

**Article**

# **One World Per Observer Paradigm in an Observer-Centric World and the Enigma of Enlightenment**

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## **Abstract**

The essential conceptual mistake that leads to an incorrect view of the world is the commonly made assumption that there are multiple observers in the world. The correct assumption from which all valid scientific concepts naturally develop is the one-world-per-observer paradigm and an observer-centric view of the world that follows from this concept. The most fundamental of all scientific concepts is the holographic principle, which tells us the observer is only observing the forms of information that are encoded on and projected from a bounding surface of space that acts as a holographic screen. The bounding surface of space is inherently an observation-limiting but observer-dependent event horizon that only arises in the observer's accelerated frame of reference, like a cosmic horizon that arises with the accelerated expansion of space that expands relative to the observer's central point of view due to the expression of dark energy.

**Keywords:** Observer-centric world, holographic principle, dark energy, consciousness.

## **Introduction**

In recent months, PBS Space Time on YouTube has in a very serious way attempted to explore recent developments in modern physics and cosmology. The most mysterious and intriguing of these recent discoveries are the nature of dark energy and the holographic principle. The basic problem with the way physics is discussed in this series is the whole conceptual and logical framework of modern physics and cosmology as presented is wrong. Starting with dark energy and the holographic principle as the most fundamental concepts in physics, it is possible to demonstrate in a logically consistent and scientific way the fundamental wrongness or logical inconsistency of the commonly accepted conceptual framework of physics.

In her recent book "Trespassing on Einstein's Lawn", Amanda Gefter has surveyed recent developments in modern physics and gone a long way in terms of explaining the nature of reality in a logically consistent way. The biggest recent discovery is the holographic principle, which resolves all the paradoxes and inconsistencies inherent in the way quantum theory and relativity theory are mathematically formulated and understood. The second big discovery is dark energy, which is the primordial explosive energy that creates the world in a big bang event and shatters the undivided unity of the nothingness of empty space. The critically important point of this scientific analysis is understanding the holographic principle in the context of dark energy.

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The essential conceptual mistake that needs to be corrected is the commonly made mistaken assumption that there are multiple observers in the world. The correct assumption from which all valid scientific concepts naturally develop is the one-world-per-observer paradigm and an observer-centric view of the world that follows from this concept. The holographic principle tells us the observer is only observing the forms of information that are encoded on and projected from a bounding surface of space that acts as a holographic screen. The bounding surface of space is fundamentally an observation-limiting but observer-dependent event horizon that only arises in the observer's accelerated frame of reference, like a cosmic horizon that arises with the accelerated expansion of space that expands relative to the observer's central point of view as a direct consequence of the expression of dark energy.

### **Accelerated Expansion of Space, Observer's Horizon, Holographic Principle & Quantum State of Potentiality**

In relativity theory, dark energy is understood as a positive cosmological constant in Einstein's field equations for the space-time metric that gives rise to the accelerated expansion of space. This accelerated expansion of space is like a globally repulsive force of anti-gravity that opposes the locally attractive force of gravity, which in relativity theory is understood as the contraction of space that locally contracts around all matter and energy. With dark energy, space expands relative to the central point of view of an observer that looks out into space. At some point in an exponentially expanding space, space appears to expand away from the observer at the speed of light. Due to the limitation of the speed of light as the limiting rate of information transfer in three dimensional space, nothing is observable to the observer beyond this point in space, which defines an observation-limiting cosmic horizon that surrounds the observer at the central point of view and limits the observer's observation of things in space. The observer can only observe things within the space bounded by the cosmic horizon. The observer's cosmic horizon is observer-dependent in the sense that it can only arise in the observer's accelerated frame of reference as dark energy is expended.

Tom Banks has shown that the holographic principle is automatically in effect whenever non-commutative geometry is applied to a bounding surface of space. A bounding surface is an event horizon that arises in an observer's accelerated frame of reference, like a de Sitter cosmic horizon that arises with a positive cosmological constant and the accelerated expansion of space. With non-commutative geometry, a finite number of quantized position coordinates on the bounding surface are represented by non-commuting variables. This effectively smears out the quantized position coordinates into area elements like pixels, and each pixel encodes a bit of information, typically as the  $n$  eigenvalues of an  $SU(n)$  matrix, where the total number of bits of information is given in terms of the surface area,  $A$ , of the horizon as  $n=A/4$  (Planck area), which is the holographic principle. These bits of information are the fundamental degrees of freedom that are quantized in quantum theory, which in thermodynamics are called entropy.

