

An Integrated Systems Framework Derived from Physical Laws Reveals an Isomorphic Ontology Manifested Across Levels of Existence, from Atoms to the Human Psyche.

Abstract

This paper proposes an integrated systems framework in which Time, Space, Matter, and Energy constitute four fundamental forms whose relationships establish a foundational ontology. Drawing on well-established physical relationships developed over more than a century of modern physics, the framework identifies a synergistic relational structure that is proposed to replicate isomorphically across levels of existence, from atoms through biological organization to the human psyche.

The paper focuses on the psychological level, where the same underlying relationships are mapped onto fundamental archetypal modes of human experience. Rather than treating archetypes solely as symbolic or descriptive categories, the framework represents them as dynamically related states within an underlying system. This provides a structural interpretation of Jung's concept of archetypes and suggests a potential synergistic bridge between psychology, and contemplative inquiry.

The resulting ontology is intended not only as a theoretical model but also as a practical framework for self-reflection. By making relationships among psychological states explicit, it offers a means of examining how attention, sensation, excitation, worldview, and other archetypal modes interact and transform one another. The paper proposes that this approach may provide new tools for understanding the psyche.

Keywords

Consciousness, Human Ontology, Quantum Physics, Metaphysics, Theories of Everything, Self-Realization, Self-Reflection, Body-Mind-Soul, Isomorphism, Jungian Archetypes, Jung-Pauli Conjecture, Scientific Structuralism, Analytical Psychology, Systems Psychodynamics, Metacognition, Emergence, Neutral Monism

Why Time, Space, Matter, and Energy?

The Starting Point: Time, Space, Matter, and Energy provide four fundamental forms through which physical reality can be described.

The Problem: We usually treat these four forms as building blocks for describing fundamental physical expressions and processes.

The Premise: Their inherent relationships may constitute a more integrated, dynamic structure.

The Extension: The same structure is proposed to manifest isomorphically across levels of existence.

The Psychological Relevance: At the human level, the structure corresponds to archetypal modes and their dynamic relationships.

The Contemplative Application: If the same relational structure manifests at the level of the psyche, it provides a framework for examining subjective experience as a dynamic system rather than as a collection of fixed traits. This has particular relevance to contemplative inquiry, in which sustained self-observation and introspection can be used to investigate the nature and transformation of consciousness. The framework therefore offers a conceptual map through which practitioners may examine relationships among archetypal states as they arise in lived experience.

Figure 1. The Core Synergistic Entities (Building Blocks)

