

The Lila Paradigm of Ultimate Reality

A Fundamental Paradigm Shift

We call our description of Ultimate Reality a "Paradigm" because it involves a fundamental shift from the currently accepted physically based paradigm to one that is metaphysically based. Instead of assuming that there is an independently existing physical world out of which emerge biological forms some of which are somehow conscious, we are proposing that a metaphysical reality exists out of which emerges consciousness of what *appears* to be the regularities of our physical universe.

In this paradigm, the concept represented by the word 'physical' includes: independently existing matter, i.e. material substance, located in space and time that could, using any means, in principle, be observed by at least one conscious individual. The concept represented by the word 'metaphysical' is: independently existing immaterial individuals that can originate acts, be in conscious states, and makes comparisons.

A philosophy in which there only exists physical things is called a physical monism and a philosophy in which there exists only immaterial individuals is called an immaterial monism. In the Lila Paradigm only immaterial individuals exist therefore it is an immaterial monism. This is true even though the immaterial (nonphysical) individuals often appear in their illusionary consciousness as physical things. Philosophers call immaterial monism 'idealism' and theologians call it 'theopantism' ('God is all, the only reality,' not pantheism which is 'all things constitute what God is.'). Though all idealisms up to now, including the immaterial monism of Bishop Berkeley in the 1700's, have not been able to account for the regularities we perceive in the world; the Lila Paradigm does explain what matter, time, space, energy, mass are, what their underlying magnitudes ('constants') are, what comparison, consciousness are, and what nonphysical individuals that can be conscious are.

The paradigm shift, therefore, is fundamental and goes from the physical to the nonphysical.

According to the Lila Paradigm what is the Ultimate Reality?

Bishop Berkeley's idealism defined Ultimate Reality as God's Mind (the immaterial) ; whereas, we define Ultimate Reality more precisely.

In the Lila Paradigm Ultimate Reality is assumed to be the following:

All that exists is a large, specific, finite number of nonphysical individuals each of whom originates itself into a number of separate nonphysical states. In regard to each different nonphysical individual, an individual originates itself into a state of either direct knowledge or a state of *no* direct knowledge of that nonphysical individual.

In order to understand how this description of Ultimate Reality results in patterns of relations of the nonphysical individuals that appear in the consciousness of each nonphysical individual in those patterns, as our common physical universe, it may be useful that I first expand on each phrase of the above description of Ultimate Reality.

- **"All that exists..."** This means that nothing else exists except nonphysical individuals and their states of direct knowledge (and states of no direct knowledge). The conscious states that we are in are really only patterns of relations of us nonphysical individuals which are just states of direct knowledge based on each other. As a rope lying on a road at twilight may be seen as a snake, so are the nonphysical individuals in their patterns of relations with each other are seen as physical objects (both as fundamental particles and as macro-objects) in relationships with each other of time, space, and energy. The description we are making of ultimate reality is not only an ultimate reality, it is the only reality. This is not suggesting a solipsism in as much as that which is behind the illusory appearance of the physical objects are real, independently, existing nonphysical individuals.
- **"... a large, specific, finite number..."** By fixing the number of nonphysical individuals (N), we fix the number of possible states of direct knowledge and of no knowledge that can exist (N^2). In addition to this, we can, by measurement, determine the average number of actual states of direct knowledge per nonphysical individual (K), and, thereby, we fix the value of most of the universal constants. In order for the equations

for the magnitudes of the universal constants to match their observed values (measurements), the number of nonphysical individuals (N) needs to be quite large, of the order of 10^{23} and needs to be an exact number; and the *average* number of states of direct knowledge per nonphysical individual (K) needs to be near to 13.

- **"... of nonphysical individuals..."** Since we are assuming an ultimate reality that underlies the *appearance* of a physical universe and the process of us observing it, that of which that ultimate reality is composed (the individuals) must be nonphysical. By 'nonphysical' is meant 'that which exists but cannot be observed;' however, it is only the nonphysical which can be conscious. The term individual is used because the nonphysical individuals cannot be divided, i.e., each is not composed of parts. A nonphysical individual is a unitary whole. Even so, a nonphysical individual has various attributes, but these attributes cannot be divided from the individual, they make up what and who a nonphysical individual is.

One might ask, "Where did the nonphysical individuals come from?" They were not created; therefore, they have not come from anywhere or from anything, they just exist as God is thought of as just existing. There was not a prior 'nothing' into which the nonphysical individuals were created. Unlike the 'monads' of Leibniz and the 'spirits' of Bishop Berkeley, which were to have been created by God, the nonphysical individuals in our paradigm were not created. If some existence is created, it must be in time and thus physical, because there must have been a time before it was created. If some existence is created by God or by anything it cannot be an ultimate reality. Physical things only react, the individuals in our paradigm can originate states to be in, therefore those individuals cannot be physical. They are not particles or relationships or combinations of anything, nor are they everlasting – they, being nonphysical, are not in or of time and thus do not durate through time. They are as God, they are Ultimate Reality. Each nonphysical individual is equivalent to every other nonphysical individual in 'what' it is; however, they are different in 'who' it is that each is.

- **"...each of whom..."** That which differentiates one nonphysical individual from another is 'who' each individual is. The one that is in states of direct knowledge and no direct knowledge and the one that originates itself in those states is who that nonphysical

individual is. According to our paradigm, who each of us is, is one of these nonphysical individuals, thus each of us is not a human body, a brain, a part of a brain, a resonant oscillation of a brain neuron circuit, a mind, a part of a mind, a personality, an ego, a psyche, subtle soul, or spirit located in space or time, or any physical thing.

- **“...originates itself into a number of separate nonphysical states..”** Each of us is ('has') the ability to act to originate oneself in a state. These are the only kind of act one can make. The nonphysical individual originates the act of being in a state, nothing or no one causes oneself to act, oneself is the sole cause. Thus oneself has freewill to act in regard to putting oneself in a state. This act is a nonphysical act made by a nonphysical individual, there is not any other source of action. These acts a nonphysical acts and thus are not in time. They are not even instantaneous, nor do they follow one another, time being an illusion of sequence.
- **"In regard to each different nonphysical individual, an individual originates itself into a state of either direct knowledge or a state of *no* direct knowledge of that nonphysical individual.**

One of the attributes of a nonphysical individual is that it is the ability to originate itself into states of direct knowledge or of no direct knowledge of any nonphysical individual. Strictly speaking, one does not *have* the ability, what one is, is the ability to originate oneself into a such states.

The idea of 'direct knowledge' is new. This is why it is called 'direct' knowledge, to differentiate it from either ordinary knowledge (data) or indirect knowledge. Direct knowledge, as its name implies, is not arrived at through a process of perception, but by fiat, by originating oneself into to a state of direct knowledge of a nonphysical individual. The direct concept includes that nothing nor anyone can intervene in one being in that state of *direct* knowledge. The word 'direct knowledge', as used in this paradigm, does not mean 'consciousness.' One can 'directly know' something and at the moment not be conscious of it; but one could bring it to one's consciousness a moment later; whereas, if one was not in particular a state of direct knowledge, one could not bring it into one's consciousness no matter how hard one tried.

One is in a state of direct knowledge only by fiat (by one's own origination) and not by a perceptual process. By indirect knowledge is meant, as the phrase indicates, knowledge attained by or through a means. As used here, indirect knowledge means it was attained through (or by way of) another nonphysical individual. That is, if nonphysical individual B is originating itself into a state of direct knowledge by its own fiat of nonphysical individual C and, nonphysical individual A, by fiat, is in a state of direct knowledge of B, and if B's state of direct knowledge of C is included in A's direct knowledge of B, A will be in a state of direct knowledge of B and, by way of B, A is also in a state of *indirect* knowledge of C. But, here we are in danger of falling into the illusionary snare of thinking that A is in a real state of indirect knowledge of C; whereas, A is only in a state of direct knowledge of B and B is in a state of direct knowledge of C. Yes, one can call this arrangement 'indirect knowledge', but it is actually only A and B in direct knowledge states. These two direct knowledge states are analogous to 'seeing the rope poorly at twilight' and the so called indirect knowledge is analogous to the illusion of 'seeing a snake' instead. The state of no direct knowledge that one originates oneself into is a positive state of no direct knowledge.

In what follows, we will describe the attributes of the nonphysical individuals. This is followed by a description of the ways these individuals combine through their relations that form consciousness of self and the compositions that form the appearance of consciousness of microphysical objects in time and space. Finally, a few examples are given of computations, linked with directed graph theory and combinatorics of the magnitudes of physical constants and various apparent physical values

Attributes of the individuals

Existence

The nonphysical individuals were not created, they are assumed to 'just exist.' They are completely nonphysical, unlike the souls, spirits, and minds of Bishop Berkeley or the monads of Gottfried Leibniz, which were created. Individuals that were created implies that at some time, in a background of time, the individuals did not exist, were then created, and existed from the time of their creation; thus, created individuals are located in time. Being located in time is a physical property. Since the nonphysical individuals in this paradigm are not created, they are not located in time, which includes the 'present.' The

'existence' of a nonphysical individual is treated here as an attribute of that nonphysical individual.

Being completely nonphysical, these individuals are also not located in space, nor at a specific distance from anything – there is no background of space. In addition, a nonphysical individual is not energy, charge or mass, has no quantum spin, is not physical matter.

Consciousness will be defined a little later; let it suffice for now to say that it is only each of these nonphysical individuals that *can* be in a conscious state.