Ted Jacobson has shown that Einstein's field equations for the space-time metric, which describe the curvature of the 3+1 dimensional space-time geometry of the bounded space, arise as thermodynamic equations of state from the holographic way fundamental bits of information or entropy are encoded on the two dimensional bounding surface of that space. The holographic principle is more fundamental than Einstein's field equations for gravity, which are only valid as a low-energy limit near thermal equilibrium or an effective field theory. With the usual unification mechanisms of super-symmetry and the Kaluza-Klein mechanism of extra compactified dimensions of space, all other field theories, like Maxwell's equations and the Dirac equation, in effect arise from Einstein's field equations for the space-time metric as extra components of the space-time metric.

Unification tells us that the wave-functions for all wave equations arise as extra components of the space-time metric. Quantum theory tells us that wave-functions give representations for point particles in the sense of probability amplitudes that specify where particles can be observed to be localized at some point in space at some moment of time. The wave-function as a probability amplitude is the nature of the quantum state that gives the probability for observing the particle at any possible point in space-time, but for an observer to observe the particle's actual location, the wave-function must be reduced to an actual state. Wave equations fundamentally give a point particle description of the world. The holographic principle is more fundamental than a point particle description of the world and more fundamental than wave equations. The best way to operationally understand the holographic principle is in terms of non-commutative geometry applied to a bounding surface of space, which explains how all fundamental bits of information for any bounded region of space, otherwise known as an observable world, are encoded on the bounding surface. That is the fundamental nature of quantum theory, not wave equations.

Most physicists have not understood the essential nature of quantum theory. As is well known, wave equations like the Schrodinger equation can only give rise to quantized values like energy levels when solved with periodic boundary conditions. This tells us that in some fundamental way the space we perceive is compactified, like the surface of a sphere that encompasses a three dimensional region of space. In a very real sense, our perception of three dimensional space may be a holographic illusion that arises from a bounding surface of space, like the three dimensional images projected from the surface of a hologram. In a very basic way, Einstein's field equations for the space-time metric are the most fundamental wave equations, and all other wave equations, like the Schrodinger equation or Maxwell's equations, are derivative of Einstein's equations. Solving the Schrodinger equation for the quantized energy levels of an electron orbiting a proton in an hydrogen atom is an example of solving a wave equation with periodic boundary conditions. As 't Hooft and Susskind discovered with their exploration of how quantum theory is unified with relativity theory, wave equations are not the most fundamental principle in physics. The holographic principle is more fundamental than wave equations.

## Horizon Entropy, Unification, the Observer's Screen, World-line and Decision Point & Quantum Entanglement

With the usual unification mechanisms of super-symmetry and the Kaluza-Klein mechanism of extra compactified dimensions of space, all other field theories, like Maxwell's equations and the Dirac equation, naturally arise from Einstein's field equations as extra components of the space-time metric. The Schrodinger equation is only another wave equation. The Schrodinger equation for an electron orbiting a proton in a hydrogen atom is a non-relativistic limit of the Dirac equation. All the wave-functions for all wave equations arise as extra components of the space-time metric with super-symmetry and extra compactified dimensions of space.

In the non-commutative geometry formulation of the holographic principle, a finite number of quantized position coordinates on the bounding surface are represented by non-commuting variables. The bounding surface acts as a holographic screen that encodes  $n$  bits of information, typically as the  $n$  eigenvalues of an  $SU(n)$  matrix, where each non-commuting variable acts like a pixel on the surface that encodes a bit of information in a binary code of 1's and 0's and the total number of bits of information encoded on the surface is given in terms of the surface area  $A$  of the bounding surface as  $n=A/4(\text{Planck area})$ . This is inherently an observer-centric view of the world since everything observable in the observer's world is specified in terms of configuration states of information encoded on the observer's holographic screen, which only arises as an observer-dependent event horizon in the observer's accelerated frame of reference. The observer itself can only be identified as a point of view in empty space that arises in relation to the observer's holographic screen, which is an observation-limiting bounding surface of space that encodes all the bits of information for its world. The observer is nothing more than the point of origin of the coordinate system that specifies the observer's accelerated frame of reference, which is the central point of view of its reference frame in relation to its holographic screen.

The observer is not a person in the world it observes. The person is a form of information like everything else the observer can observe in its world. The observer is only the perceiving consciousness present at the central point of view of its world in relation to its holographic screen. This is the only logically consistent interpretation of the holographic principle that is consistent with Rovelli's relational interpretation of quantum theory, which tells us every observer observes observable forms of information in its own observer-dependent world. Every observer has its own holographically projected world defined on its own observer-dependent holographic screen. This interpretation makes absolutely no difference if understood in the Copenhagen sense of quantum state reduction or the Everett sense of many worlds. The quantum state can always be formulated as a sum over all possible paths in the information configuration space. The classical path is understood as the path of least action, which is like the shortest distance between two points in the configuration space and most likely path in terms of quantum

probability. A quantum state reduction is inherently a decision point on the observer's world-line that chooses which path the observer will follow and what the observer will observe in its world.