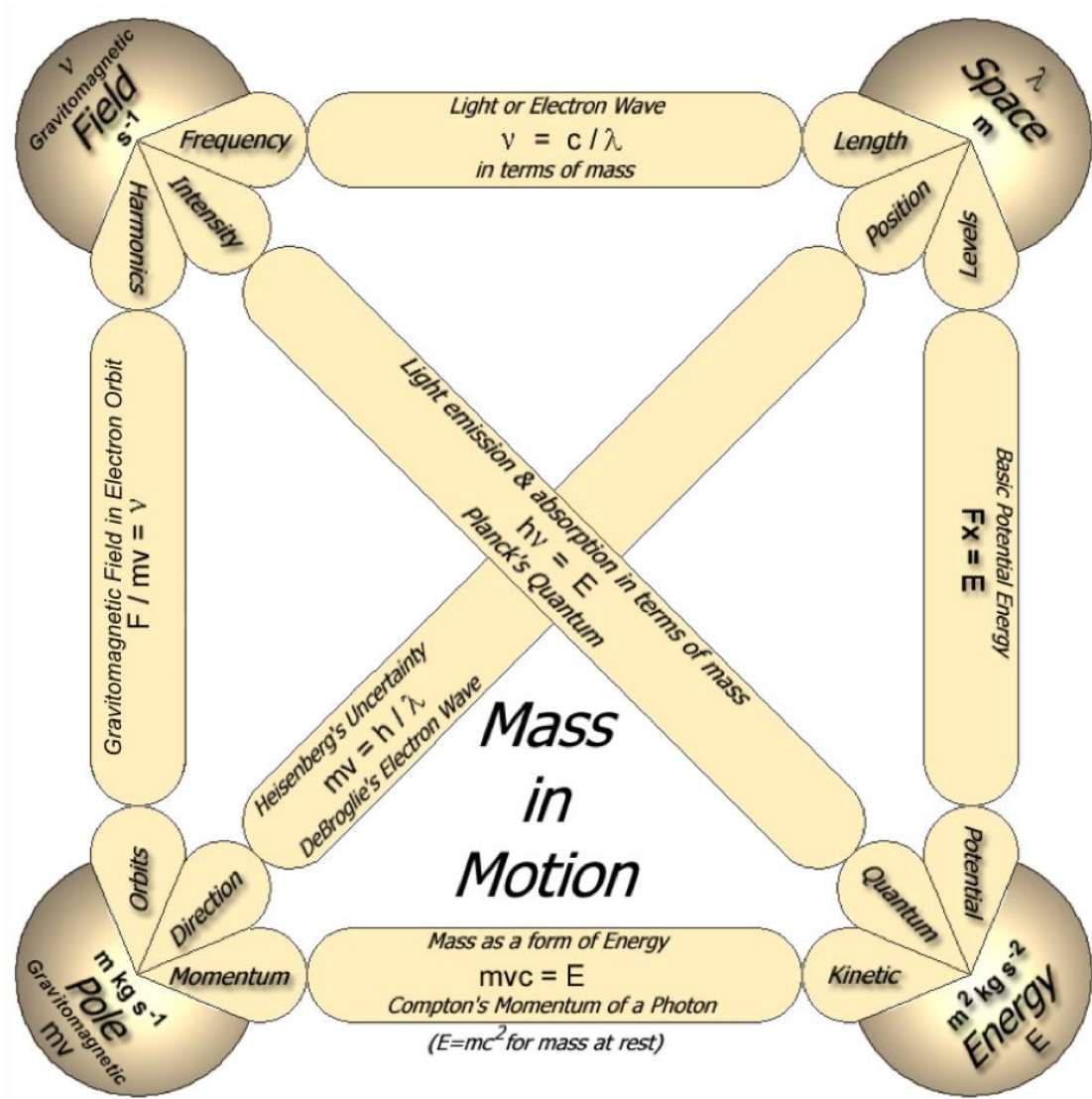
Notes: We are using Frequency as the measurement of Time. This actually turns out to be the definition of Gravitomagnetic Field. Frequency, in turn, is just one of three definitions of Field.

The Physics Ontology as a Foundation

The following diagrams establish the physical ontology from which the framework developed. They organize Time, Space, Matter, and Energy according to their established relationships in physics and provide the structural foundation for the analysis that follows. The purpose of presenting these relationships is not to propose new physical laws or reinterpret established physics, but to make explicit the relational structure that serves as the foundation for the ontology developed in this paper.

The significance of this structure emerges at the human level. The subsequent analysis examines whether the same relational pattern can be recognized in the organization of the psyche and in the archetypal modes through which human experience is expressed. It is here, rather than in the physical diagrams themselves, that the framework invites a contemplative engagement. The proposed archetypal correspondences are intended to provide readers with an opportunity to examine their own experience and discover whether the relationships described resonate with their own process of self-reflection and self-discovery.

Figure 2. The Physics Matrix



Notes: In Figure 2 we find out that each core entity has three different modes depending on which other entity it is relating to. If we observe Energy we see the three fundamental modes of Energy as reflected in Einstein's Photoelectric Equation.

What is interesting is that the same

$$\text{Quantum Energy} = \text{Potential Energy} + \text{Kinetic Energy}$$

relationship is repeated for Field, Space and Matter:

$$\text{Field Intensity} = \text{Field Frequency} + \text{Field Harmonics}$$

$$\text{Space Position} = \text{Space Length} + \text{Space Level}$$

$$\text{Pole Direction} = \text{Pole Momentum} + \text{Pole Orbits}$$

Modern physics has developed remarkably successful theories for describing different regimes of nature, but these theories do not yet constitute a single, comprehensive account of reality. Einstein's Relativity describes the large-scale structure of space, time, gravity, and motion, while Quantum Mechanics describes physical processes at microscopic scales. Atomic physics provides a highly successful account of the structure and behavior of the atom. The continuing effort to understand how these perspectives arise from, and ultimately relate to, a common underlying framework is one of the great unresolved questions of modern physics.

