**Newton, Maxwell**

**Physics, the king of science**

**Einstein**

#### 2.1.2**Neo-Darwinism**

**The Modern Synthesis**

**struggles among organisms**

#### 2.1.3**Standard Models**

**blank**

**Standard Cosmological Model**

**The Big Bang**

**excerpts from An Experimental test of non-local realism**

#### 2.1.4**Consciousness is a by-product of matter**

#### 2.2**Classical Philosophies**

*Synopsis*

Section describes the relevant philosophies in play in the early 21st century. Philosophical materialism dominates the picture; panpsychism and Russellian monism are gaining traction. All of them have a common denominator of being approximations.

**Philosophical materialism**

*Synopsis*

Materialism or physicalism is the dominant worldview of contemporary science and philosophy.

**neoplatonism, quotes about**

*Synopsis*

Introduces and summarizes the history and basic elements of neoplatonism.

**Panpsychism, broadly held**

*Synopsis*

Presents the basic perspectives of panpsychist ideas; lumps them together as appropriate (not splitting minor hairs). Basic theme is that mind/spirit/qualitative energy underlies all that is.

**Esoteric philosophies**

*Synopsis*

Examines broadly interpreted select versions of esoteric philosophies, particularly Steiner, Bailey, etc. all from a high level as viewed in early 21st century— mostly the commonalities as they relate to the central theme of a mind-centric universe.

## CHAPTER THREE

### *Chapter: Challenges to the Western Worldview*

#### 3.1**Esoteric traditions**

**Theosophical/metaphysical currents**

*Synopsis*

Theosophical and metaphysical traditions have paralleled the scientistic worldview for centuries and have had significant influences on both religious and scientific conceptions (through the early 20th century).

**Jacob Boehme, 17th century thesophy**

*Synopsis*

The origins of theosophical conceptions trace back to Jacob Boehme.

#### 3.2**Quantum Mechanics**

*Synopsis*

The bizarre discoveries of quantum mechanics, and particularly of non locality, demonstrated conclusively that the classical conception of reality was incomplete. The depth of that incompleteness is controversial, but here is held to be far more than most contemporary scientists and philosophers believe it to be.

**Does contemporary physics need a new worldview?**

**The "naive view of reality"**

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#### 3.3**more general challenges to materialism and neo-darwinism**

*Synopsis*

Expands on the idea that there are a virtually infinite number of “worlds,” each of which is created by a conscious being. Many of these worlds overlap— we really can plan on tomorrow being much like today— but very many of them do not. We each are participants in a reality that is shared by others, but we are also unaware of most of the other realities similarly shared by other beings.

**extended evolutionary synthesis**

*Synopsis*

The standard model of neo-Darwnism has come under increasing fire over the last several decades. One of the challengers that has gained traction with at least some biologists is termed “extended evolutionary synthesis”

**Gould: Tanner Lectures**

*Notes*

*Challenges to Neo- Darwinism and Their Meaning for a Revised View of Human Consciousness*

STEPHEN JAY GOULD,

THE TANNER LECTURES ON HUMAN VALUES

**Reductive Materialism-- Nagel**

**Against materialism**

**Rupert Sheldrake on materialism**

**Consciousness: the greatest challenge to the classical worldview**

**Consciousness and Materialism**

#### 3.4**Standard model still prevails**

*Text*

One of the primary criticisms of Capra’s Tao of Physics, and indirectly of the new worldview, is that the Standard Model of particle physics is now almost universally accepted by the physics community, with alternative views such as the Bootstrap Model advocated by Capra pushed into obscurity. Oddly, none of the essays in “…Worldview…” addressed this issue. One possible explanation is that Capra and others expect that their conception will be borne out in mathematics, that the truth of the matter requires mathematical support or description. Why this must be so is not clear. It does not, however, seem unreasonable that a consistent and self-contained model of particle physics could exist in harmony with a broader, some would say mystical, perspective of mind and consciousness.

## CHAPTER FOUR

### *Chapter: An emerging model: mind is central*

WE ARE IN the early stage of a new paradigm or worldview wherein what we variously call consciousness, mind, or spirit will be understood to be a fundamental fabric of the Universe. We, of course, have absolutely no idea what that means to any degree of precision. For now we have little choice but to accept broad generalizations and be open to considering the possibility that the Universe is far more complex than we can currently understand, and possibly more than we can ever imagine.

Much like the heliocentric worldview that was introduced in the 16th century— and took more than two centuries to become fully adopted— this new worldview is now broadly rejected by contemporary scientists and academic philosophers. But it is increasingly being explored and adopted by a growing number of thinkers, piece-by-piece— something like a world-wide puzzle or hologram that comes into increasing focus as more pieces are introduced and become incorporated into the overall fabric of understanding.