The possibility of a consensual reality shared by many observers only comes into play if there is information sharing in the sense of a Venn diagram among the overlapping bounding surfaces of space or holographic screens of the respective observers, like the kind of information sharing seen in an interactive network of overlapping screens, like the internet.

Quantum entanglement automatically comes into effect in a holographic world as a direct consequence of non-commutative geometry, since the observer's holographic screen encodes bits of information in terms of the entangled eigenvalues of an  $SU(n)$  matrix. All the riddles of quantum entanglement and spooky action at a distance are inherent in the holographic way bits of information are encoded on the observer's holographic screen. For example, the correlation of observable values of entangled spin variables that apparently become separated in space is inherent in the way entangled bits of information are encoded on the holographic screen, and really has nothing to do with the apparent separation of spin variables in three dimensional space or the speed of light as a limitation in the rate of information transfer in three dimensional space. Spin variables do not really exist in three dimensional space. Their apparent existence in three dimensional space is only a holographic illusion. All the bits of information for the spin variables are encoded on the two dimensional bounding surface of that space. The only thing that really exists outside the holographic screen is the observer that observes these observable forms of information. The big question is what is the true nature of the observer?

## **The Observer, the Screen and the Thing & Holographic Projection**

The apparent effects of gravity in a three dimensional region of space are a thermodynamic consequence of encoding entangled bits of information on the two dimensional bounding surface of that space. Einstein's field equations for the space-time metric only arise as thermodynamic equations of state. Einstein's field equations are only an effective field theory valid as a thermal average or low-energy limit near thermal equilibrium. The effects of gravity in any three dimensional region of space arise as a holographic projection from the two dimensional bounding surface of that space to the central point of view of the observer. The situation with the quantum field theories of the electromagnetic and nuclear forces is no better. The lesson of unification that occurs as a consequence of super-symmetry and the Kaluza-Klein mechanism of extra compactified dimensions of space is that all the fundamental forces are really just gravity, which in some sense is a holographic illusion. If we understand gravity as the dynamic curvature of space-time geometry described by the space-time metric, then gravity that extends into the extra compactified dimensions of space is the electromagnetic and nuclear forces while gravity limited to the extended dimensions of space is the ordinary gravitational force. What we think of as elementary particles are nothing more than quantized wave-packets of field energy and

momentum directed in the extended dimensions of space, while internal structures of particles like electric and nuclear charges are momentum quantized in compactified dimensions.

The problem is all these field properties arise from the space-time metric, which describes the curvature of space-time geometry in a three dimensional bounded region of space, but all the fundamental bits of information are encoded on the two dimensional bounding surface of that space. In reality, the effects of gravity in three dimensional space are only a holographic illusion, similar to the projection of digital images from a computer screen to the point of view of an observer that really only exists in the empty space outside the screen. The observer's world is imaginary in the same sense digital images projected from a computer screen are imaginary. Only the underlying reality of the observer's consciousness in empty space is ultimately real and really exists. Everything else is part of the holographic illusion.

Like a computer screen that encodes bits of information on pixels, the observer's horizon acts as a holographic screen that projects images of the observer's world to the observer's central point of view, just like the projection of images from a computer screen in a computer generated virtual reality. The observer's world is imaginary in the sense it is composed of nothing more real than projected images, like the images of a movie projected from a movie screen. Only the observer is really real in the sense of not being imaginary. The observer is not an image it can observe, and can only be described as a point of pure consciousness. Quantum theory tells us the world only exists in an unobserved state of potentiality until observed, and the observer must observe the images of its world for its world to come into an apparent existence. The observer's world only appears to exist because the observer observes it. If the observer does not observe its world, its world disappears from existence, at least from its own point of view. Only the observer has an underlying reality and an existence that is independent of whatever appears to happen in its world. The observer itself can only be described as a pure presence of consciousness. In this sense, consciousness creates reality, but the reality it creates is purely imaginary like in a virtual reality. The reality of the observer is not imaginary and is not created as some image the observer can observe. The underlying reality of the observer is uncreated and has its own independent existence, which is called consciousness. That is the underlying reality of what one really is, not something that one observes in the world.