This challenge is sometimes expressed through the search for a Theory of Everything: a fundamental framework capable of accounting for the full range of physical phenomena within a coherent description. The framework proposed here begins with a related but broader question. Rather than asking only whether the fundamental forces and physical theories can be mathematically unified, it asks whether the relational structure underlying physical descriptions may itself persist across increasingly complex levels of existence.

Figure 3. The Matrix as Three Realms of Existence

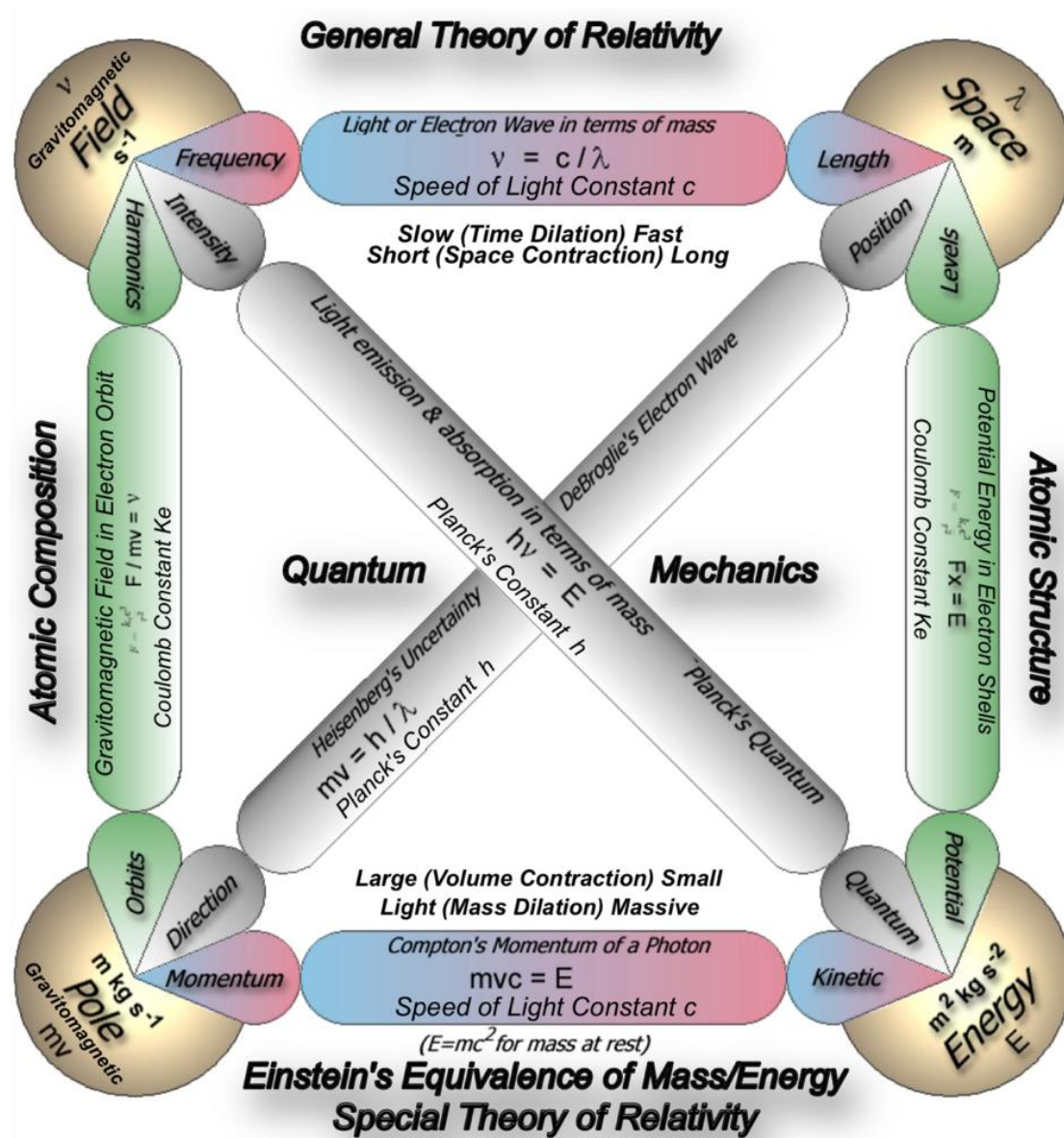
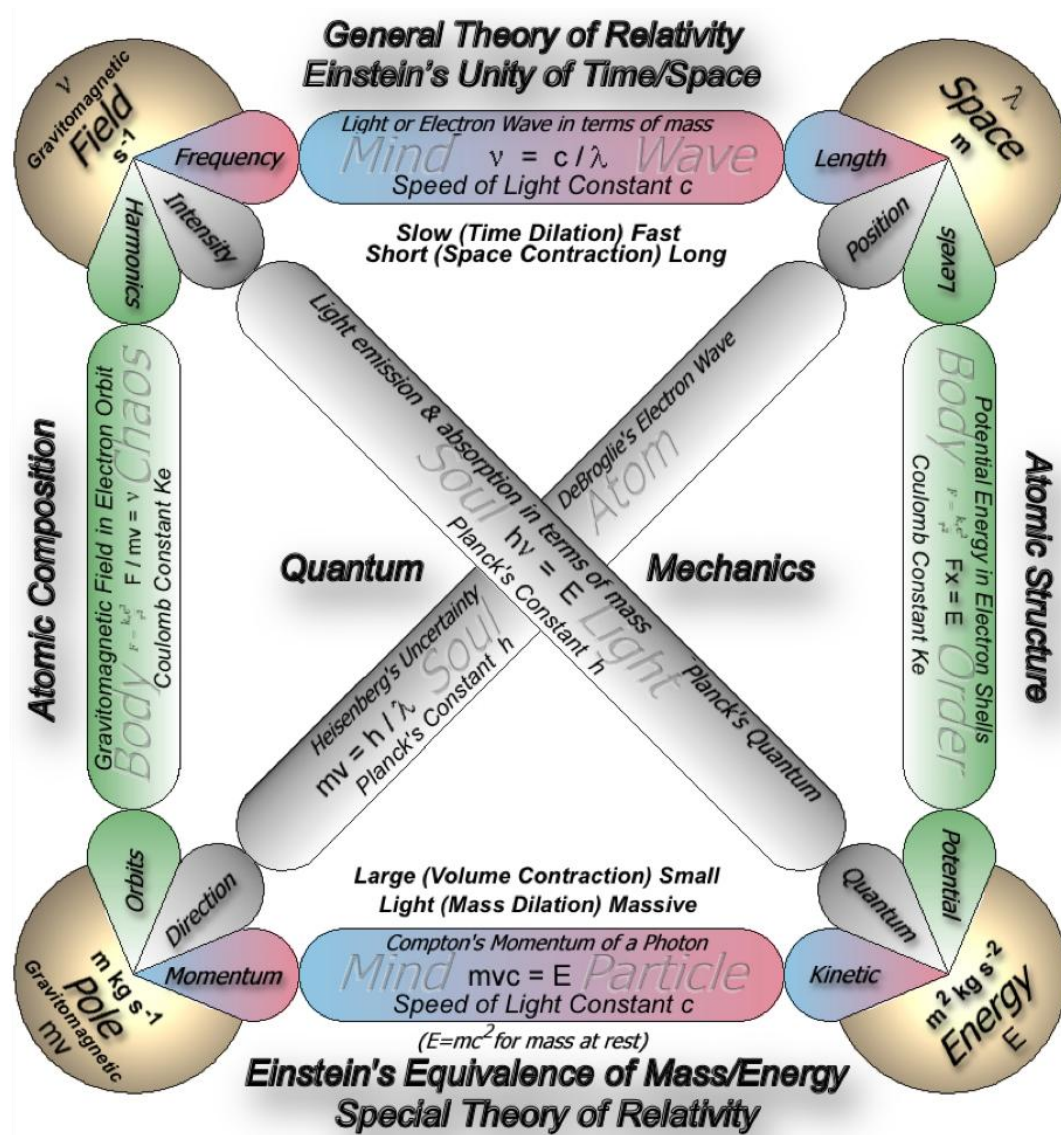


Figure 4. Introducing Body, Mind & Soul



Notes: It's in Figure 4 where we have our leap of faith. The Matrix is representing a kind of intersection between Body, Mind & Soul. This is the fundamental structure of the universe with each state having it's own constant.