This is only the beginning of what will likely be a centuries-long project to construct a cogent worldview that can accommodate all of what we know, not just what we can measure. This essay, a small collection of some of the elements of an incredibly complex picture, is offered in the hopes of stirring the intuition and imagination of some who are able.

#### 4.1**Nagel: An emerging middle path between materialism and theism**

*Text*

Tertium quid (“a third thing that is indefinite or undefined but that is related to two definite or known things”)

This emerging middle path stems from several sources, including

Although it has been foundational to scientific thought for some three hundred years, some philosophers have challenged the program reductive materialism philosophical been coming under increasing challenges over the last few decades.

* “As a way of marking the boundaries or the territory in which the search for such understanding must proceed, I would now like to say something about the polar opposite of materialism, namely, the position that mind, rather than physical law, provides the fundamental level of explanation of everything, including the explanation of the basic and universal physical laws themselves. This view is familiarly expressed as theism, in its aspect as an explanation of the existence and character of the natural world.”[1](#footnotes.xhtml#fn1)
* “However, I do not find theism any more credible than materialism as a comprehensive world view. My interest is in the territory between them. I believe that these two radically opposed conceptions of ultimate intelligibility cannot exhaust the possibilities. All explanations come to an end somewhere. Both theism and materialism say that at the ultimate level, there is one form of understanding. But would an alternative secular conception be possible that acknowledged mind and all that it implies, not as the expression of divine intervention but as a fundamental principle of nature along with physical law? Could it take the form of a unified conception of the natural order, even if it tries to accommodate a richer set of materials than the austere elements of mathematical physics?[2](#footnotes.xhtml#fn2)
* “Both theism and evolutionary naturalism are attempts to understand ourselves from the outside, using very different resources…. But the shared ambition of these two approaches, to encompass ourselves in an understanding that arises from but then transcends our own point of view, is just as important as the difference between them.[3](#footnotes.xhtml#fn3)
* “To sum up: the respective inadequacies of materialism and this as transcendent conceptions, and the impossibility of abandoning the search for a transcendent view of our place in the universe, lead to the hope for an expanded but still naturalistic understanding that avoids psychophysical reductionism. The essential character of such an understanding would be to explain the appearance of life, consciousness, reason, and knowledge neither as accidental side effects of the physical laws of nature nor as the the result of intentional interventions in nature from without but as an unsurprising if not inevitable consequence of the order that governs the natural world from within.[4](#footnotes.xhtml#fn4)

**An emerging alternative worldview**

#### 4.2**Language is at best an approximation**

*Synopsis*

Language, words, math, cannot completely convey the breadth and depth of the way things really are (other than the trivial sense of mathematically consistent or correct). We must live with approximations

#### 4.3**Contemporary variations, non-materialistic**

*Synopsis*

Explore select examples of contemporary ideas presented as a counter to reductive materialism

**Biocentrism**

#### 4.4**A new conceptual revolution**

*Text*

“To construct an adequate non-Cartesian philosophy would take an enormous amount of work. However, I believe there is reason to think that if we were to undertake that project it might lead to a conceptual revolution equal in magnitude to the 17th century Cartesian one. In particular, it might lead to conceptions of the world, and of human nature, which differ as much from the Cartesian conceptions as the latter did from medieval conceptions. So much so that we would, perhaps, no longer want to use the words”consciousness” and “matter” (except in their everyday sense, of course).[5](#footnotes.xhtml#fn5)

#### 4.5**Model-dependent realism**

#### 4.6**The primacy of consciousness**

*Synopsis*

Consciousness is central, fundamental to all that is. There can be no reality without consciousness. We can only dimly glimpse at just what that means, but even a brief glimpse can be sufficient to act on.

*Text*

This essay proceeds from the assumption that, broadly and to a first approximation, consciousness is a fundamental property of all that exists— that the universe and all it contains is conscious, albeit in immensely varying degrees. The idea of fundamental consciousness is not new. It has been part of western thought for centuries in the forms of philosophical idealism, variations of panpsychism, and a variety of esoteric and metaphysical traditions. With the discovery of the quantum nature of matter, however, questions about the fundamental nature of consciousness took on a new and, for many, more serious consideration.

A consequence of such consideration has been a virtual explosion during the last few decades of well-researched articles, books, and technical papers about various aspects of fundamental consciousness and supporting arguments— not to mention a plethora of more esoteric and sometimes sensationalized ideas about or based on the notion of universal consciousness. We A brief and select summary of the ideas expressed in recent literature

#### 4.7**Elements of one view of emerging paradigms**

*Synopsis*

There is no single or dominant version of the various world views and themes that have been emerging over the last several decades. The elements included in this essay are believed to be consistent with similar summaries, but they are only a small piece of a very large picture.