There is some strong 'first person' evidence for the actual existence of these nonphysical individuals. David Chalmers (1993) argues, I think correctly, for the nonphysicality of consciousness. We suggest that that which can be in a nonphysical state of consciousness would also be nonphysical. Since most people claim they have first person conscious experience, they would be the nonphysical individuals assumed above, rather than Homo sapiens bodies, brains, resonant fields, quantum fields, microphysical fermions, or any physical thing.

Another first person experience that most people claim they have is that of originating acts, at least sometimes. Since according to modern science, the physical only reacts and does not originate acts, a person cannot be physical. Assuming this is valid, we must be nonphysical individuals.

Unity

Each nonphysical individual has the attribute of unity. Each is indivisible and is therefore labeled 'a nonphysical individual,'.

Acts

An attribute of nonphysical individuals is that they originate acts. All acts reduce to only one kind of act. A nonphysical individual originates an act by either:

- Originates itself in a state of direct knowledge of a nonphysical individual, or
- originates itself in a state of *no* direct knowledge of that nonphysical individual.

Each nonphysical individual so acts with regard to each nonphysical individual, including itself. This attribute of nonphysical individuals is not a thought nor any mental process, it is an absolute nonphysical primary ability to so act. The act of placing itself in a state of direct knowledge of a nonphysical individual, and being in that state, are two way of saying the same thing. The state of direct knowledge, or no direct knowledge, of a nonphysical individual is a completely nonphysical state that is not located in time or space, and does not take time or space or energy.

The phrase 'state of direct knowledge' refers here to a state of a nonphysical individual in which it has placed itself wherein it knows a nonphysical individual. It is the state from which consciousness of things appears. This state of direct knowledge is not perception and is not consciousness; and it is not a result of perception.

A state of direct knowledge can only be based on a nonphysical individual as it really is, not on some thing other than it is.

Rule One: In the above meaning of state of direct knowledge is also included any states of direct knowledge and states of no direct knowledge that the *known* nonphysical individual is placing itself in. This rule is because what a nonphysical individual is includes the originations of states. The ramifications of this important rule are applied in the Section on Consciousness of a Proto-Physical-Particle Located in Time.

Who

'Who' an individual is, is an important attribute of a nonphysical individual. That which originates acts so that it is placed in states of direct knowledge or states of no direct knowledge of nonphysical individuals is 'who' the individual is. From a second or third person point of view, or from a 'God's eye view' or from an Archimedes' Point, 'who' the individual is, is 'which one the individual is'; but for the nonphysical individual itself (as first person), 'who' it is, is self-evident and is the nonphysical attribute of 'me,' or 'the one I am.' All the nonphysical individuals are the same in their attributes except in the attribute of who each is.

So there are four attributes of a nonphysical individual: Existence, Unity, Acts, and Who it is.

Consciousness

Consciousness of Self

The definition of consciousness applies to both consciousness of self and consciousness of physical things; however since the description of consciousness of self is simpler, it is given first.

Consciousness is a state a nonphysical individual is in, wherein: an attribute in the *state of direct knowledge* a nonphysical individual is in, is *the same as (is like)* an attribute of the nonphysical individual who is in that state of direct knowledge.

If an nonphysical individual, call it ind A, places itself in a state of direct knowledge of itself, ind A will be consciousness of itself as it is – a nonphysical individual, a unitary existence *who* acts. The reason, according to the above definition of consciousness, is that all four attributes of ind A in the state of direct knowledge ind A is in of itself are the same as all four of the attributes of ind A: ind A is conscious of ind A's four attributes, which is what ind A is. This is shown in the following table:

1	2	3	4
Attributes of Ind A	Ind A's state of direct knowledge of the Attributes of Ind A	Attribute in 2 same as in 1?	Ind A is conscious of ind A as (additive down this column):
Existence	Existence	Yes	Existence
Unity	Unity	Yes	A unitary existence
Acts	Acts	Yes	A unitary existence that acts
Who Ind A is	Who Ind A is	Yes	A unitary existence who acts

One might ask, why is this consciousness?

Applying Thomas Nagel's famous phrase, "... that a being is conscious if there is

something it is like to be that being;" and applying the statement (Chalmers, 1996), "Similarly, a mental state is conscious if there is something it is like to be in that mental state" to the above example of self consciousness, we have the following:

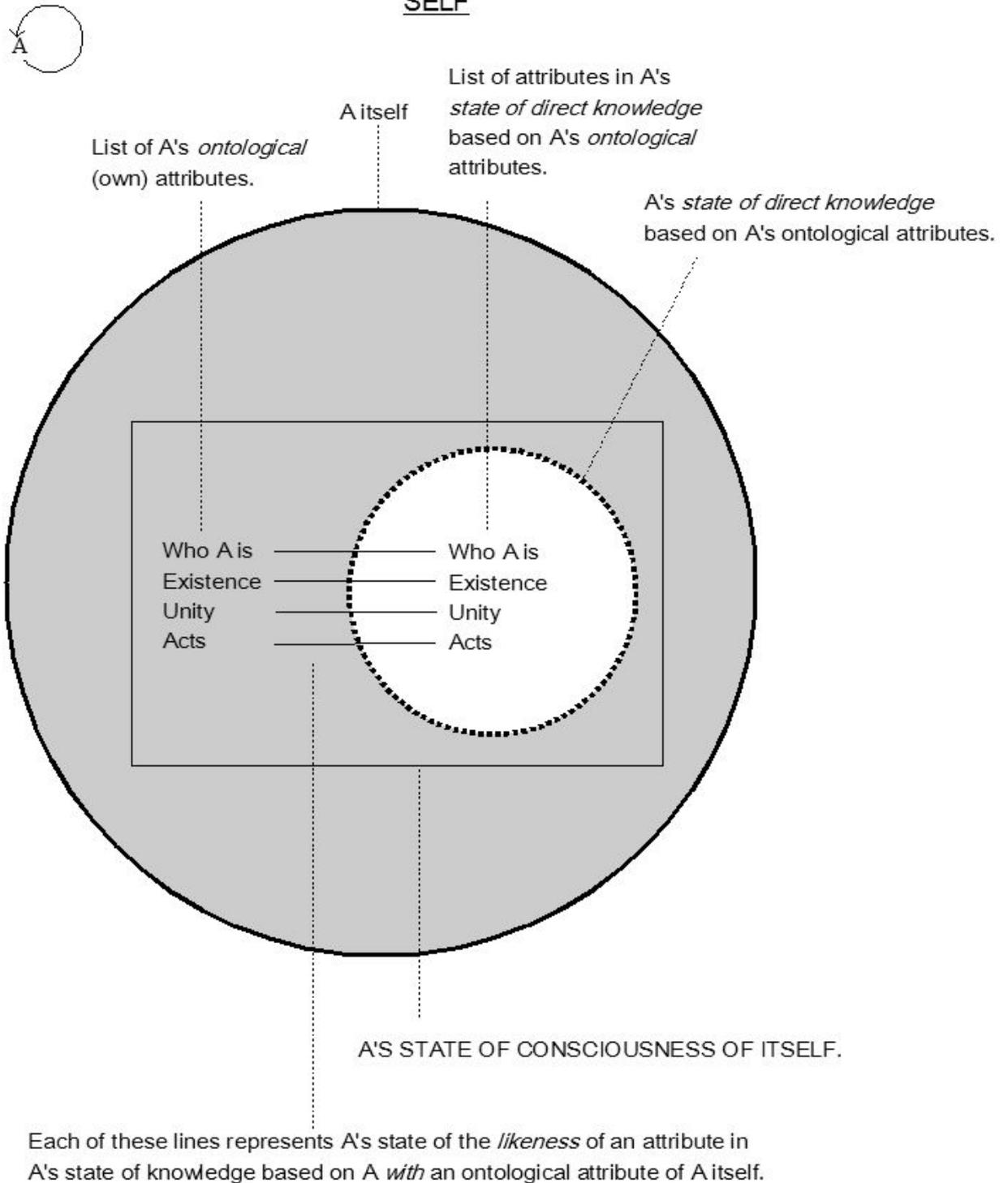
- The mental state is ind A's state of direct knowledge of itself.
- Ind A itself is the something it is like to be in that mental state, since ind A is something like ind A in the state of direct knowledge of ind A in which ind A is;
- Therefore, ind A is in a state of consciousness of itself.

It may help to reword the above as:

- A mental state is a conscious state if to be in that state is like something.
- Ind A's state of direct knowledge of itself is a conscious state if to be in that state of direct knowledge of itself is like ind A itself.
- Because ind A's state of direct knowledge of itself is *like* ind A itself, ind A's state of direct knowledge of itself is a state of consciousness of ind A.

Strictly speaking, consciousness is only the above state of a nonphysical individual and it not a thing in itself, i.e. consciousness is not an independently existing nonphysical thing that was created by the above described situation, it is only that situation in which ind A is.

SELF



If, on the one hand, an individual consciously experiences itself as it is, that person experiences itself as 'a unitary existence *who* acts.' In so doing this person does not 'see' anything, anywhere, not any when, and not even a 'clear light.' This is what consciousness of the nonphysical is like. On the other hand, most people who set out to

be conscious of themselves usually experience themselves as a physical something, rather than as one really is, a nonphysical individual (see section on How a 'Common Universe' Occurs).

As will be seen in the balance of this paper, this definition of consciousness not only has intuitive appeal it has great explanatory power with regard to what fundamental physical particles are, what their locations in time and space are, what time, space, energy continuums are, what the four fundamental forces, mass are, and why quantum theory is the way it is. Using this definition of consciousness, direct calculations of the magnitudes of these physical items can be made.