Chaos - BODY - Order

The forces that create atomic structure and hold atomic composition represent the
Physical.

Wave - MIND - Particle

Waves and Particles & the speed of light represent communication, the realm of the
Mental (Consciousness)

Atom - SOUL - Light

Planck's constant and the Emission and Absorption of Light is the realm of the
Spiritual.

The Elephant in the room...

The scope of the proposition developed here is admittedly difficult to overlook. Beginning with four familiar terms - Time, Space, Matter, and Energy - and tying them together in an ontology encompassing physical, mental, and spiritual existence is not a modest undertaking. This theory proposes no new equations of physics. Rather, it relies upon established physical relationships and examines what they might reveal when considered together as components of a larger system or ontology.

If the underlying physics is so simple, and the relevant science has been developing for centuries, a reasonable question naturally arises: why hasn't anyone come up with this before now?

Physics has traditionally approached nature by reducing it to its component parts. Its great successes have come from identifying fundamental constituents, forces, and laws and describing their behavior with increasing precision. The complementary question of how these components and relationships function together as an integrated system across levels of existence has received considerably less attention.

There is also our worldviews and assumptions at work. If consciousness or spirit are defined from the outset as something outside the legitimate domain of physical inquiry, there is little reason to look for any relationship between these phenomena and the material universe. Consciousness in the last decade or so has started to be discussed by the physics community, but with a variety of 325 definitions, there seems to be little consensus or notion of what exactly it is. And it's ironic that the concept of Spirit is so foreign to physics when it could quite possibly be the most fundamental aspect of existence.

This paper deliberately begins from a different premise. It is not primarily addressed to physicists, nor does it attempt to resolve the outstanding problems of theoretical physics. It is addressed instead to those engaged in the study of consciousness, contemplative experience, and the search for deeper understandings of human existence. The central proposition is that an isomorphic resonance may exist between the relational structure expressed at the physical level and corresponding structures at progressively higher levels of organization, ultimately including the human psyche.

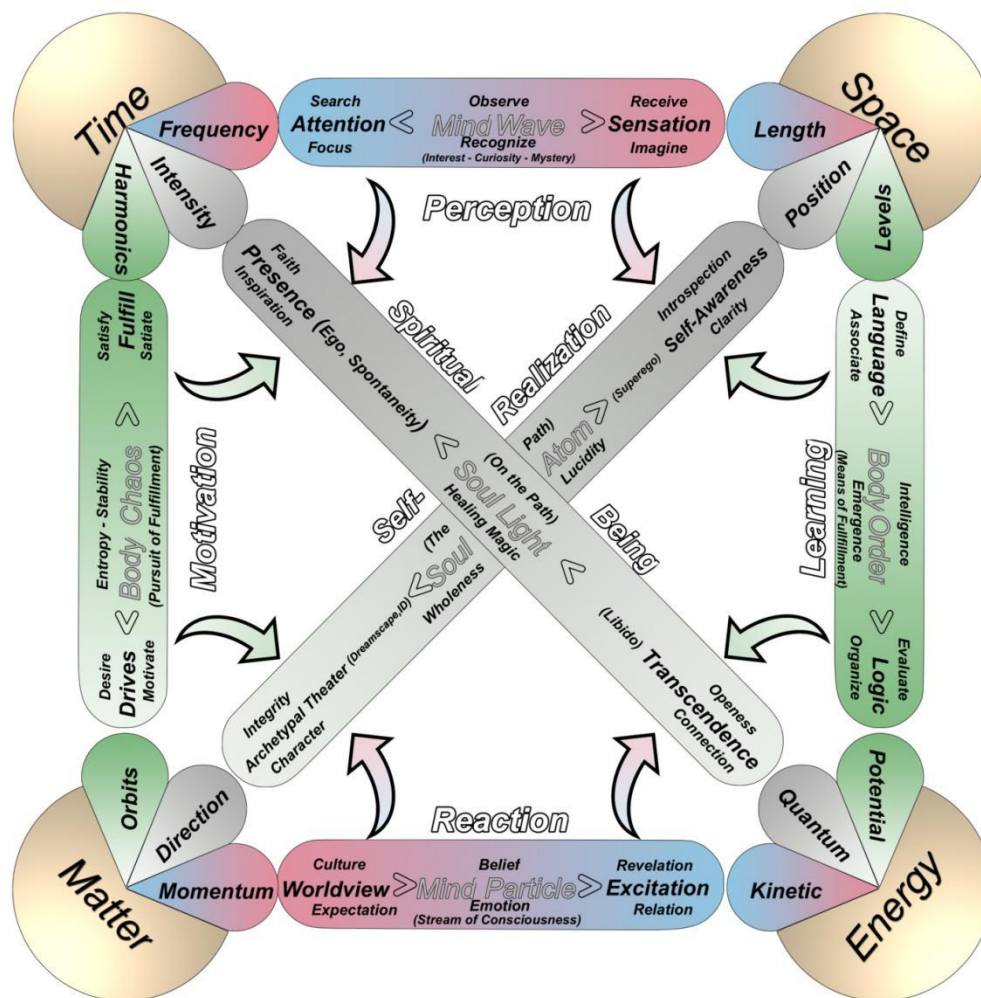
If the proposed physical ontology has merit, the question then becomes: how accurately might that same underlying ontology describe the human level of existence? That is the question this manuscript begins to explore.