#### 4.8**The basic elements are presumed; but what are we to do with it?**

*Synopsis*

The basic elements of a new paradigm are presumed to be more or less true. No significant effort will be made to defend the notion of a such a new paradigm. What is at stake, however, is what we can or will do in light of that new perspective, both individually and collectively.

#### 4.9**The Universe as Mind**

**Spirit and mind are fundamental**

*Synopsis*

There exists a fundamental, qualitative aspect known variously and inadequately as mind or spirit.

To a first approximation, sufficient for the time being, the words ‘mind’ and ‘spirit’ can be used interchangeably.

**Mind/spirit and matter are a continuum**

*Synopsis*

As one esoteric source put it: spirit is matter at its most refined, matter is spirit at its coarsest.

#### 4.10**Basic tenets of an emerging paradigm**

*Text*

* Truth is elusive; a substantive, sustainable conception is likely to include “deep truths” wherein the opposite of a true statement is also true.
* .
* All sustainable ideas about the nature of reality are, at least for now, only approximations of something that is much deeper and broader than most of us can presently imagine. Sustainable ideas will, paradoxically, be simpler and more complex..
* We are not in a place where we can reasonably expect to clearly define any given aspect of a broader worldview. The best we can achieve is a broad synthesis in which all of the fundamental pieces can be accommodated, albeit to perhaps widely varying degrees of specificity and completeness. Models are all we can reasonably expect to guide us, now and perhaps forever. Certainty is found in only the most trivial of things.
* We cannot fully understand or describe this territory, these models; we must be comfortable with maps of it. Different maps can be equally viable— they are simply alternative ways of perceiving the world (although this is not an apology for relativism, as some maps are better than others).
* Materialism is partially correct: advanced consciousness cannot occur without a complex brain. But materialism by itself is insufficient to account for consciousness.
* The continuum can be approximated by matter as energy at its lowest potential and spirit as energy at its highest.
* Spirit can, among much else, be considered as a supervening force towards greater complexity and awareness— a teleos of sorts. The supervening aspect of spirit is a force towards greater complexity and awareness.
* Deep or substantive understanding can only be perceived individually; it cannot be expressed adequately through logic or language.
* The unique aspects of human consciousness, abstraction and advanced tool-making, are of little cosmic or ultimate consequence. Experience and a sense of connection can represent or be higher levels of awareness than abstraction and tool-making.
* The classical conception of reality is a a hindrance to greater awareness. We are at this point in our exploration much like Flatlanders contemplating three-dimensional objects.
* Panpsychism, broadly interpreted, is the closest philosophical perspective with classical roots that more or less aligns with our fledgling understanding of mind, consciousness, and matter.
* Human intelligence is considerably different from other highly intelligent animals, particularly in our obsession with abstraction (many of us are willing, sometimes eager, to die for ideas) and our advanced capacity for tool-making (historically led by weaponry). But those characteristics do not solely define advanced intelligence in any cosmically-sustainable manner. It could very well be, and under the worldview considered here it is accepted that, humans are but one of several lines of advanced intelligence currently living on earth. Elephants and cetaceans— particularly the odontocetes— must be included in any meaningful account of advanced intelligence.
* Individuals have a capacity for intuitive understanding that bypasses the channels of logic and method.

#### 4.11**Science is necessary but by itself insufficient**

*Synopsis*

Science provides important knowledge about the nature of the physical world. Without science, there could be no advanced technology. But science can only confidently assert the truth about that which can be measured. Although science cannot by itself provide a meaningful understanding of consciousness and subjective phenomena, it must be in alignment with any serious proposal about an element of a broader worldview. Science will not provide the final answers to many fundamental questions, but those answers must at the very least not be contradicted by science.

#### 4.12**Humans are not the only species on earth with high level cognitive capabilities**

*Synopsis*

Humans are only one of several lines of highly intelligent animals on earth.

#### 4.13**A Central Order**

*Synopsis*

The notion of a central order to all that exists is a fundamental premise of this thesis. Whether it is the unus mundus from Jung and Pauli, the central order supposed by Heiseberg, or any of the conceptions held by various spiritual traditions, all are more or less consistent with the idea that something indescribable underlies or is woven throughout reality. That this underlying fabric consists of both material and non-material aspects is a belief that is at first glance no more or less credible than the all but universal contemporary belief that reality is exclusively material.

Explore and defend the premise that there is a central order to the universe; that this central order includes non-material dimensions; and that consciousness can only be understood in the context of a relationship between material and non-material dimensions. Efforts to understand consciousness, or anything that stems from consciousness, through a strictly material lens is doomed to failure— much like trying to understand magnetic fields by examining only one pole of a magnet.