Consciousness of a Physical Thing

Consciousness *of* physical things is ubiquitous. Consciousness and physicality are inextricably paired. The only exception is consciousness of oneself (as seen in Consciousness of Self). Any 'perception' in the Lila Paradigm is considered to be *of* a physical thing – this includes all organ sensory perceptions and all mental perceptions, such as mental images etc. in dreams, memories, and thoughts.

The same definition of consciousness given in the consciousness of self section applies to consciousness of physical things:

Consciousness is a state a nonphysical individual is in, wherein: an attribute in the *state of direct knowledge* a nonphysical individual is in, is *like (the same as)* an attribute of the nonphysical individual who is in that state of direct knowledge.

The word 'same' as used in the definition does not mean 'one and the same,' it means, for example, even though twins are the *same (alike)*, in the way they look, their looks are associated with *different* people. So, though two nonphysical individuals are the same as each other (alike) in that they each include, for example, the attribute 'existence,' their 'existence' attributes are based in different things: (1) the attribute of 'existence' of a real nonphysical individual and (2) the attribute of 'existence' in *a state of direct knowledge* (based on a real nonphysical individual), that that real nonphysical individual in (1) is in.

Here is the simplest example of consciousness of a physical thing: a nonphysical individual, call it ind A, is placing itself in a state of direct knowledge of another nonphysical individual, call it ind B. This state of direct knowledge that ind A is in of ind B includes the four attributes of ind B: 'existence,' 'unity,' 'acts,' and 'who ind B is.' And, for the sake of completeness, this includes ind B's state of no direct knowledge of ind A, including no direct knowledge of ind A's four attributes; ind B's state of no direct knowledge of ind B itself; and ind A's state of no direct knowledge of ind A itself. Using the above definition of consciousness, the following table is formed.

1	2	3	4
Attributes of Ind A	Ind A's state of direct knowledge of the Attributes of Ind B	Attribute in 2 like (the same as in) 1?	Ind A is conscious of ind B as (additive down this column):
Existence	Existence	Yes	Existence
Unity	Unity	Yes	a unitary existence
Acts	Acts	Yes	a unitary existence that acts
Who Ind A is	Who Ind B is	No	a unitary existence that acts

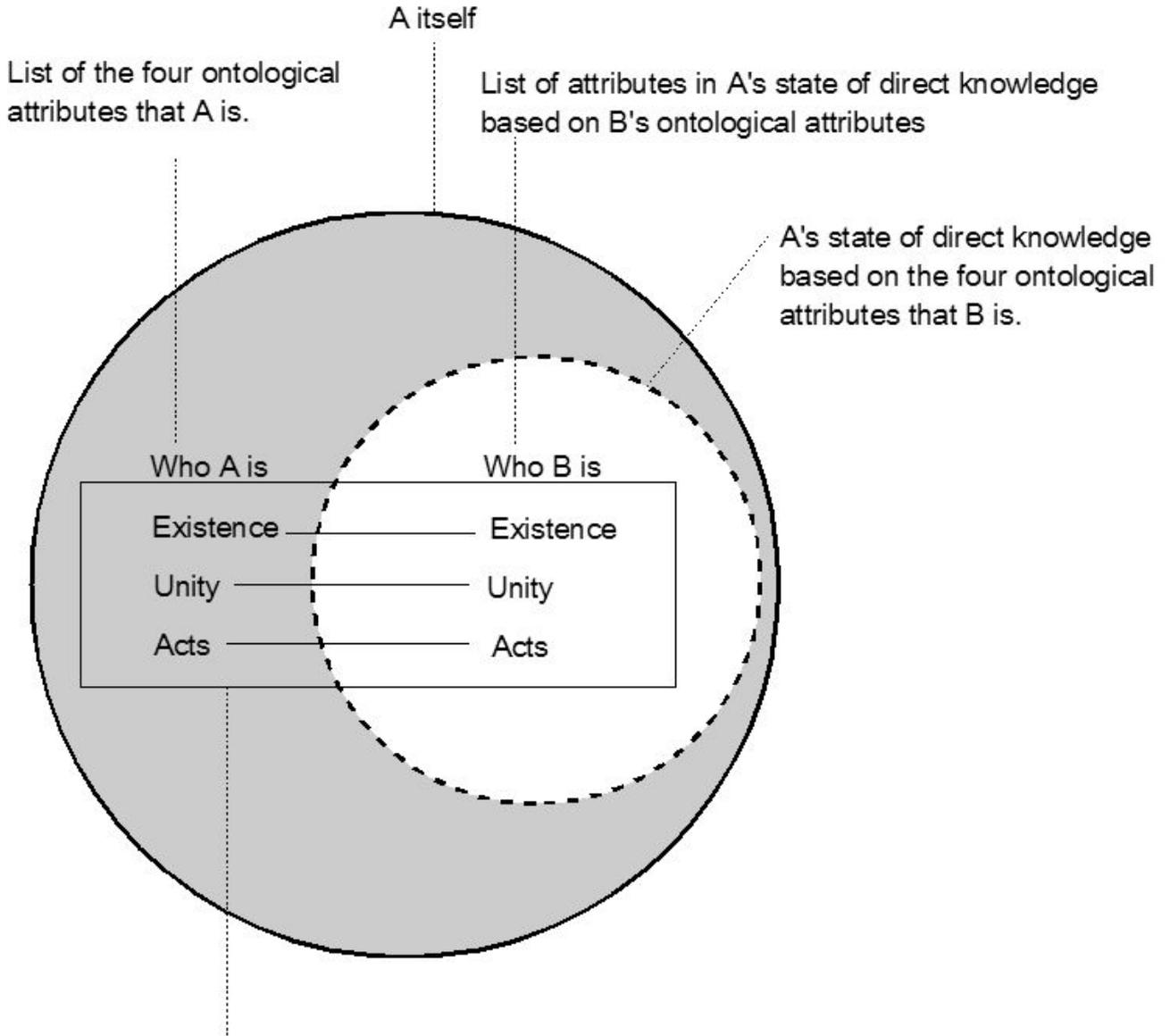
Since the attribute of 'existence' in ind A's state of direct knowledge of ind B (in column 2) is like (same as) ind A's attribute of 'existence' (in column 1) as shown in column 3, row 1, according to the definition of consciousness, ind A is in a state of consciousness of ind B's attribute of 'existence', as shown in column 4, row 1. The attribute of 'unity' in ind A's state of direct knowledge of ind B is like (the same as) ind A's attribute of 'unity' and thus ind A is in a state of consciousness of ind B's attribute of 'unity.' This would mean that ind A is in two states of consciousness, consciousness of the existence and consciousness of the unity of ind B. In addition, ind A *is* a unity and thus both 'consciousnesses' are subsumed into a single state of consciousness of 'a unitary existence' as in column 4, row 2 (see T. Bayne and D. Chalmers, 'What is the Unity of Consciousness?'). In a similar way, the attribute of 'acts' in ind A's state of direct knowledge of ind B is like (the same as) ind A's attribute of 'acts' and therefore ind A is conscious of ind B's attribute of 'acts' which is subsumed into the single state of consciousness so that ind A is conscious of 'a unitary existence that acts' as in column 4, row 3. However, the attribute of 'who ind B is' in ind A's state of direct knowledge of ind B (in column 2, row 4) is *not* like (the same as)

(column 3, row 4) ind A's attribute of 'who ind A is' (in column 1, row 4); therefore, according to the definition of consciousness, ind A is *not* in a state of consciousness of ind B's attribute of 'who ind B is.' As a result, in ind A's subsumed state ind A is *not* conscious of 'a unitary existence *who* acts,' which ind B really is, but instead is conscious of only of 'a unitary existence *that* acts.'

Consciousness of a 'a unitary existence *that* acts' does not appear to have a 'who' attribute which originates acts. A unitary existence *that* acts, appears to only react; that is, it appears to be a physical thing! In this simplest example described above, and is a fundamental '*proto*-physical-particle' since it has no location in space or time, no mass, charge, or spin, yet it appears as a unitary existence that acts – acts that 'just happen' as in quantum interactions or fluctuations.

A → B

MATTER



A's STATE OF CONSCIOUSNESS

Content of A's state of consciousness:
a physical matter particle, a proto-fermion.

→

Represents an Act to be in a state of direct knowledge

—————

Represents A's state of *likeness* of an attribute in A's state of knowledge based on B *with* one of A's ontological attributes

Again, why is this consciousness?

"A mental state is conscious if there is something it is like to be in that mental state"

- The mental state is ind A's state of direct knowledge of ind B.
- Ind A's three attributes of existence, unity, and acts are the something it is like to be in that mental state, since those three attributes are something like those three attributes in the state of direct knowledge of ind B in which ind A is, three of ind A 's attributes are like (the same as) those three attributes of ind B in ind A's state of direct knowledge of ind B.
- Therefore, ind A is in a state of consciousness of those three attributes of ind B.

Rewording the above:

- A mental state is a conscious state if to be in that state is like something.
- Ind A's state of direct knowledge of ind B, that includes the three attributes of existence, unity, and acts, is a conscious state if to be *any attributes* in the state of direct knowledge of ind B is like *any attributes* of ind A. (The attributes of a nonphysical individual are that nonphysical individual.)
- Because ind A's state of direct knowledge that includes those three attributes of ind B are *like* (the same as) those three attributes of Ind A, ind A's state of direct knowledge of ind B is a state of consciousness of those three attributes for ind A.