The purpose is therefore not to ask the reader to accept the proposed psychological ontology in advance, but to examine it and determine whether its relationships resonate with the observed and lived dimensions of human experience. The hope is that consciousness researchers and contemplative practitioners may recognize patterns, possibilities, or questions within the framework that warrant further investigation.

In contrast to religious doctrine prescribing idealized lifestyles, a practice of self-reflection realizes that each of us (and our culture) are all works in progress and our paths are unique based on our own experience. Our paths may be unique but the tools that we use to understand our journey can be a shared Universal Language (UL). And the only way to learn the UL is to discover how it applies to one's own life. This UL is how we function unconsciously, so deep down we already know how it works, it's just a matter of being able to recognize it consciously.

Before turning to the psychological ontology, it is useful to examine the first proposed translation layer: how the relationships identified at the physical level might be expressed within a simple life form.

Figure 5. The Initial translation from Physics to Metaphysics



Notes: Figure 5 reveals the core assumptions I made regarding how to translate the physics terms and equations into an ontology shared by all living beings. The physics equations helped by providing the basic framework from which to recognize similar ontological relationships.

The physics matrix is an extremely simple concept. The hard lifting had already been done by brilliant physicists over a hundred years ago. It was inevitable that someone would stumble on the elegant symmetry of how they all fit together synergistically. Beyond the physics, the more challenging goal was to delve into psychology and expand upon the work of Carl Jung. He proposed that beneath the surface of personal experience lies a collective unconscious and a shared reservoir of symbolic forms he called archetypes. This is an inherent universal language (UL), recurring patterns of meaning that shape how we dream, tell stories, and react to each other as human beings. They are patterns that anchor human experience in something universal.