*Notes*

The idea of a central, defining order at work in the universe has been at the foundation of philosophy and science since the Greek philosophers moved us past the idea that the world was controlled by arbitrary and capricious gods. The very core of scientific thought is the presumption that the universe is under law, that all things happen only through one or more explicitly definable laws.

**part of western thought for millenia**

*Synopsis*

The idea that a central unifying order underlies our universe and all it contains has been a persistent theme throughout the history of western thought.

**Introduced by Pythagorus**

*Synopsis*

The Greek philosopher Pythagorus introduced the word cosmos as a conception of an ordered universe. Accepted by Aristotle [expand with other ideas from the period]

**Foundational to Aristotle's cosmology**

*Synopsis*

Aristotle’s conception of cosmology dominated western thought for some 2,000 years. Refined by Ptolemy for astronomical calculations, the basic ideas of Aristotle about the nature of the world remained more or less unchanged through that period.

**Cosmological conception changed with Copernicus**

*Synopsis*

Copernicus’ treatise introducing the heliocentric concept quickly led to sweeping changes in cosmological thinking.

**Humboldt's Kosmos**

*Synopsis*

Humbolt’s Kosmos, published in 1845, brought the idea of an ordered universe into the domain of public thought. Humans and nature were all part of a much greater fabric.

*Notes*

[see Introducing Humbolt’s Cosmos].

**central order requires consciousness**

**Quotes on central order**

**Heisenberg on central order**

#### 4.14**A new naturalism**

*Synopsis*

A fundamental conception underlying this essay is naturalism, the belief that all that exists is physically manifested, that there is “no ontologically distinct and superior realm (such as God, soul, or heaven) to ground, explain, or give meaning to this world.”[1] But an acceptance of naturalism, even broadly considered, is balanced by a belief that some sort of qualitative aspect or dimension is as fundamental to matter and energy as mass or charge

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[1] Jerome A. Stone: “What is Religious Naturalism?, p. 1

#### 4.15**Limits of language**

*Synopsis*

We have no choice but to use words in expressing these ideas, but we must constantly bear in mind that words are simply part of a map; they are not the territory. And we are only beginning to explore the map— a meaningful understanding of the territory is probably out of reach for most of us at this time. Just as the Flatlanders could only conceive of a sphere in two-dimensional terms, language is simply not up to the task of such an exploration in any depth. Limited as they may be, however, words are all we have for common expressions such as this essay. We must nonetheless remember that the territory will be much richer and more complex than the map and that words are only approximations of deeper perceptions that are inherently subjective.

*Text*

#### 4.16**Current paradigms**

#### 4.17**The Galileo Commission**

*Notes*

https://galileocommission.org

Following widespread consultation with 90 advisers representing 30 universities worldwide, we have published the Galileo Commission Report, written by Prof  Dr Harald Walach and entitled **Beyond a Materialist Worldview – Towards an Expanded Science**.  The report has been widely endorsed as a groundbreaking document and we encourage you to read it for yourself and spread the word among your professional network.  Summaries  of the argument are available in a number of languages.

Summary Report: https://galileocommission.org/wp-content/uploads/2020/04/GC-Report-Summary.pdf

#### 4.18**A complicated materialism**

*Notes*

See Ann Taves about “complicated materialism”, “a bigger model of materialism”

#### 4.19**Cosmology**

#### 4.20**Non-material dimensions (NMD) are real**

*Synopsis*

Explore the thesis/assertion that the properties of the world include non-material dimensions, and that these dimensions are inextricably connected to consciousness: consciousness cannot exist without these dimensions, and they can only be understood (to an approximate level) through higher consciousness.

*Text*

\* Consider/explore the notion that consciousness depends on both material and nonmaterial dimensions; it is not possible to be conscious without a nervous system (material) and a connection to the nonmaterial (requires, very probably, that evolution is inextricably connected to the nonmaterial— how else could immensely complex neurological systems evolve?)  
\* Present a broad case in support of the assertion that the universe includes real, knowable subjective dimensions and then to explore some of the potential implications and consequences were such a worldview to become more commonly accepted.

The notion of non-material dimensions is implicit in virtually all philosophical, religious, and psychological thought. It may also stem, at least in small part, from a reluctance to accept the materialist presumption that the entirety of reality is physical in nature. Beyond our bodies, all of the things that make us human are subjective in nature. Love, compassion, virtue, and an immense range of other characteristics (as well as their antitheses) are impossible to measure and therefore cannot be considered material. But whence do such things come? Are they a wonderful illusion with no inherent meaning, the result of an incredibly serendipitous but nonetheless accidental evolution of electro-chemical reactions? Are they gifts from an anthropomorphic God? Or is there something else, a largely unrecognized aspect of the universe that accounts for the immense breadth and depth of subjective human characteristics and experience?