Again, strictly speaking, both the consciousness and the physical thing, ind A's consciousness of 'a unitary existence that acts' in the above example, are not things in themselves, i.e. they are not independent existing things that were created by the above described situation, they are only that situation in which ind A is.

Consciousness of a Proto-Physical-Particle Located in Time

Let an arrow [→] represent an act by the nonphysical individual at the tail of the arrow to originate itself into a state of direct knowledge based on the nonphysical individual at the head of the arrow and let a capital letter represent a nonphysical individual: $A \rightarrow B = \text{ind A}$ in a state of direct knowledge of ind B. As described just above, ind A is *conscious* of ind

B as a proto-physical-particle, not located in time or space and without charge, motion, spin, or mass. Let a dot (•) represent ind A's consciousness of such a proto-physical-particle based on, in this case, ind B: $A \rightarrow B \bullet$. Let the absence of an arrow from ind B to ind A represent a state of ind B of no direct knowledge of ind A (and, for the sake of completeness) the absence of an arrow from ind A to itself and the absence of an arrow from ind B to itself represent states of ind A and ind B of no direct knowledge of ind A and ind B of themselves respectively.

To locate a proto-physical-particle based on ind B [$B \bullet$] in an appearance of time in the consciousness of ind A, an addition is needed to the arrangement $A \rightarrow B \bullet$, as in the arrangement:

$$A \rightarrow B \bullet \rightarrow C$$

Because ind B is in a state of direct knowledge of ind C, and because, as mentioned in the last paragraph in Attributes, **Rule One** indicates that ind A's state of direct knowledge of ind B *includes* ind B's state of direct knowledge of ind C, and therefore, ind A is conscious of two proto-physical-particles $B \bullet$ and $C \bullet$, as in:

$$A \rightarrow B \bullet \rightarrow C \bullet$$

From Rule One, ind A is in two states of *consciousness*:

- (1) the consciousness of two proto-physical-particles due to $A \rightarrow B \bullet \rightarrow C \bullet$ and also,
- (2) the consciousness of one proto-physical-particle due to $A \rightarrow B \bullet$.

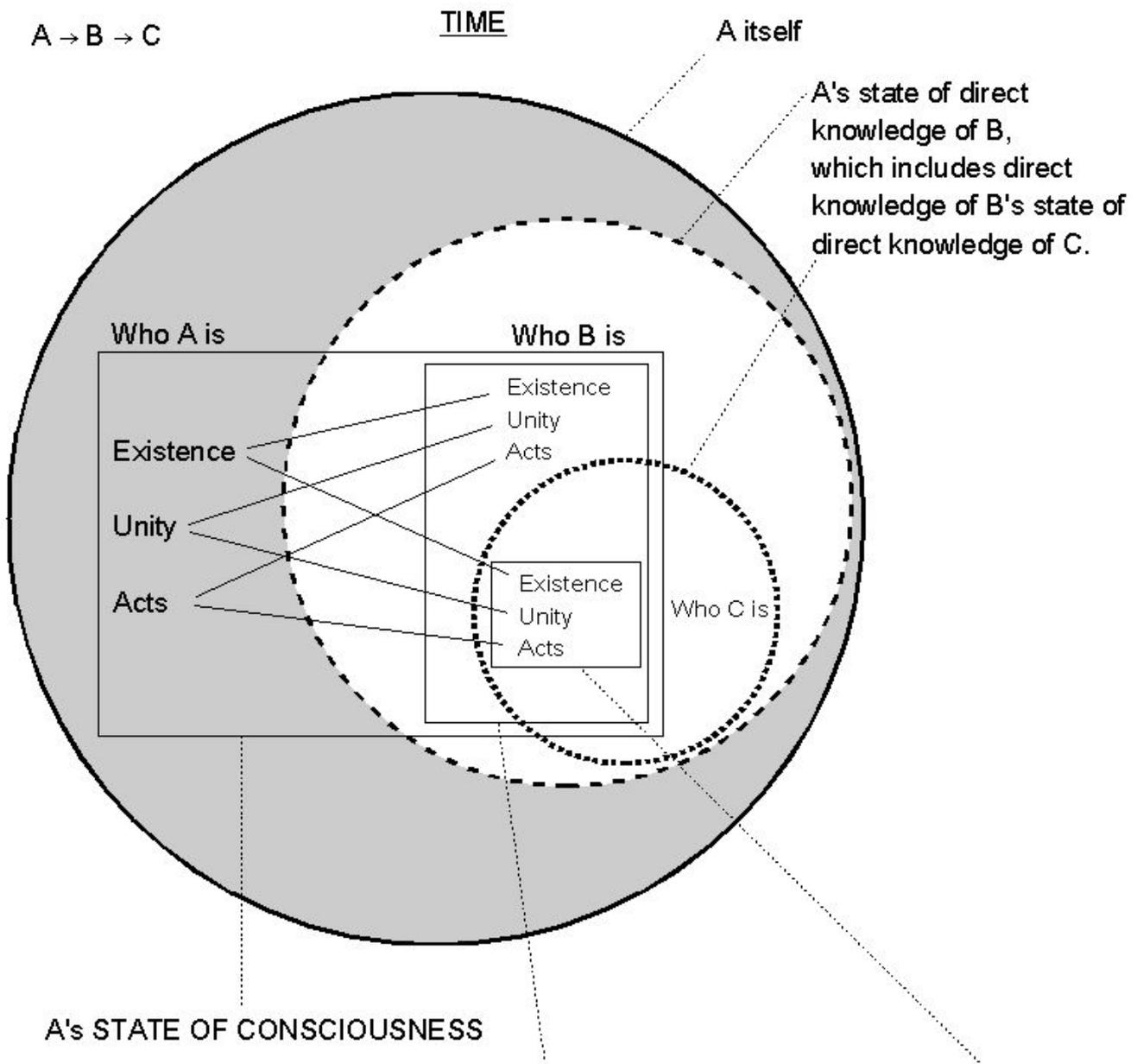
The first mentioned (1) is called the 'overall' state of consciousness and the second (2) mentioned is called a 'substate' of consciousness of the overall state of consciousness.

There is another rule, **Rule Two**; any two or more states of consciousness a single nonphysical individual is in, are subsumed (combine) to form a single state of consciousness that includes those states of consciousness. This is because of the Unity attribute. Therefore, as a result of ind A being a unity, the two *conscious* states that ind A is in are 'subsumed' into a single conscious state. In this example of $A \rightarrow B \bullet \rightarrow C \bullet$, the subsumption results in ind A's consciousness due to the substate $A \rightarrow B \bullet$ being 'embedded' in ind A's overall consciousness due to $A \rightarrow B \bullet \rightarrow C \bullet$. The reader might think that ind A is in

a conflict of the two 'consciousnesses': the substate of one proto-physical-particle and the overall state of two proto-physical-particles; however, this conflict is resolved if the reader understands that

ind A is in a single state of consciousness of what is usually called 'present time' in which there appears in ind A's consciousness one proto-physical-particle, C•, along with a conscious *memory* of one proto-physical-particle B•, due to this consciousness being an embedded sub-state in the overall present time. That single state of consciousness ind A is in also includes the conscious memory of a B• proto-particle having existed one fundamental unit of duration (time) in the past from ind A's overall consciousness of the C• proto-physical-particle existing in present time. Ind A is in a state of consciousness of an apparent *continuum* of time of one unit duration, the continuum appears in ind A's consciousness, again, because the two conscious experiences that ind A is in are subsumed into one conscious experience, due to the unitary nature of ind A. The duration of time for ind A is *bounded* by the conscious memory of one proto-physical-particle B• one unit of time in the past, which is the beginning of time for ind A, and by the conscious experience of proto-particle C• in present time, which is the end of time for ind A. Remember there is no background of time, the background in this case is the nonphysical individuals and their originated states, which is all that exists.

This subsumption and embedding into a single state of consciousness *compares* the consciousness that ind A is in of present time to ind A's consciousness of one unit of time in the past (in ind A's memory). This comparison is a *measurement*. A measurement of ind A's consciousness of present time of C• to ind A's consciousness of B• and of one unit of time duration to 0 units of time duration. Ind A is an observer in whose state the comparison nonphysically and thus 'instantaneously' occurs, which is the measurement. This is the basis of the reduction process or collapse of the wave function in quantum theory.



A's STATE OF CONSCIOUSNESS

Content of A's state of consciousness: two proto-fermions, C• and B•, with C• being in A's present time with B• one unit of time before, in A's memory.

2.3 Consciousness of a Simple Physical Particle (a Proto-fermion) Located in Time

Let an arrow [→] represent an act by the nonphysical individual at the tail of the arrow to place itself in a state of knowledge based on the nonphysical individual at the head of the arrow, and let a capital letter represent a nonphysical individual: $A \rightarrow B$ equals ind A in a state of knowledge of ind B. As described in 2.2, ind A is conscious of ind B as a simple-physical-particle, not located in time or space and without charge, motion, spin, or mass. Let a dot [•] represent ind A's consciousness of such a simple-physical-particle based on,

in this case, ind B: $A \rightarrow B\bullet$. Let the absence of an arrow from ind B to ind A represent a state of ind B of no knowledge of ind A; and, for the sake of completeness, the absence of an arrow from ind A to itself and the absence of an arrow from ind B to itself represent states of ind A and ind B of no knowledge of ind A and ind B of themselves respectively.