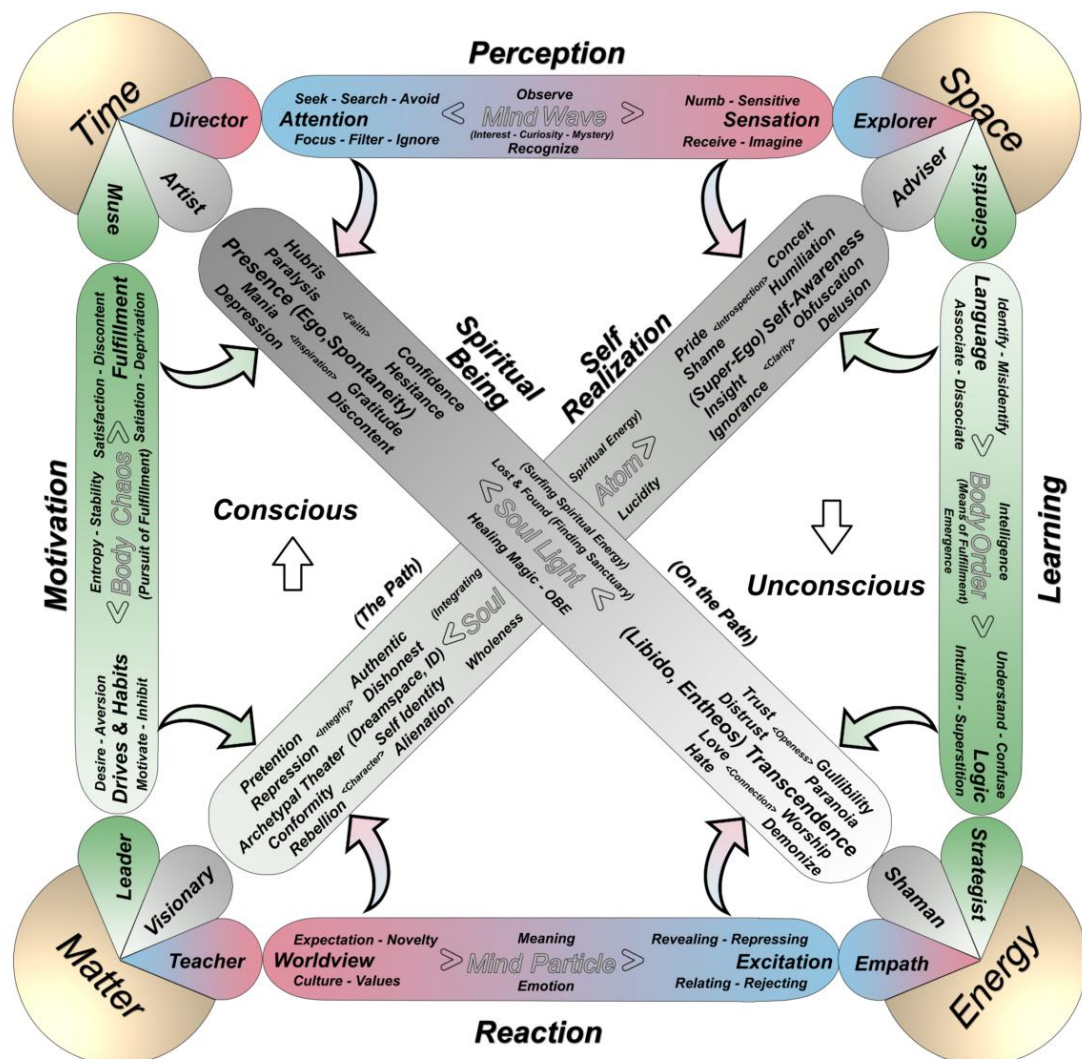
Symbolic maps have been created across cultures to orient ourselves within life's complexity. Religious cosmologies, pantheons of gods and saints, Buddhist mandalas and maps of consciousness, the bardos described in the Tibetan Book of the Dead, Hindu systems of chakras and subtle bodies, the tattvas of Samkhya philosophy, Daoist models of transformation, tarot decks, astrological charts, Kabbalah's Tree of Life, alchemical symbolism, and modern diagrams of psychological archetypes all represent attempts to give structure to dimensions of experience that can otherwise be difficult to describe. In different ways, these maps have served to orient human beings toward self-reflection, transformation, and a deeper understanding of their place within existence.

Notes: In the following diagram, instead of using the physics terms, we've substituted in the Human Archetypes that define our personality. The positive/negative and healthy/unhealthy manifestations also been articulated.

Note that the relationships mirror those in the physics equations. The ">" symbols in opposite direction to each other indicate inverse relationship, while the symbols in same direction with each other indicate a directly proportional relationship.

You will also notice the swooping arrows that indicate that the central "Soul" archetype is composed of mental and physical components: e.g. the Soul's "Self-Awareness" is a product of the physical "Language" and the mental "Sensation". Of course there are other dynamics going on as well (in this case, the give and take play between the conscious and unconscious self).

Figure 7: Adding the Archetypal definitions



Perspectives on the Metaphysical Framework

Our Metaphysical Framework is basically a map of how the realms of Body, Mind, and Soul intersect and relate to each other. The first thing that stands out to me in our diagram is how the upper dualism (the Mind Wave “Perception”) reflects our Conscious Self while the lower portion (Mind Particle “Reaction”) reflects our Unconscious Self. I believe this is closely related to the levels of organization that go into composing us. The Mind Wave is the outer layer of the org chart (individual human-like) and the Mind Particle is the inner layer of the org chart going down to the cellular, molecular, atomic level of organization.