* Non-material dimensions are real and at least partially knowable, although only through higher levels of consciousness. Intuition is the gateway to perceiving/understanding non-material dimensions.

#### 4.21**Immaterial vs Supernatural**

*Synopsis*

Assert a critical difference between immaterial and supernatural: immaterial is simply a non-physical aspect of reality (compassion, meaning, love), but can be (and, in this essay, is asserted to be) entirely natural, a very real part of our world. As part of the natural order, an immaterial phenomenon is still subject to governing principles, laws, or whatever term one chooses to describe an ultimate bounding or controlling aspect. Supernatural, on the other hand, is outside of such a bounding or controlling aspect— it is not subject to a consistent understanding, even if such an understanding is well beyond our current capacity or conception.

*Text*

#### 4.22**Buddhism immaterial phenomena**

*Text*

But this seems incompatible with the realization that matter is not “solid” in the way that had been thought, and that in fact matter and energy are interchangeable. Buddhism rejects the distinction between the material and immaterial. We say that “emptiness is form and form emptiness.” The dichotomy of material and immaterial makes no sense. Even if there are qualitative differences between animate consciousness and inanimate matter, there is no basic incompatibility that outlaws interaction between the material world and consciousness. Interdependence provides an interface.5 T: In other words, Buddhism says that the distinction between the interior world of thought and exterior physical reality is artificial. The antithesis between internal and external realities is a mere illusion. There's only one reality. M: Or rather only one unreality! In this sense, the mind/matter dichotomy turns out to be another example of our attachment to solid reality and is just a concept.6[6](#footnotes.xhtml#fn6)

Ricard, Matthieu; Thuan, Trinh Xuan. The Quantum and the Lotus (pp. 166-167). Crown. Kindle Edition.

#### 4.23**the basic premise: fundamental, immaterial properties exist**

*Synopsis*

The basic premise: the stuff the Universe is made of appears to include both qualitative and quantitative properties. In addition to the scientifically established, quantifiable characteristics of matter and energy— mass, charge, spin and other measurable properties— there appears to exist non-measurable but nonetheless fundamental properties of reality, the nature of which we can at this point only glimpse or speculate.

*Text*

The basic premise is straightforward: the stuff the Universe is made of includes both qualitative and quantitative properties. In addition to the scientifically established, quantifiable characteristics of matter and energy— mass, charge, spin and other measurable properties— there [appears to] exist non-measurable but nonetheless fundamental properties of reality, the nature of which we can at this point only glimpse or speculate.

Although that premise is quite simple, albeit couched in uncertainty, more complex questions include why one would believe it to be true; what some of the implications and consequences might be if it is; and why such a simple idea has not only failed to emerge as a viable candidate in discussions about the scheme of the Universe but were it to be offered would almost certainly be dismissed by the vast majority of contemporary scientists and philosophers.

Modern science is almost entirely, although not necessarily, based on the materialist presumption that everything in the Universe is exclusively quantitative— that any conception of immaterial properties ultimately derives from a purely quantitative condition. Physicalism, as this presumption is often referred to, is so thoroughly engrained in modern science and philosophy that it is simply taken for granted by just about all contemporary scientists and philosophers. A standard text on materialism asserts that: “Materialism is now the dominant systematic ontology among philosophers and scientists, and there are currently no established alternative ontological views competing with it.”[7](#footnotes.xhtml#fn7)

Challenges to physicalism, although increasing over the last few decades, are widely dismissed.

During the 20th century a number of scientific discoveries and philosophical ideas began to converge into a somewhat fuzzy but increasingly cogent model of the way the world works that is fundamentally different from the commonly accepted narratives. Quantum mechanics, pan-psychic philosophical perspectives, and animal consciousness studies all offer varying yet significant support for a mind-centric worldview [also with deep historical roots and strong continuity in metaphysical religious perspectives].

The bizarre discoveries of quantum mechanics have shown that the fundamental components of matter are not objects but rather probabilities

The basic ideas are

1) What we commonly think of as consciousness is ubiquitous in animals, albeit to varying degrees of complexity. Homo sapiens evolved along one of several evolutionary branches that have led to advanced forms of intelligence, although anthropomorphic hubris all too often gets in the way of acknowledging the implications of all animals exhibiting some form of consciousness.

2) The dominant expressions of human intelligence, complex abstraction and sophisticated tool-making, are unique on earth. But many other species, including several dozen species of Odontocetes, possess what can be reasonably defined as high intelligence such as empathy and other emotional responses, sophisticated cultures, and complex personal relationships.

3) What we refer to as mind is a non-material aspect or property of matter (and, by extension, of energy). Mind runs all the way down: although it cannot be measured, it is as fundamental as the properties of mass or charge.

4) To a first approximation, the terms ‘mind’ and ‘spirit’ are synonymous.