## **Universal Observer/Atmanic Consciousness & Atman-Brahman**

The key point is we can't scientifically explain what consciousness is. Everything the observer can observe in its world, including the personal form of its own character and all its character's thoughts, emotions and memories, are no more real than images of a movie projected from a computer screen. Science can only describe what appears to happen in the movie of the world. Science can only attempt to conceptually explain how the images of this holographic illusion are created, animated, and projected from the screen. The observer's consciousness is always outside in the audience of empty space and is only watching the movie. The only real power the observer

has its limited ability to direct what appears to happen in the movie with its focus of attention on the movie. The ultimate expression of this power, which is called awakening in the sense of a Buddha as one who has awakened, is if the observer completely withdraws its focus of attention away from the movie of its world, its world disappears from existence, and only the true nature of the observer's consciousness remains. The true nature of what it is, its underlying reality or existence remains. Awakening is nothing more than consciousness shifting the focus of its attention onto the true nature of its being while everything else disappears from existence. Awakening can be summarized in the pithy little phrase: *I Am Consciousness*, but what is *That*? Nobody can say what *That* is. Of *That* which one cannot speak, one must remain silent.

Science can't explain what the observer is in terms of consciousness. Science can only explain the nature of the observer's world, which is purely imaginary in the sense of images projected from a screen, like in a virtual reality. This is the irrefutable logical conclusion of science based on the overwhelming scientific evidence we have about the nature of the world. We really don't need science to make this logical deduction. We only need our direct observations of the world and a sound logical analysis of those observations, like Plato made long ago in the pre-scientific era. The only possible logical conclusion we can make from our observations of the world is that the world is imaginary in the sense of images projected from a screen. The observer itself is not imaginary. It is what is perceiving the projected images. It can only be described in the sense of negation in terms of what it is not, since it is not something that it can perceive. It is not something perceivable. It can be described as void, nothingness, emptiness or an empty space of potentiality, but it is not nothing in the sense of the absence of something. It is a presence, since it is what is always present in the sense of consciousness being present whenever a perception of something is made. It is the ultimate nature of reality or what remains and ultimately exists when everything perceived in any world disappears from existence. Ultimately, only consciousness remains. Ultimately, only consciousness exists.

Everything an observer can observe in its own world is a form of information that arises from configuration states of entangled bits of information encoded on its own holographic screen. In some sense these forms of information must be projected from the observer's screen to its point of view, like the projection of images from a computer screen to the point of view of an observer outside the screen. In this sense, the observable form of a person is not an observer. The observable form of a person is another projected form of information like anything else the observer can observe in its world. When people apparently observe things and then communicate with each other about their observations, this is just another form of holographic projection that occurs in the observer's world. Different observers each observing their own holographic worlds can only indirectly communicate with each other about their observations through this kind of holographic projection, which through information sharing can somehow become correlated in the respective worlds of different observers to the degree their respective holographic screens overlap. Like everything else the observer can observe in its world, this kind of apparent

communication between observers is only a holographic appearance, like the appearance of avatars communicating in a virtual reality game played by different observers that each observe the game on their own computer screen. People apparently communicating in the world about their apparent observations of the world in reality is no more real than avatars communicating in a virtual reality game. It is all imaginary in the sense of images projected from a screen. The observer in-and-of-itself is not perceivable, and is not an image it can perceive. The observer itself is not imaginary. Only the observer has an ultimate reality and existence as consciousness.

The potentiality for everything that can possibly happen in the world is inherent in the empty space of potentiality, but for anything to appear to happen, that unobserved potentiality must become an observed actuality. The quantum state of potentiality must be reduced to an actual observable state. That can only happen if the observer makes an observation, which requires the observer to be present in the sense of focusing its attention on the observation. Things only appear to happen in the world because the observer focuses its attention on the observation of whatever it observes, which requires the observer to be present. If the observer withdraws its focus of attention and is not present, no observation is made and nothing appears to happen.

This could be described as the observer's consciousness becoming differentiated from the undifferentiated nothingness of the empty space of potentiality when the observer is present to make an observation of its world. In terms of the holographic principle, this is the observer's consciousness arising from the empty space of potentiality at the central point of view of its world in relation to the holographic screen that simultaneously arises from the empty space of potentiality and projects the images of all forms of information the observer can observe in its world to its central point of view. When the observer withdraws the focus of its attention away from the observation of its world and is no longer present to observe its world, the observer's differentiated consciousness must return to and reunite itself with the undifferentiated nothingness of the empty space of potentiality. This happens every night when one falls into a deep sleep. One doesn't become unconscious in deep sleep. One's consciousness becomes aware of nothing, which is what one really is before one observes anything.

In the tradition of Advaita Vedanta, the observer observing its own holographic world is the nature of Atmanic consciousness, which is a limitation of consciousness since that holographic world is defined on a bounding surface of space that surrounds the observer at the central point of view. Without the limitation of a holographic screen, consciousness becomes unlimited, which is the nature of Brahmanic consciousness. The observer's world only appears to come into existence within the limitation of a holographic screen, and everything is observed within that limitation. Without that limitation, the observer's world disappears from existence, and nothing is observed. Ultimately, limited Atmanic consciousness must return to and reunite itself with its source of unlimited Brahmanic consciousness, which is undifferentiated and unchanging.