But it’s not really that tidy. Both the Mind Wave and the Mind Particle are continuums along the consciousness spectrum. And where one is on the spectrum in one mode will affect the other mode. For example, when the Mind Particle moves towards Excitation, the Mind Wave moves towards Attention. One can actually perceive a shift in one’s perception of time slowing down when one’s adrenaline kicks in. More focused information is coming in to give the impression of slow motion. Modern psychology is recognizing that Sensation and Attention are just two ends of a continuum, where at any moment there is ratio favoring one side or the other.

You could say that there are two expressions of spiritual life. The Soul Atom is the light that bonds our atoms. The Soul Light is the life force that freely moves through our body in the moment. The spiritual realization that is the bonding energy in our material self. It is the history of who we are and might be called the core of our own mystery. It's what I call our "Path". The spiritual being is the healing life force that is attempting to live within those archetypal stories (as a vessel for the light). It's what I call "Being on the Path". The core of who we are is our spiritual nature seen in the center of our diagram where our Soul Atom self and Soul Light self interact.

When each of the dualisms in the Body, Mind & Soul balance at their midpoints, this brings The Soul into a state of lucidity. The self-awareness from the Adviser is dialoguing with the dream material from the Visionary and the transcendent spiritual energy from the Shaman is being channeled into the presence of the Artist. This is a state of unity with our spiritual source.

This theory is clearly a paradigm shift in our approach to physics and psychology. I don't expect our mainstream physics community to embrace the concept with open arms (where any mention of the "Soul" is taboo). But there will be those few Gnostic explorers (psychonauts) who will find resonance with their own experience. This is the path less taken. While this may be a dramatic leap of faith from our modern mainstream western viewpoint, there is some resonance with ancient eastern thinking. I don't see our mostly materialistic culture dramatically embracing these concepts, and that is ok. The theory really needs time to organically mature and to gradually find a constructive niche in our culture. The metaphysical aspects of the theory are still in a germinal stage. The hope is that multiple researchers can collaboratively bring some consensus to how the archetypes can be refined and mapped out.

Summary

This is all about a sacred Universal Language (UL), and unfortunately at this point, a vivid description of how that magic language works is lacking. I think the concept deserves a new kind of artistic medium that is built upon the core archetypes. It would be a soulful series of structured stories that each of us create to illustrate how the UL mechanisms function in our lives. It would be something like developing a language to articulate a series of transitions between archetypal state of beings, resulting in a kind of very deep but easily experienced koan-like poetry charting the lessons in a life's journey.

The major usefulness of this Ontology is centered in it's unique window for self-realization. Contrary to a set of doctrines cast in stone about idealized life values, we are talking about a process of self-realization that is unique to each individual's path. Using the UL for charting and analyzing our own dreams and experiences would ideally ground the learning process. I'm interested in developing a UL story writing app that can help myself and others to understand the UL mechanism better and then become a useful tool. Right now I would relish finding other researchers who are interested in collaborating on this adventure in self-discovery.

Figure 8. A Long Range Perspective

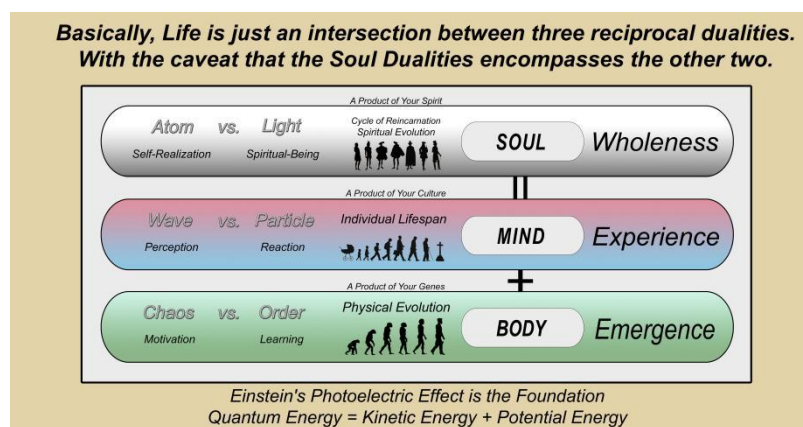


Figure 9 Tree of Life