To locate a simple-physical-particle based on ind B, i.e. $B\bullet$, in an apparency of time in the consciousness of ind A, an addition is needed to the arrangement $A \rightarrow B\bullet$, as in the arrangement:

$$A \rightarrow B\bullet \rightarrow C.$$

Because ind B is in a state of knowledge of ind C, and because, as mentioned in the last paragraph of section 1.3 Attributes, ind A's state of knowledge of ind B *includes* ind B's state of knowledge of ind C, there are two states of *consciousness* formed for ind A by this situation: (1) ind A is conscious of $B\bullet$, and (2) ind A is conscious of $C\bullet$. Because ind A is a unity, these two '*consciousnesses*', (1) and (2), are subsumed into one state of consciousness, wherein the 'substate' of consciousness of $B\bullet$ is 'embedded' in ind A's overall consciousness of $C\bullet$. The reader might think that ind A is in a conflict of these two '*consciousnesses*': the substate of one simple physical particle, due to $A \rightarrow B\bullet$, and the overall state of two simple-physical-particles, due to $A \rightarrow B\bullet \rightarrow C\bullet$; however, this conflict is resolved if the reader understands that ind A is in a single state of consciousness of what is usually called 'present time' in which there appears in ind A's consciousness one simple-physical-particle $C\bullet$, along with a conscious *memory* of one simple-physical-particle $B\bullet$, one unit of time in the past from present time. This is an example of two phenomena being combined into a single phenomenon. This is made possible because of the assumption that these phenomena are conscious states of a unitary individual.

This combination includes, ind A being in a state of consciousness of an apparent *continuum* of time of one unit duration; this continuum appears in ind A's consciousness, again, because the two conscious experiences that ind A is in are subsumed into one conscious experience, due to the unitary nature of ind A. Additionally, the duration of the continuum of time for ind A is *bounded* by the conscious memory of one simple-physical-particle, $B\bullet$, one unit of time in the past, which is the beginning of time for ind A, and by the conscious experience of the simple-physical-particles, $C\bullet$, in present time, which is the end of time for ind A. Remember there is no background of time, the 'background' in this

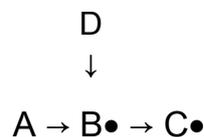
case is the nonphysical individuals and their originated states, which is all that exists; this situation is traditionally called the phenomenon of 'the passage of time.'

Because of this subsumption and embedding into a single state of consciousness, a '*comparison*' of the consciousness that ind A is in of present time (C•) to ind A's consciousness of one unit of time in the past (in ind A's memory) (B•) occurs. This comparison is a fundamental *measurement*. The measurement is between one unit of time duration and zero units of time duration – between the existence of C• and the existence of B• in ind A's consciousness. Ind A is an unlocated in time (or space) observer in whose conscious state the phenomenon of comparison occurs nonphysically and thus, independent of time.

2.4 How a 'Common' Universe Occurs

In the following arrangement of nonphysical individuals and their states, two conscious experiences of two simple-physical-particles are had:

- one by ind A and
- the other by ind D.



(ind B is only conscious of C•)

What each consciously experiences is the same in content, because ind A and ind D are in an equivalent relationship to ind B and ind C. Ind A and ind D each are in a state of consciousness of a very young baby universe of C• simple-physical-particle located in present time and of a conscious memory in present time of B• one fundamental unit of time in the past of that present time. For each of them, that baby universe is one unit of time old; this is called 'common time' in that it is common to both ind A and ind D.

In Arrangement 1, each of the nonphysical individuals is in a state of consciousness of four proto-fermions: A•, B•, C•, D• in common present time.



Each has a memory of this 'universe' being two units of continuous time in duration old. However, the sequence of the events in that common time is different and unique for each of them:

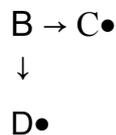
$A \rightarrow B \bullet \rightarrow C \bullet \rightarrow D \bullet \rightarrow A$; $B \rightarrow C \bullet \rightarrow D \bullet \rightarrow A \bullet \rightarrow B$;
 $C \rightarrow D \bullet \rightarrow A \bullet \rightarrow B \bullet \rightarrow C$; and $D \rightarrow A \bullet \rightarrow B \bullet \rightarrow C \bullet \rightarrow D$. This type of circuit arrangement sequencing turns out to account for special relativity.

2.5 A Nonphysical Individual's Consciousness of Bounded One-Dimensional Space

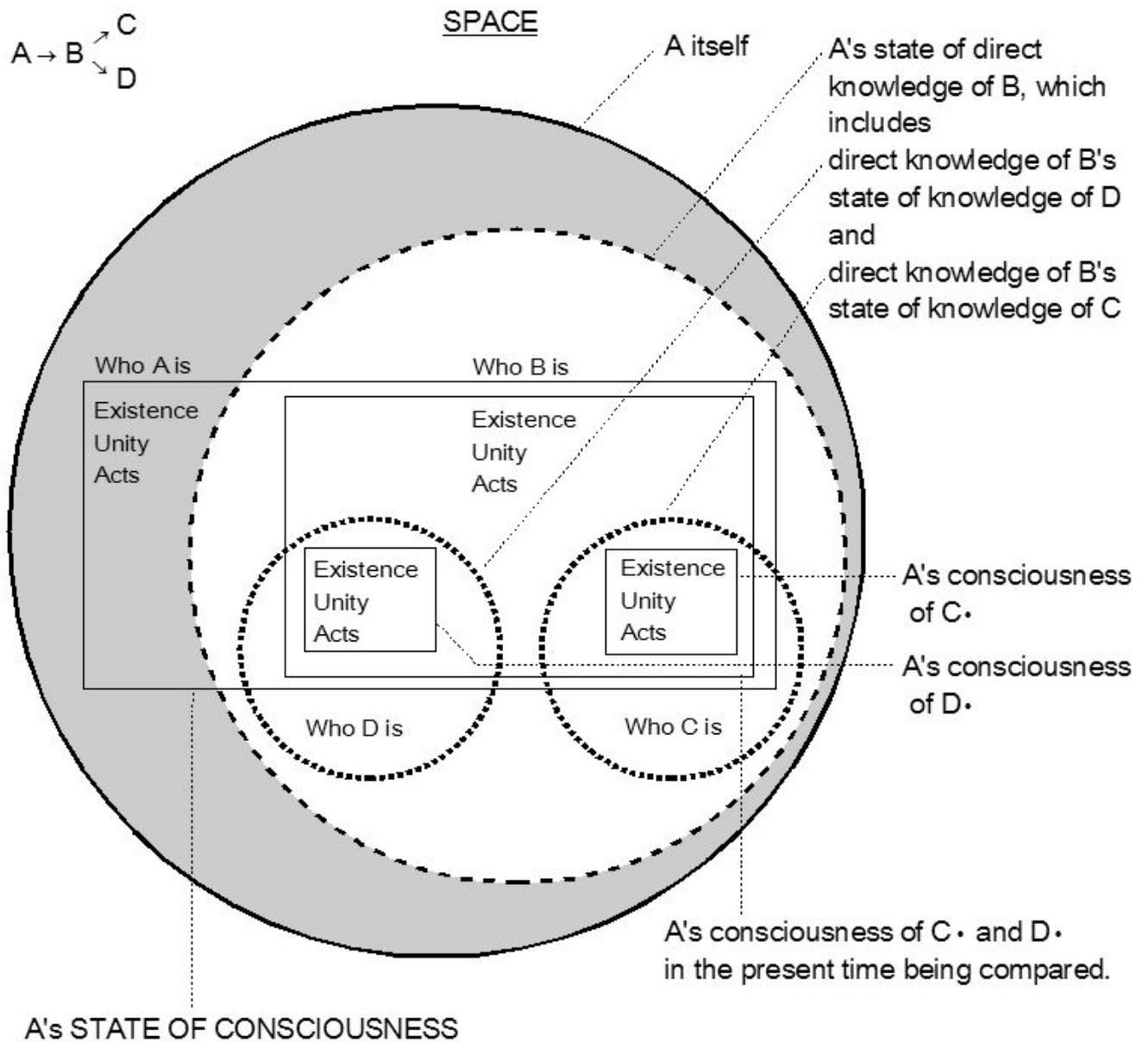
In Arrangement 2, the simple-physical-particles, $B \bullet$, $C \bullet$ and $D \bullet$, are not located within a *background* of space. In order for particles to be located at a distance from each other, those particles must exist at the same time in the consciousness of the individual who is conscious of those particles.



Because of the unity of ind A, the conscious states due to $A \rightarrow B \bullet \rightarrow C \bullet$, $A \rightarrow B \bullet \rightarrow D \bullet$ reduce to the appearance in ind A's consciousness of $C \bullet$ and $D \bullet$ at the same time, present time. ($B \bullet$ exists for ind A as a conscious memory one unit of time in the past of this present time.) In the following arrangement:



there is no consciousness of time and thus no relative locations of $C \bullet$ and $D \bullet$ are possible in ind B's consciousness. In Arrangement 2, however, $C \bullet$ and $D \bullet$ appear in ind A's conscious experience of present time (the overall arrangement) to be one unit of one dimensional (1-D) space from each other.



Content of A's state of consciousness:

Protofermions C• and D• as the termini of a one dimensional bounded space continuum one unit of distance apart from each other in what is the present for A.