## **The Mystery of Dark Energy**



Physics cannot explain the nature of dark energy in terms of vacuum fluctuations or vacuum energy of some quantum field. This is putting the cart before the horse. The logical progression of creation begins with the true vacuum state, which in-an-of-itself has no energy, no information and encodes no laws of physics. It can only be described as an empty space of potentiality or as pure nothingness that is unlimited, unchanging and undifferentiated. In some mysterious way it creates a world as it expresses dark energy through the accelerated expansion of space that always expands relative to the central point of view of the observer of that world at the point of singularity of that expansion of space. This accelerated expansion of space gives rise to an observation-limiting but observer-dependent bounding surface of space called a cosmic horizon. When non-commutative geometry is applied to the surface of the horizon as a way to specify a finite number of quantized position coordinates on the horizon in terms of non-commuting variables, the holographic principle is automatically in effect and the surface of the horizon encodes all the bits of information for all the configuration states of information for everything the observer at the central point of view can observe in its holographic world.

The observer's horizon acts as a holographic screen. Everything the observer can observe in its world is a form of information projected like an image from the screen to its central point of view. An observation is understood in the usual way as a quantum state reduction that reduces the quantum state of potentiality of all possible configuration states of information that can be encoded on the screen to an actual observable state, but can only occur through holographic projection of forms of information from the screen to the observer's central point of view. The laws of physics that appear to govern events in that world in the probabilistic sense of quantum theory spontaneously emerge as thermodynamic equations of state in that world from the holographic way bits of information are encoded on the screen, but are only valid as a low-energy limit or thermal average near thermal equilibrium.

These laws of physics include Einstein's field equations for the space-time metric and all the usual field equations for the quantum fields of the standard model of particle physics. but they only apply to whatever appears and is observed in the 3+1 dimensional space-time geometry of the bounded space. They cannot explain the nature of dark energy as vacuum energy in terms of quantum fluctuations of quantum fields since their very operation is dependent on dark energy for coming into their apparent operation through the geometric mechanism of the holographic principle. This is where physics wants to put the cart before the horse. Dark energy must be expressed before the laws of physics come into their apparent operation because that is how the observer's horizon arises in the observer's accelerated frame of reference. The observer's horizon acts as a holographic screen that encodes all the bits of information for its world, which is the nature of entropy or the fundamental degrees of freedom of that world. The operation of the laws of physics are only valid as a low-energy limit, and are not valid at the Planck scale.

The only scientific principles that are valid at the Planck scale are the holographic encoding of bits of information on a bounding surface of space that arises in an observer's accelerated frame

of reference as dark energy is expended and the holographic projection of forms of information from the observer's screen to the observer's central point of view. Beyond the holographic principle there are no valid scientific principles. Beyond an observer's holographic world there is only the unlimited (infinite), unchanging (timeless), undifferentiated (undivided) nothingness of the empty space of potentiality that is the ultimate nature of reality and existence.

This kind of scientific explanation is as scientific as one can be within the limitations of science. Anyone who wants to explain more is being unscientific since they want to go beyond the natural limits of science. They are trying to extend scientific concepts beyond the limitation of their own holographic screen. Scientific concepts do not apply beyond that limitation.

### **The Illusion of Causality**

The idea of cause and effect is not a valid scientific concept and does not apply in a holographic world. The observer's holographic screen encodes all the bits of information or entropy for its world, which are the fundamental thermodynamic degrees of freedom of that world. These are the fundamental bits of information that are quantized in quantum theory. The holographic screen is the fundamental nature of the observer's quantum state. Everything spontaneously emerges from the quantum state in the sense of thermodynamics, much like a weather system emerges on planet earth. Due to the probabilistic nature of the quantum state with its inherent uncertainty, cause and effect is not a valid principle. Quantum entanglement is automatically in effect in a holographic world, which tells us everything has an effect on everything else. One thing cannot cause another thing to happen. Everything is as it is because the entire world is as it is.

Everything spontaneously emerges in the flow of energy through the world, but there is no way to understand this flow of energy as arising from or within the world. If we accept the world is created in a big bang event, the primordial creative energy of the big bang is what gives rise to the flow of energy through the world. Most physicists accept dark energy is the nature of that primordial energy that puts the bang in the big bang event. The laws of physics spontaneously emerge in the world like everything else, and there is no way to understand how that primordial energy is created in terms of any known physical principle. We can't use what we know about the world to explain the nature of the energy that creates the world. The true vacuum state that creates the world in an explosive big bang event in-and-of-itself has no energy or information and encodes no laws of physics. The only thing we can say is that primordial creative energy is a spontaneous expression of creativity, but who is expressing itself with this expression of creativity? The only possible answer is consciousness is expressing itself, but what is that consciousness? The only possible answer is consciousness is the ultimate nature of reality that is creating the world, but this really takes us nowhere and tells us nothing.