The first idea, that all animals possess some form of consciousness and that human intelligence is simply a sophisticated expression of it, is accepted by virtually all contemporary biologists. The notion that humans are different in type from all other animals is a pre-scientific conception, albeit extremely strong in modern western thought.

The second idea, that humans possess a higher form of intelligence than any other animal, is based on the presumption that language, abstraction, and advanced tool-making are unique expressions of high intelligence. This anthropocentric bias is thoroughly baked in to our thinking and very rarely challenged. In considering whether other forms of advanced intelligence exist, for example, we have turned our efforts to search for signs of extraterrestrial technology— radio signals from space with sufficient complexity to have originated only from an intelligent source.

Over the last several decades, however, biologists, and particularly marine biologists, have shown that other species

more of an expression of anthropomorphic hubris than a thoughtful conclusion from evidence. challenged on several fronts.

The basic idea is simple enough: energy— the stuff the Universe is built of, including matter equivalent— has immaterial as well as material properties.

For the last several hundred years western science has been concerned only with the material or quantitative properties. Indeed, since the days of Galileo science has been defined by its exclusive focus on properties that can be measured, or, more recently, that can be mathematically inferred (dark matter, for example). The intellectual dominance that science and technology have exerted on western society over the last few centuries has led to a widespread if not virtually universal presumption that the universe is an exclusively physical place (aside from ideas about a supernatural agent).

But the conception of reality as exclusively material is a metaphysical perspective that is at bottom no different in type from the idea that God created the world for his glory— neither of them can be proven or falsified. This is not to say that all metaphysical perspectives have equivalent explanatory force. The idea of a purely physical universe is fully supported by the scientific program, in sharp contrast to the assertion of creation by a supernatural agent.

The simple statement that reality is fundamentally qualitative as well as quantitative is merely a doorway into an immensely broad, deep, and complex world that is known by many of us in varying configurations.

there is no serious question about the veracity of our overall scientific knowledge about the Universe. The fact is that science works. Scientific explanations about the world have replace

no different in type than the

And over the last several centuries science has come

Over the course of several centuries this limited exclusive focus has led to the widespread belief that physical char

The biological sciences seem to be thoroughly entrapped in the search for mechanical explanations and a final conclusion of biological determinism.

#### 4.24**Intelligence, 2 Consciousness & Mind**

*Synopsis*

Explore various definitions and review various historical and contemporary usage of the terms ‘intelligence’, ‘consciousness’, and ‘mind’. Consider how the usage/definitions can affect the way we think.

#### 4.24.1**Intelligence**

*Synopsis*

Intelligence is the most practical of the various terms used to convey conceptions of consciousness or mind, and is almost always used in an anthropocentric context (we measure intelligence of non-human animals in terms of human intelligence).

*Notes*

Conceptions of “higher” or “advanced” intelligence are all but universally cast in anthropocentric terms, and notions of higher intelligence in non-human animals is routinely dismissed with relatively little explanation.

“Intelligence is one’s ability to learn from experience and to adapt to, shape, and select environments. Formal studies of intelligence date back to the early 20th century.”

“The relationship between brain size and intelligence does not hold across species.28 Rather, there seems to be a relationship between intelligence and brain size relative to the rough general size of the organism (level of encephalization).”

*Text*

**Hominid intelligence**

*Synopsis*

Humans diverged from their hominid ancestors sometime around (xxx Mya). Gorillas and chimpanzees, all hominids by recently accepted usage, exhibit behaviors that meet a reasonable definition of higher intelligence. Humans have greatly surpassed this, at least in some narrow ways, but mostly in the last few tens of thousands of years.

**Odontocetes intelligence**

**Human intelligence**

*Synopsis*

Human intelligence is the standard by which most contemporary discussions of ‘intelligence’ are based.

*Notes*

“For much of the past 2,000 years in the West, intelligence was conceived in terms of a God-given faculty of reason that set humans wholly apart from other creatures.” Stephen Cave: “The Free Will Scale

**Anthropomorphic conception of intellgence**

**Individual intelligence**

*Synopsis*

Humans have a very wide range of apparent intelligence. Explore various ideas about why that is.

**Types of intelligence**

**Collective intelligence**

*Synopsis*

Collective intelligence is a better overall barometer of human behavior than individual intelligence, as the effects of humans on earth can reasonably be attributed broader outcomes. There appear to be several levels of collective intelligence, ranging from a small group or tribe to the species as a whole.

#### 4.24.2**Consciousness**

*Synopsis*

Explore various ways that ‘consciousness’ is used by contemporary scientific and philosophical writers.