This difference in location *from* each other in ind A's consciousness of C•, D• appears because of the comparison, due to the unity of ind A, in ind A's single state of consciousness of the two different 'consciousnesses' of relation: $A \rightarrow B \rightarrow C$ and $A \rightarrow B \rightarrow D$. This difference in location is the phenomenon of space, in this case of bounded 1-D space between C• and D• in A's state of consciousness. This phenomenon of space is

the result of combining the phenomena of C•, D•, due to the structure in Arrangement 2.

Further, in ind A's consciousness, C• and D• appear to be located at the same time (in this case present time) at the termini of a continuum of 1-D *bounded* space, with C• and D• being the point-like termini.

2.6 Consciousness from a Point in 3-D Space of Particles in that 3-D Space

In a circuit arrangement of nonphysical individuals with at least three 'arrows' extending across the circuit from *one* of the nonphysical individuals in that circuit, each nonphysical individual in that circuit will be in a conscious state of being at a point in an *unbounded* finite 3-D space viewing physical particles located at various distances from each other in that 3-D space. This three-dimensional conscious state for each nonphysical individual in the circuit appears, again, because of the unity of each nonphysical individual which subsumes the 'consciousnesses' of 1-D space due to each of the three 'cross-over arrows,' which merge those 1-D spaces into a single state of consciousness of that unity forming an *orthogonal* 3-D space based on the difference of *who* the three nonphysical individuals are to which each of the arrows points. Because of the circuit arrangement, the 3-D space is unbounded in the consciousness of each of the nonphysical individuals in or connected to the circuit.

This phenomenon of viewing from a physical point, which is not a physical particle, in space tends to convince the nonphysical individuals in the circuit that they are located in the common space and time of the circuit, each at their own location in that space, each in their own sequence of temporal history, and each in common present time. Being so convinced, the nonphysical individuals tend to consider themselves to be physical beings instead of knowing they are nonphysical, even though those who are placing themselves in a state of knowledge of themselves may be also be conscious of themselves as nonphysical individuals.

3.0 A Few Examples of Computations of Magnitudes

3.1 The Magnitudes of N, K, and n

It turns out that labeled *directed* graph theory accurately and mathematically represents the compositional patterns (arrangements) of the paradigm offered here. The key

magnitudes in a directed graph are the number of nodes N , which represents, in this case, the number of nonphysical individuals; the average number of directed arcs (arrows) per node (K), which represents, in this case, the average number of states of knowledge per nonphysical individual; and, the number of nodes (n) in the spanning Hamiltonian (here, the largest circuit). In this case, (n) represents the number of nonphysical individuals in that largest circuit.

In this paradigm it is assumed that there is a finite number of nonphysical individuals, for if this were not so all computations of magnitudes of physical phenomena would be infinite. Using the finite number of nonphysical individuals (N) and the finite number of acts of being in a state of knowledge by those nonphysical individuals (NK) and the number of nonphysical individuals in the largest circuit (n), it is possible to use combinatorics to compute the magnitudes and probabilities of various realities and phenomena. In the following, I have not always included the arguments explaining which arrangements appear as which physical particles and their relations.

N has been found using various measurements of physical phenomena, such as the rest mass ratios of the charged leptons, the point of inflection of the inflationary curve, the elementary electric charge, and the ratio π (π) combined with the natural number (e). That is to say, all these values, including π and e , are determined by the value of the number N .

First, the value for N is found from the rest mass ratios of the charged leptons. The number of states of knowledge (arrows) involved in the substate that represents the rest mass of the tau lepton is $\sqrt[5]{120N^4}$ and the rest mass number of the electron lepton is $\sqrt[3]{6N^2}$. These rest mass numbers are probabilistic and can be thought of as the expectation numbers, the number of arrows needing to exist in a substate in order to expect one arrangement to exist that forms in the consciousness of a nonphysical individual of, in this case, a tau lepton with its rest mass and an electron with its rest mass, respectively. The arrangement in the case of the tau lepton is composed of a nonphysical individual in the largest circuit that has five arrows extending across the circuit to five different nonphysical individuals who are also in the largest circuit. The arrangement in the case of the electron is composed of one nonphysical individual in the largest circuit that has three arrows extending across the circuit to three different nonphysical individuals

who are also in the largest circuit. This paradigm's equation for the mass ratio of the tau particle to the electron is $2 \left[\sqrt[5]{120N^4} / \sqrt[3]{6N^2} \right]$. The best measured value for this ratio is by Perl (1990) and is 3491 ± 6 . Solving for N, N is 1.3836×10^{23} nonphysical individuals. The mass ratio equation of the muon lepton to the electron is $2 \left[\sqrt[4]{24N^3} / \sqrt[3]{6N^2} \right] = 206.7682657$, the measured value of this ratio. Solving for N, N is about 1.3841×10^{23} . Unless otherwise noted, all measured values are from the current CODATA web site.

Another way to find N is by using the point of inflection of the inflation curve (ti), which is easily computed using this paradigm's equation for the point of inflection:

$$ti = (\pi/2) N (tp/(2N))^{1/2}$$

where tp is the Planck time, which from measurements is 5.3906×10^{-44} second. The best standard estimate for ti using GUTs theory is about 10^{-33} second (Guth 1984). Solving for N, N is 6.2178×10^{21} .

The best way to find N is to use the values for the ratio π and the natural number e, both of which are a consequence of various substates of the extant total arrangement; these various substates are embedded in such a way that their subsumptions form the numbers of π and e. Thus, $N = 10$ to the $(e^\pi) = 1.382587521 \times 10^{23}$, which is close to the value found from the mass ratios of the leptons and about one and one half orders of magnitude more than the GUT's-based ti estimate. Using $N = 1.382587521 \times 10^{23}$, a prediction of the point of inflection as based on the paradigm used here can be easily computed: $ti = \pi/2 N (tp/(2N))^{1/2} = 2.51214 \times 10^{-32}$ second. I use N as $1.382587... \times 10^{23}$ or about 138 billion trillion nonphysical individuals in all the computations that follow.

The *average* number of states of knowledge (arrows) per nonphysical individual (K) is the square root of the inverse of the electromagnetic coupling constant (α) plus 1: $\alpha^{-1/2} + 1$. The measured value of the constant α^{-1} is 137.03599976 and its square root is about 11.70623764. This magnitude is the average number of arrows that cross over the largest circuit from a nonphysical individual to nonphysical individuals in that circuit. Then, adding 1, which is the arrow in the circuit *from* each of the nonphysical individuals in the circuit, we get K, as 12.70623764. Of course, some nonphysical individuals are placing themselves into many more states of knowledge of nonphysical individuals than others.

KN, the total number of knowledge states (arrows), is $1.756748560 \times 10^{24}$. With, on average, this many (K) arrows (states of knowledge) per nonphysical individual, an extant, giant arrangement or network of nonphysical individuals is formed which includes nearly every nonphysical individual being *indirectly* connected *to* nearly every other nonphysical individual. The number of nonphysical individuals *not* connected to the network is given by: N/e^K , which is 4.19238×10^{17} or about 0.0003% of N; therefore, n is $N - N/e^K$, which is $1.382583329 \times 10^{23}$.

This nonphysical network of nonphysical individuals is connected by nonphysical directed relations of states of knowledge; and, it is not located in time or in space, it merely exists (is extant), in the pattern determined by the nonphysical acts of the nonphysical individuals. Due to the various indirect pathways in this giant nonphysical network that exist *to* each nonphysical individual *from* each nonphysical individual, each nonphysical individual can appear many times as some variety of *fundamental fermion* (leptons and quarks), complete with all quantum numbers. The number of such fermions is $(Kn)^3(2N)^{1/2}$, which is 6×10^{84} ; estimates based on measurements vary from 10^{80} to 10^{87} (Martin Rees, 1999).

3.2 Some Magnitudes of Constants and Other Phenomena

The universal constant, the Planck length (lp), is the total of all fundamental units of length generated by all the arrows that cross over the largest circuit and is given by: $e^\pm (K - 1)$, where e^\pm is the elementary electric charge expressed as length (see Misner, 1973), which is the total of all fundamental units of length generated by one arrow crossing over the largest circuit from *one* nonphysical individual in that circuit, which is given by λ_{ce}/Kn , where λ_{ce} is the Compton wave length of the electron, which, in turn, is the number of fundamental units of length generated by only one arrow crossing over the largest circuit from each nonphysical individual in that circuit, which is measured as $12.426310215 \times 10^{12}$ m. So, the Planck length is $1.616796549 \times 10^{-35}$ m. This ten-digit value is a prediction. The current CODATA value of the lp, which is limited by the currently measured value of G, the Newtonian constant of gravitation, is 1.616×10^{-35} m.

The age of the universe (tu), as it appears in the consciousness of a nonphysical individual that is in the largest circuit, is the number of two-arrow substates, i.e. fundamental units of

time, which that nonphysical individual is presented with in its consciousness. This number is determined by the number of arrows in the largest circuit, which is the same as n , and by K , which is the average number of arrows extending from a nonphysical individual. This number, nK , is cubed because at least one nonphysical individual in the largest circuit has at least three arrows originating from it across the largest circuit and any such arrows in excess of three are observed as energy, instead of as additional dimensions of space and time. The magnitude of the fundamental unit of time (t_q) is given by $tp/(2N)^{1/2}$, where $(2N)^{1/2}$ is the number of states of knowledge needed to expect a substate of two arrows to exist, as in $A \rightarrow B$: therefore, the number of time units is $(Kn)^3 t_q$. However, this is decreased by a factor of $\pi/2$; therefore, $t_u = 2/\pi[(Kn)^3 t_q]$, is 12.6516 billion sidereal years. This is a prediction. The *average* current value measured for t_u , using various methods (cephids, globular clusters, WMAP microwave background, and uranium decay in stars), is 13.2 ± 0.7 billion years.