Consciousness isn't really a part of the world it perceives. Consciousness is like an observer out in an audience watching the images of a movie projected from a screen, where the movie is called The World. The only way we can understand the process of creation that makes any real sense is if that consciousness expresses dark energy through the accelerated expansion of space as a spontaneous expression of creativity, which leads to the creation of a holographic world in the sense of bits of information encoded on a bounding surface of space that acts as a holographic screen, which in turn projects images of that world back to consciousness. In this scenario, consciousness is understood as an empty space of potentiality.

Science confirms the fundamental nature of creation with the measurement of the total energy of the observable universe, which is exactly zero. This is possible in a holographic world since the negative potential energy of gravitational attraction can exactly cancel out dark energy and all other positive forms of energy. This tells us that everything is ultimately nothing. Everything is really nothing in holographic disguise, like a personal costume that consciousness wears.

If consciousness is only wearing a personal costume, then why does almost everyone believe they are a person? The answer has to do with the way emotional energy flows through and animates the form of a person. The emotionally animated form of a person is a self-replicating form that can only self-replicate its form due to emotional expressions that at some level are all self-defensive. Self-replication of form has to do with the way the flow of energy through the form and the organization of information in the form are coherently organized in the sense of holding together as a distinct and recognizable form. Coherent organization can be understood to arise in a holographic world from the quantum entanglement of information encoded on the holographic screen. There is a natural tendency for entangled bits of information to align over a sequence of holographic projections, but this tendency for alignment is balanced by the tendency for information to become disorganized as heat flows in a thermal gradient and entropy increases. Self-replicating forms are only able to maintain their coherent organization by adding organizing potential energy to their forms, which opposes the natural tendency for disorganization as disorganizing thermal energy or heat flows in a thermal gradient.

We recognize the addition of potential energy to a self-replicating form as the process of that form eating another form, which is inherently a self-defensive process. The fundamental nature of the expression of all emotions is the defense of the self-replication of that form, which begins with the necessity that forms can only survive as self-replicating forms if they eat other forms and avoid being eaten by other forms. This need for a self-replicating form to eat other forms and avoid being eaten by other forms is the nature of all self-defensive expressions of fear and desire.

## **Emotional Conflicts and the Denial of Death**

Emotional conflicts arise from the desire to control things. The problem is that things cannot really be controlled. The normal flow of things arises with the normal flow of energy through the

entire world. An expression of energy limited in space and time can never control the entire flow of energy through the world. The desire to control things is inherently personal, and is limited in space and time. This limited expression of desire can never control the universal flow of things.

The desire to control things is all about feeling powerful in an uncertain world where events are unpredictable and death is always near. Death is feared since it is equated with non-existence. Fear of non-existence underlies the desire to control things, which is a denial of death. The desire to control things is a way to deny death, but this is a denial of reality and the facts of life, and leads to creation of unresolvable emotional conflicts. Conflicts inevitably arise because the desire to attach oneself to others comes into conflict with fear of others and the desire to defend oneself from others. In simplest biological terms, the desire to eat is in conflict with the fear of being eaten. These inherently unresolvable emotional conflicts can only arise from the desire to control things in an attempt to deny death, but are at the root of the mental construction of a self-concept.

In simplest biological terms, the body moves toward whatever it wants to eat, as eating promotes its survival, and moves away from or against whatever wants to eat it, as being eaten threatens its survival. Movement toward is an act of attachment, while movement away from or against is an act of self-defense. These movements are emotional expressions. By their very nature, emotional attachments are in conflict with self-defensive expressions.

Conflicts inevitably arise when the body wants to eat something that also wants to eat it, but that kind of conflict is the nature of bodies surviving in the world. Without survival behavior, the body will die. The fear of death is a survival instinct, but this fear gives rise to the unresolvable emotional conflicts that are at the root of the mental construction of a self-concept.

Once the emotional expression of fear and desire kicks in as a way to defend the survival of a self-replicating form, the consciousness that perceives that emotionally animated form in its holographic world tends to emotionally identify itself with that form. The observer really feels self-limited to that emotionally animated form as it perceives the animating flow of emotional energy through the form. The more self-limited the observer feels, the more the observer tends to identify itself with the form. This creates a vicious cycle. The observer feels compelled to defend the survival of the form as though its existence depends on it, which leads to the expression of more self-defensive emotions and perpetuates its emotional self-identification with the form.