## CHAPTER FIVE

### *Chapter: Other stuff*

#### 5.1**Spirit**

#### 5.2**symbols: the big mistake**

*Synopsis*

Perhaps the biggest mistake we make is believing that the mysteries of the world can at least in principle be completely expressed through words or mathematics, that the ultimate mysteries of the universe can be fully revealed through human communications. There is, of course, absolutely no reason to believe this to be true other than unrestrained hubris and a fear of uncertainty.

#### 5.3**Introduction & summary of the primary thesis**

*Text*

For those of us who have grown up in the age of science, we are at the beginning of a new paradigm or world view wherein consciousness and what we call spirit will be understood to be a fundamental fabric of the Universe. We, of course, have absolutely no idea what that really means or to where it will eventually lead. But if it is more or less true, then a millennia from now— should human civilization survive that long— this period will be viewed in something of the same vein as the 16th century when heliocentric cosmology was introduced to modern thinking.

This

For now we have little choice but to accept broad generalizations and be open to considering the possibility that the Universe is far more complex than we can currently understand, and possibly more than we can ever imagine.

Much like the heliocentric worldview in the early 16th century— then the beginning of a process that took almost two centuries to become fully adopted— any consideration of a new worldview is widely rejected by contemporary scientists and academic philosophers. But it has been and will continue to be realized and explored by a growing number of thinkers, piece-by-piece— something like a world-wide puzzle or hologram that comes into increasing focus as more pieces are introduced and become incorporated into the overall fabric of understanding.

This essay, a simple collection of a small number of those pieces, is offered in the hopes of stirring the intuition and imagination of some who are so able.

#### 5.4**Perhaps we take ourselves too seriously.**

*Text*

Perhaps we take ourselves too seriously. Homo sapiens has been morphologically stable— that is to say that our brains have been about the same size and complexity— for a few hundred thousand years or so (estimates vary). But it’s only been a few hundred years since we’ve quit selling our children and burning people at the stake for claiming that earth was not at the center of the universe— and only 200 years or so since most Americans believed that black people were only 2/3 human (and as some still do). In the meantime, we’ve exploded our population in a way that would make most viruses jealous, degraded just about every ecosystem on the planet, and stockpiled enough nuclear weapons to plunge ourselves back into the Stone Age.

Yet we persist in thinking that we are the pinnacle of intelligence in the cosmos. We have, after all, developed a system (physics) that describes the physical universe to an accuracy unimaginable a century ago. Our penchant for technology is insatiable.

#### 5.5**A (very) brief history of how we got here**

#### 5.5.1**Timeline from Greek philosophers to 21st century**

#### 5.6**Quantum Theory, intro**

*Synopsis*

Introduce the basics of QT, particularly the probabilistic and uncertainty aspects. Also consciousness, and locality (i.e., that the classical perception of reality is at best an approximation)

#### 5.7**Basic ideas (starting point, incomplete)**

*Text*

The basic premise is simple: the central order of the Universe is a continuum that includes both material and non-material properties. Material and non-material aspects are not inherently and forever separate domains, but rather complementary aspects of this effectively infinite continuum, the nature of which we are only beginning to glimpse. The limits of language are such that a complete description or understanding of this continuum may be unachievable; a substantively true approximation may be the best we can reasonably strive for.

Elements of such an approximation have been part of various philosophical narratives since the emergence of human logic and reason some 2,500 years ago.

Exploring the nature of material properties such as the charge and mass of a sub-atomic particle is the domain of science.

There is a single underlying stuff to all that is. Considering and exploring the nature of that stuff and of our place within it is what all of science, philosophy, and spiritual traditions— of all human abstractions— is based on. Many words are used to describe various aspects of that stuff: ‘mind’, ‘matter’, ‘spirit’, and ‘information’ are but a few of the terms used in western thought about such things. Monism, panpsychism, one-mind, and other labels are attached to various sets of western ideas about the underlying stuff. But these are all just words, human symbols necessary to communicate ideas— tiny pieces of a crude map to an unimaginably vast territory that we have only begun to explore.

But such an exploration is underway. Notions of a single underlying stuff have been part of esoteric philosophies and traditions for centuries. But the breadth, pace and substance of those explorations has expanded, quickened and gained weight over the last hundred years— particularly through the discoveries and profound implications of quantum mechanics. A few notions potentially related to these explorations include:

1. Reality is a continuum between what we can refer to, for lack of a better simile, as the poles of the quantitative (matter) and the qualitative (spirit/energy/mind). Matter possesses qualitative properties that are as fundamental as the quantifiable properties of mass, charge, and spin. The qualitative aspects of matter are not emergent; they exist all the way down.

2. There is no single, monolithic “reality” independent of an observer. What we individually perceive as the physical world is but a tiny slice of an unimaginably vast continuum of overlapping “realities” ranging from the geologic to the interpersonal— all of which are in a substantial way merely part of what for lack of a better term may be referred to as “cosmic mind.” (The many-worlds “interpretation” of quantum mechanics is a useful model with the caveat that the range of realities available through or for perception varies with degrees or levels of awareness).