The relative strength of the electromagnetic force to the gravitational force (EM/g) is given by: $(Kn)^2/(\pi/2N)^{1/2}$, so $EM/g = 6.6223224 \times 10^{36}$. The measured value of this ratio is 6.6×10^{36} ('t Hooft 1980).

The relative strength of the strong force to the gravitational force (S/g) is given by: $3(K-1)EM$, which is 2.3256744×10^{38} . The measured value at 10^{-16} m is 2.3×10^{38} ('t Hooft 1980).

4.0 Quantum Theory

As regards to quantum theory, the nonphysical individuals are the 'selectors', the 'indexers', who nonphysically act to be in nonphysical states of direct knowledge of nonphysical individuals from among the many possible choices in the extant network. A nonphysical individual making a choice to be in a state of direct knowledge of a specific nonphysical individual, determines which possibility becomes a state of direct knowledge or state of no direct knowledge it is in of that specific nonphysical individual. This, along with the subsumption, due to the unity attribute, reduces the overall arrangement and all the substates arrangements of that overall arrangement to one phenomenon in the consciousness of that nonphysical individual which has acted and it appears in the consciousness of those nonphysical individuals who are connected *to* that nonphysical

individual. This is the act of observation and the nonphysical individuals are the observers, not some sensory system of a biobody with which that nonphysical individual may or may not be associated. This result is called a 'measurement' 'reduction' or 'collapse of the wave function' in quantum theory. There is no requirement for this nonphysical individual to, in turn, be observed and thus collapsed because that individual observer is nonphysical and thus, the observer problem of quantum theory is resolved.

There are limitations to a nonphysical individual's ability to select nonphysical individuals to act of which to be in a state of direct knowledge, e.g. a nonphysical individual cannot act to be in a state of direct knowledge of a nonphysical individual of which it is in a state of direct knowledge. Other data show that acts with regard to the *extant* network of nonphysical individual and states are *close* to being random; therefore, the distribution of possibilities of the extant states determine the values in the wave function and thereby the probabilities of the various possible outcomes.

[Here is another version that stresses combinatorics]

Characteristics and Attributes of Nonphysical Individuals

In my proposal, I assume that –

The nonphysical individuals are ontologically fundamental and are not a product of a body, brain, micro-physical particles, or of anything: they are not created. The nonphysical individuals are completely nonphysical; they are not material or some form of energy, nor do they have any of the characteristics of fermions or bosons. The nonphysical individuals, unlike souls or spirits as located spiritual individuals, and monads, are not located at any originate in space, and, because they are not created, they cannot be located at any time, present, past, or future. I call a nonphysical individual an individual because a nonphysical individual is not dividable, it is a **'Unity'**. While it has four attributes (these are Capitalized and in **bold** type) and several characteristics, it is 'single', an ultimate individuality.

- Each nonphysical individual is *different* from every other nonphysical individual in who that individual is, **'Who it is'**. Yet, in all its other attributes, it is equivalent to (like) every other nonphysical individual.
- Each nonphysical individual has the attribute of **'Existence'**, that is, it exists even though it has zero physical attributes.

- Each nonphysical individual has the attribute of being able to originate '**Acts**'; that is, freewill. It turns out that only one *kind* of act by a nonphysical individual is needed and that is to act to be in a state of direct knowledge of any specific nonphysical individual, or if one *is* in a state of direct knowledge of that specific nonphysical individual, to act to be in a state of no direct knowledge of that nonphysical individual. ('direct knowledge' will be defined shortly.) Each nonphysical individual has the ability to originate this kind of act with regard to each nonphysical individual, including itself. This kind of act is the only act of freewill that a nonphysical individual can perform. Such acts are nonphysical and thus are not in time or space. Further, such acts can only be performed with respect to nonphysical individuals that exist, that is one can't act to be in a state of direct knowledge or of no direct knowledge of that which does not exist.
- Nothing exists other than a large, definite number of nonphysical individuals and their self-originated states (acts) of direct knowledge and/or of no direct knowledge.

A state of direct knowledge is an actual nonphysical state (a nonphysical facsimile, a nonphysical duplicate) of (based on) a nonphysical individual (either another or oneself). A direct knowledge state is a nonphysical state that one places oneself in that corresponds to a specific nonphysical individual. However, a direct knowledge state is *not* consciousness of a nonphysical individual, nor is it consciousness of anything; it is not an experience of anything; it is an information state *based* on a nonphysical individual. It is similar to direct knowledge that one has and is trying to remember but of which one is not yet conscious. Consciousness is defined later.

Combination Categories

There are four categories of combination or relation:

- (1) Combination due to acts of direct knowledge,
- (2) Combination due to indirect direct knowledge,
- (3) Combination due to the unity of a nonphysical individual, and
- (4) Combination due to equivalence of attributes.

(1) Combination Due To Acts of direct knowledge Combination due to the act of placing oneself (as a nonphysical individual) in a state of direct knowledge (a facsimile) based on a specific nonphysical individual is the basic category of combination. A

combination of this category is both a 'direct' relation, a relation with no intervening relation, and a 'directed' relation, a relation that is uni-directional. For example, if A and B are nonphysical individuals and A acts to be in a state of direct knowledge of B, A is in a direct relation (direct combination) with B, that is, *for A*, there is a direct relation or combination. If B is acting to be in a state of no direct knowledge of A, B is not in a direct relation with A. This means that for A there is a direct combination with B, but not for B with A. This is graphed as A.B, where the arrow originates with the nonphysical individual, A, that is in the state of direct knowledge and terminates at the nonphysical individual, B, upon whom A's state of direct knowledge is based. Combining two or more combinations of this category can lead to a more complex category.

(2) Combination Due To Indirect direct knowledge For example, in A.B.C , there is an indirect relation (combination) for A. *B* is in a state of *direct* knowledge of C, while A is in a state of *indirect* direct knowledge of C. A is in this state because A's state of direct knowledge of B includes B's state of direct knowledge of C. Like direct relations, indirect relations are 'directed'.

(3) Combination Due To the Unity of a Nonphysical Individual A combination of this category occurs if a single nonphysical individual is in two or more states, whether states of direct knowledge, indirect direct knowledge or consciousness (explained later). The states are related to (are combined with) each other to form an additional state of, or for, the single nonphysical individual who is in the states. This happens because a nonphysical individual is a Unity and, the states, being states of a single unitary nonphysical individual, are related (combined). For example, in D.A.B, where A is in a state of direct knowledge based on B *and* is in a state of direct knowledge based on D, because A is a unity, the two states are connected, related, combined, or, as you and Tim Bayne put it, 'subsumed' to form an additional state that includes both states of direct knowledge. The general rule is that states comprising any subset of states of a nonphysical individual combine to form a new state of that individual.

(4) Combination Due To the Equivalence of Attributes There is a .nal category of

combination that occurs if an attribute contained in a state of (direct or indirect) direct knowledge a nonphysical individual is in, is equivalent with (like) one of that nonphysical individual's own (ontological) attributes. For example, if A.B, A's direct-direct knowledge state attribute of **Existence** (based on B's attribute of **Existence**) is equivalent with A's own attribute of **Existence**, therefore the two attributes combineare related) so that A is in an additional state, a state of the equivalence of the two attributes.

Protophenomena

Applying these four categories of combining, we can develop various types of combinations that account for all of our conscious experiences. What follows is in two parts: (a) a detailed description of the simplest example of the combination that produces consciousness of a matter particle, then (b) brief descriptions of the types of combinations that produce the other important basic phenomena.

(a) Consciousness of a Proto-Physical Particle

In this section will be described how consciousness of a unit of matter occurs from combinations due to direct knowledge acts (category 1), combinations due to unity (category 3), and combinations due to the equivalence (likeness) of attributes (category 4). Included will be why consciousness is nonphysical and why what one is conscious of is physical, what a 'subject' is and what an 'object' is, and what 'phenomena' and 'physicality' are.

In A.B, each nonphysical individual has four attributes: **Existence, Unity, Acts, and Who it is.**

In Figure 1, the various states that A is in are shown :

- The state of direct knowledge of B in which A is acting to originate itself.
- Seven additional states that are formed due to the unity of A and due to the equivalence (likeness) of three of A's own (ontological) attributes with three of the attributes in A's state of direct knowledge of B.

[Table goes here]

Of these seven additional states, three come within category (4). They are represented by the three rectangular boxes containing two attributes related by double ended arrows

indicating their equivalence.

(4a) A is in a state of the equivalence (likeness) *of* the attribute of **Existence** in A's state of direct knowledge based on B's attribute of **Existence** *with* A's own (ontological) attribute of **Existence**.

This state of equivalence that A is in is a conscious state, the content of which is the attribute of **Existence** in A's state of direct knowledge (facsimile) based on B's attribute of **Existence**.

Consciousness (at its most basic) is a nonphysical individual's state of the equivalence of an attribute in its state of direct knowledge based on a nonphysical individual *with* an ontological attribute.