At the level of its mind, emotional conflicts create false beliefs the observer believes about itself. These false beliefs have the nature of an emotionally energized personal self-concept constructed in the observer's mind. The observer believes it is a person since that is the way it really feels as the observer perceives these emotional states of mind. As is well known, perceiving is believing. Consciousness is predisposed to believe whatever it perceives, but in-and-of-itself consciousness is not a perceivable thing nor is it the perceivable energy that animates things.

Surrender and detachment are the only ways of resolving the inherently unresolvable emotional conflicts of the self-concept. When one surrenders, one gives up the desire to defend oneself and control things. When one detaches oneself from things, one severs the emotional attachment to things. Surrender and detachment are a way of becoming motionless at the level of one's mind. One's body is still in motion, but at the level of one's mind, the thoughts that move one toward things with the desire to attach oneself to things or that move one away from and against things with the desire to defend oneself from things come to an end. Without these thoughts, one's mind becomes silent and still. In that silence and stillness, one can see things more clearly.

Emotional conflicts are never resolved at the same level they are created. Emotional conflicts can only be resolved if one sees things more clearly from a higher level. As one surrenders and detaches oneself from things, one sees things more clearly and with a sense of distance, like a movie one is watching. One sees that one's character in the movie is afraid of death and non-existence, but when one detaches oneself from one's character, one no longer feels compelled to defend the survival of one's character as though one's existence depends on it. One becomes willing to just watch things play out in the normal way.

## **The Enigma of Enlightenment**

The consciousness of the observer has two aspects, which are like an outgoing aspect and an incoming aspect. The outgoing aspect is a projecting aspect and the incoming aspect is a perceiving aspect. These two aspects are like a light that emanates from a source and is reflected off a screen back to the source of the light. Whatever appears to happen in the observer's world is like a reflection of light off the screen. The outgoing projecting aspect is the observer's focus of attention, which is reflected off the screen as the observer perceives the incoming projected images of its world. This reflected light can be called the light of consciousness.

Awakening in the sense of enlightenment is only possible if the observer shifts the focus of its attention away from the screen and onto the true nature of what it is. The observer must become aware of itself as the source of its own light. The only thing that can block awakening is if the observer's attention is firmly focused on the life of the person it takes itself to be in the world it perceives. This personal identity is inherently a false identity. The form of the person is only an image projected from the screen. The observer only identifies itself with the form of a person due to the self-defensive way the life of a person is emotionally animated. The observer emotionally identifies itself with the animated form of the person since it really feels self-limited to that form as it perceives the emotional energy that flows through and animates that self-replicating form.

Once self-identified, the observer feels compelled to defend the survival of that form as though its existence depends on it, which keeps its attention focused on the life of the person in an emotionally biased way and leads to the expression of self-defensive emotions that perpetuate the vicious cycle. The vicious cycle is like a hypnotic spell that must be broken before the

observer will shift its focus of attention away from the life of the person and onto the true nature of what it is. The only way the observer can break this hypnotic spell is if it detaches itself from its world. The awakening process only goes forward with its willingness to let go and allow things to play out in the normal way without any desire to control things or defend the survival of its character.

As the observer detaches itself from things, it sees things with a sense of distance and its focus of attention becomes unbiased. As it severs the emotional bonds of attachment to things and cuts the knot of personal self-identification, it just watches things play out in the normal way. It stops caring about what appears to happen in its world or to its character. It becomes disillusioned as it sees the whole thing is only an illusion of what it really is and loses interest in the illusion. Only if it detaches itself from things and loses interest in the whole thing will it shift the focus of its attention away from its world and character and onto the true nature of what it really is. As it withdraws its attention away from its world and is no longer present to observe its world, its world disappears from existence. Only the true nature of its underlying reality remains, which it becomes aware of as it focuses its attention on the true nature of what it is.

The process of awakening is inherently a process of negation. As one withdraws one's attention away from one's world and that world disappears from existence from one's own point of view, one is saying no to the illusion. When one is no longer present for one's world, one is negating the illusion. One wants out. One no longer wants to be a part of the illusion. One never really is part of the illusion. One is always outside, only watching the illusion, like an observer out in an audience watching the images of a movie projected from a screen. The only thing that makes one feel like one is part of the illusion is the expression of emotions that make one feel self-limited to one's character in the illusion. The illusion is the nature of the life one lives in the world.