3. Human intelligence is not the epitome of consciousness on earth, but is rather one expression of multiple forms of advanced consciousness. There are enormous differences in levels of consciousness or awareness among humans.

#### 5.8**Spirit-matter continuum**

#### 6**Chapter? Magic of Human Consciousness**

*Synopsis*

Energy follows thought (intention), but focused and sustained intention is something that relatively few people are capable of. But the modern world, based on pursuit of material wealth as it is, has emerged largely through the use of focused intention: the intention to accumulate wealth.

#### 6.1**neo-magical perspectives and Post-scientific world views**

*Text*

Neo-magical perspectives in post-scientific world views.

reductive materialism is not a sufficient framework for explaining consciousness.

mind-centric perspectives have been emerging over the last several decades.

there is no single, objective reality that we can in principle fully understand through observation (the current scientific paradigm).

there are no clear and compelling alternatives to the single-reality worldview, but there is an emerging framework that sustainable alternative world views are very likely to fit within.

holistic vs reductive

mind/consciousness-centric

non-deterministic (significant for biology and psychology)

science (particularly physics) does not appear to need a new metaphysic (but see Kitchner, et. al.)— physics can be conducted without a metaphysical foundation.

we need a new approach to psychology that accommodates the emerging framework/worldview.

consciousness is slowly coming to be understood as a phenomena that is fundamental to all animals, not just humans (particularly highly intelligent species)

quantum foundations is a departure point from conventional physics, an entry into metaphysical perspectives that have a reasonable expectation of replacing the current paradigms of scientism and religious fundamentalism.

metaphysical ideas and traditions have been a significant part of western religious perspectives (see Albanese). The world has not really been as disenchanted as many believe.

a new psychology must accommodate the tremendous range of human awareness/intelligence/connection. Maslow’s hierarchy. Deep Christianity. Broad discipleship. Zen. Responsibility.

**Magic as a paranormal phemonenon**

*Synopsis*

During the last few decades, many books have emerged around the theme of magic in terms of paranormal events and perspectives.

**science and religion are not sufficient to completely describe the world**

*Synopsis*

The prevailing western world views of science and religion are incomplete and inadequate as a means of fully describing the world or even describing it sufficiently for purposes of establishing a worldview that accommodates all we know about consciousness.

**we are only beginning to explore consciousness**

*Synopsis*

Consciousness will eventually emerge as the central theme for sustainable world views, but we are only now beginning to acknowledge that such an outcome is possible or likely, and we haven’t even begun to meaningfully explore the paths by which that could happen.

**scientism remains a dominant force**

*Synopsis*

Scientism remains a powerful force, as it appears to be fundamental in the secular worldview as commonly held in the early 21st century.

**Science is near the end of contributing to world views**

*Synopsis*

Science appears to be nearing the end of substantive contributions to world views. The universe-as-a-machine metaphor remains largely intact in popular and much scientific thinking. Quantum foundations are philosophical perspectives on what appear to be rock-bottom conclusions of quantum mechanics (little prospect of significant future insights into a meaningful description/understanding of nature/world of reality through a strictly scientific lens)

**magical perspectives are considered pre-scientific**

*Synopsis*

Magical perspectives have long been considered as pre-scientific myths and superstitions about the nature of reality that were replaced by scientific understanding.

**magic, language, and modernity**

**all purposive human action can be subsumed within magic**

**A magical perspective is not an end**

*Synopsis*

A magical perspective is not an end, but rather a provisional way-point, a plateau from which one can pause and reflect on broader and more applicable conceptions. Many, perhaps most, are not ready for such a perspective and will therefore perceive no potential value in it.

#### 6.2**Magic: the power to effect change**

## CHAPTER SIX

### *Chapter: The Path Ahead: Soul and Machines*

### Notes

[1.](#body3.xhtml#fn1) Mind & Cosmos, p. 21

[2.](#body3.xhtml#fn2) Mind & Cosmos, p. 22

[3.](#body3.xhtml#fn3) Mind & Cosmos, p. 23

[4.](#body3.xhtml#fn4) Mind & Cosmos, p. 32

[5.](#body3.xhtml#fn5) Marcus Appleby, “Mind and Matter: A Critique of Cartesian Thinking”, in “The Pauli-Jung Conjecture” p.30

[6.](#body3.xhtml#fn6) Ricard, Matthieu; Thuan, Trinh Xuan. The Quantum and the Lotus (pp. 166-167). Crown. Kindle Edition.

[7.](#body3.xhtml#fn7) Preface to *Contemporary Materialism: A Reader*, Paul Moser and J. D. Trout