You might ask at this point, "Why is that consciousness?" In the past, you have stated, along with Nagel and others, "A mental state is conscious if there is something it is like to be in that mental state." Using this in my proposal, the wording is: A's state of direct knowledge of the attribute of **Existence** based on B's attribute of **Existence** is conscious since "there is something it is like to be in that state," namely, A's ontological attribute of **Existence**. Stated another way: To be in a state of direct knowledge of an attribute of **Existence** based on a nonphysical individual is like being one's own attribute of **Existence**; since one is being one's own attribute of **Existence**, one is conscious of the attribute of **Existence** in one's state of direct knowledge based on that nonphysical individual's attribute of **Existence**. A shorter form is: To be in a state of direct knowledge of an attribute of **Existence** based on a nonphysical individual is like being one's own attribute of **Existence**, therefore that state of direct knowledge is a conscious state.

(4b) A is in a state of the equivalence (likeness) *of* the attribute of **Unity** in A's state of direct knowledge based on B's attribute of **Unity** *with* A's own (ontological) attribute of **Unity**. This state of equivalence that A is in is a conscious state, the content of which is the attribute of **Unity** in A's state of direct knowledge (facsimile) based on B's attribute of **Unity**.

(4c) A is in a state of the equivalence (likeness) *of* the attribute of **Acts** in A's state of direct knowledge based on B's attribute of **Acts** *with* A's own (ontological) attribute of **Acts**. This state of equivalence that A is in is a conscious state, the content of which is the attribute of **Acts** in A's state of direct knowledge (facsimile) based on B's attribute of **Acts**. Three of the seven additional states fall within category (3) (unity). They are represented by the

colored lines as follows:

- **Blue line**, combining (relating, subsuming) 4a and 4b states, forming A's conscious state of 'a unitary existence'.
- **Green line**, combining (relating, subsuming) 4b and 4c states, forming A's conscious state of 'a unit act'.
- **Red line**, combining (relating, subsuming) 4a and 4c states, forming A's conscious state of 'existence that acts'.

The seventh and final additional state, also of category (3), is the combining of all the above eight states of consciousness to form a single overall conscious state, or, as David Chalmers and Tim Bayne say, the "Total State." The content of this overall state of consciousness that A is in consists of 'a unitary existence that acts', based on B's attributes of **Existence**, **Unity**, and **Acts**. Note that the attribute of **Who B is** in A's state of direct knowledge of B, is not included in A's overall conscious state. The reason is that the attribute of **Who B is**, is not equivalent to A's ontological attribute of **Who A is**. Only in the case wherein A is in a state of (direct or indirect) direct knowledge of itself is the **Who it is** attribute in A's state of direct knowledge, '**Who A is**', equivalent to A's ontological attribute of **Who A is**. Thus A is conscious of 'a unitary existence who acts'. Here the who doing the acting in A's consciousness is an agent, whereas in the case of 'a unitary existence that acts' there is no agent in A's consciousness to do the acting, there is only 'a unitary existence' that appears to do the acting. According to the paradigm offered here, this second case is not fundamentally true. A's consciousness indicates that 'a unitary existence' is doing the acting, whereas it is actually a free agent, a nonphysical individual, who performs the acts. Thus, A's consciousness is misinforming A about the ultimate reality involved.

Note that while A's conscious state is a state of equivalence, it is asymmetrical in that A is not conscious of its ontological attributes but is conscious only of the attributes in its state of direct knowledge.

In the example, A.B, the overall content of A's conscious state, 'a unitary existence that acts' is a phenomenon (or a proto-phenomenon). And even in the example, (A acts to originate itself into a state of direct knowledge of itself), where the content of A's conscious state is 'a unitary existence who acts', that content is not A itself; it too is a

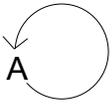
phenomenon, a phenomenon that is an *accurate* facsimile of A. The difference in the two phenomena is that 'a unitary existence that acts' is a physical phenomenon, and 'a unitary existence who acts' is a nonphysical phenomenon. The essence of non-physicality is that the acting agent's act is a freewill origination, whereas in the case of what appears to be physical, that which is actually the act of an agent appears to be caused by a 'prior' event (something other than the agent.) What is usually thought of as a unit physical (material) particle being in existence, is really 'a unitary existence that (re)acts' being the content of one's consciousness due to one's state of direct knowledge based on a nonphysical individual other than oneself. Two examples of such a unit particle are leptons and quarks (see the bottom row of the Table below). The unitary existence that forms the content of A's consciousness in A.B is actually a proto unit physical particle in that it has no quantum numbers, such as charge, isospin, mass, etc. and has no background of space and time and thus is not located in space or time (including a present). Thus, A is conscious of a unit particle that is not anywhere, or at anytime, i.e., a protophysical thing, which is actually a state of partial direct knowledge based on the ultimate reality B. Because this phenomenon, 'a protophysical thing', is based on a real nonphysical individual B, this situation, and thus this paradigm, is not solipsism.

In A's state of consciousness in A.B, the 'subject' is A in a conscious state and the 'object' is the content of A's conscious state, 'a unit of matter'. Except for consciousness based on oneself, consciousness is only of the physical, and the physical exists only as the content of one's consciousness. What is thought of as an independently existing object, like a chair, is really the result of a great many nonphysical individuals being in equivalent or similar states of consciousness (see rows 4, 5, 6, 7 and 8 of the following table). A so-called 'mental' phenomenon, like a thought or a dream, is, in my paradigm, merely a more subtle physical phenomenon, which differs from a more gross physical phenomenon only in the smaller arrangement of nonphysical individuals in states of direct knowledge needed to produce it. Subtle and gross organs of perception are the result of complex arrangements that require much discussion.

(b) Various Types of ProtoPhenomena

The basic types of combinations and the phenomena they produce in the consciousness of nonphysical individuals are covered by the table.

Table of Proto-Phenomena

Type of Combination	Simplest Example	Type of Proto-phenomenon
Basic – self		Oneself as a conscious nonphysical individual.
Basic – other	$A \rightarrow B\bullet$	A unit of matter (A is conscious of a unit of matter [B•] 'based' on individual B).
Basic – Bifurcation	$A \rightarrow B\bullet$ \downarrow $D\bullet$	Comparison of two units of matter not in time or space. Judgement. Meaning.
Second Person	$A \rightarrow B\bullet$ \uparrow C	A unit of matter (A and C are each conscious of a unit of matter 'based' on individual B).
Linear	$A \rightarrow B\bullet \rightarrow C\bullet$	Comparison by contingency. Time continuum between proto-fermions (A is conscious of C• in 'the present' and B• one time unit in 'the past'). Memory. Duration. Change. Proto-quantum fluctuation.
Linear plus Bifurcated	$A \rightarrow B\bullet \rightarrow C\bullet$ \downarrow $D\bullet$	Space continuum between units of matter (for A, C• is one unit of 1-D space from D•). Dimensionality. Orthogonality.
Circuit	$A\bullet \rightarrow B\bullet$ $\uparrow \quad \downarrow$ $D\bullet \leftarrow C\bullet$	Self as nonphysical individual located at same present time as the units of matter. Concept of infinity.
Crossed-over circuit	$A\bullet \rightarrow B\bullet$ $\uparrow \quad \swarrow \quad \downarrow$ $D\bullet \leftarrow C\bullet$	Oneself as nonphysical individual located in present time and space. Observation from a viewpoint Fermions, quantum fluctuations, fermion pairs with + and – charge. Bosons (cross-over \rightarrow). Relativity of motion of fermions. Extra dimensions decay into energy. Gravity, electro-magnetic, weak, strong forces. Mass.

By increasing the number of nonphysical individuals and the number of knowledge states in the model, more and more complex phenomena are produced. This increase can be continued until a finite, large number of the order of 10^{23} gives the measured magnitudes of our Universe. I have detailed descriptions and magnitudes for all this; however, I have left them out of this letter for fear of overdoing it.

I have assumed the exact attributes of nonphysical individuals that are needed for a workable monistic model of reality are what the ultimate reality is. This is a major shift from the current popular paradigm. There are, however, supportive factors other than the logical consistency of my model:

1. I have found no way that that which is physical can be in a conscious state. Most of us experience, at least some of the time, oneself in a conscious state; therefore, one must be a nonphysical individual.
2. Physical things operate by cause and effect or random chance; whereas, the postulated nonphysical individuals can originate acts. If, as most of us experience, each of us has at least some freewill, we must be nonphysical.
3. Using directed graph theory, physical magnitudes (universal constants and values) have been computed using the model that agree with measurements. I would appreciate feedback from you – any other questions or concerns you may have and, if you are interested, how we might proceed in further developing this paradigm.

Best Wishes,

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Comments:

Biological forms, briefly, are composed of substates of large numbers of nonphysical individuals and their states. They are so composed that they act as amplifiers of one or two acts in order to control macro-levels of actions, e.g. moving a hand; and, other such substates that act as attenuators of macro-level 'incoming' information, e.g. the position of a hand, to the proto-level. The element of life in a biolife is the acts of the many nonphysical individuals involved.

Has anything been gained by postulating a proto-level to consciousness and physicality consisting of these completely nonphysical 'psyches' and their relations? I think, yes. The hard problem of consciousness has been addressed and the 'mind'- body duality problem has been resolved. We also have gotten a better understanding of what time, space, charge, mass, and matter, etc. are. And, we have predictions of magnitudes for some phenomena and many more being worked out.

In Sanskrit, the word for the nonphysical individuals who act is *LI* and the word for their acts is *LA*, thus Sanskrit for the paradigm suggested here would be *LILA*.

If the Lila Paradigm should prove to be correct, and I think it is, it could be said that the early Ionian philosophers were correct in commenting that matter and life are inseparable.

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