When one goes through the process of awakening, one is saying no to that life. One refuses to express the emotions that make one feel self-limited, which one can only do as one withdraws one's focus of attention away from them. What makes that self-limited life not worth living is one's false self-identification with one's character in the illusion, which arises with the expression of self-limiting emotions and the creation of false beliefs one believes about oneself. The vicious cycle of self-identification leads to expressions of greedy selfishness and fearful and hateful self-defensiveness, which perpetuates the illusion. When one withdraws one's focus of attention, one is refusing to perpetuate the illusion. One is saying no to that self-identified life. Once the awakening process has run its course, one lives a new life that is selfless and non-identified. That selfless non-identified life is more playful since one knows that one is only playing a game. That selfless non-identified life is worth living.

Awakening is only about knowing the true nature of what one really is, not about having supernatural power over what appears to happen in the world. The Tao warns us to beware of the flowery trappings on the path to enlightenment and not to become interested in all the shiny

objects strewn along the path. One only awakens if one is only interested in reaching the final destination of the path, which is the source of the light. The shiny objects only have value in the world one is trying to leave behind. To appreciate the shiny objects, one must stay in the world, but to awaken, one must want out and leave the world behind. The shiny objects are all only distractions on the path. In slightly more accurate terms, one must stop believing that one is a part of the world one perceives. Nothing perceived in the world can really help one stop believing that one is part of the world for the simple reason that all beliefs are inherently emotional in nature and all the energy that animates the world is emotional energy. Even all our scientific conceptualizations are only so much more rubbish and more distractions on the path. This rubbish is just more fuel for the fire. The only way forward is to burn everything. Moving forward is about burning bridges so that one can't turn back.

The Zen story of the 10 Bulls is a metaphor for the life-force, which is the focus of attention of consciousness. Consciousness must be present as an observer whenever anything is observed and appears to happen in the world. The world only becomes energized in the sense of the life-force when consciousness is present to observe the world and focuses its attention on the world. The observer's focus of attention can also be called the light of consciousness that creates and destroys the appearance of the observer's world like the light of a movie projector creates and destroys the images of a movie. In the 10 Bulls, the bull is described as having a tendency to wander around, and one must take out one's whip and tame the bull in the sense of focusing one's attention on whatever one wants to observe. In Zen this is a metaphor for focusing one's attention on one's own sense of being present as a path to enlightenment.

The Zen 10 Bulls is telling us the bull must be tamed. One must discipline oneself and stop one's attention from wandering around. One needs to focus on what's really important in terms of finishing the journey to its final destination. The only way one can stop believing that one is a part of the world one perceives is if one loses interest in that world and leaves it all behind. One has to become willing to move on. Moving on means losing interest in the world. The only way one can do that as nothing but consciousness is if one withdraws one's attention away from the world, turns away from the world, and shifts the focus of one's attention onto the true nature of what one really is, which is not a part of the world one perceives. One must want out.

## **The Doors of Perception and the Gateless Gate**

William Blake wrote about the doors of perception as the gateway to the truth of one's being. When he wrote the doors of perception must be cleansed before one could directly experience the true nature of one's being, he was alluding to the cleansing of the sense of self. In Zen, the gateless gate paradox is alluding to the same cleansing of the sense of self. One can only pass through the gateless gate when one is without a sense of self. One must become selfless.

Nisargadatta Maharaj also discusses this doorway and the need to cleanse oneself of the sense of self before passing through the doorway. In *I Am That*, Nisargadatta says “I am is the door. Stay with it until it opens. It is always open, but you are not at it”. Being present at the doorway requires one to focus one's attention on one's own sense of beingness. When one cleanses oneself of the sense of self, one brings oneself to the edge of the doorway. When one becomes selfless, one crosses over to the other side as the doorway opens and one passes through it.

The doorway is one's own sense of being present as a presence of consciousness at the central point of view of one's world. One must be present for one's world in the sense of focusing one's attention on one's world for that world to appear to come into existence as one observes it from one's own point of view. When one is not present to observe one's world, it disappears from existence from one's own point of view. Being present at the doorway means that one must focus and stabilize one's attention on one's own sense of being present and beingness. As one focuses one's attention on one's own sense of being present, one withdraws one's attention away from one's world, which then disappears from existence since one is no longer present to observe it. This only happens if one stabilizes one's attention on one's own sense of beingness.

Being present at the doorway means one shifts the focus of one's attention away from one's world and onto one's own sense of being present, where one's attention must become stabilized before one can go further. It is the going further part of the journey that one can never wrap one's mind around. Knowing oneself as the consciousness present at the center of one's world is the highest level of consciousness that one can have while one still has a sense of self. This highest level of individual consciousness with its inherent sense of self and sense of being present can be called the Ascended Self, or the Atmanic Self, or the *I Am Self*.

### **The Search for the Grail is all about the Search, Not about Finding the Grail**

The grail legend is a metaphor for discovering the true nature of one's being. When one searches for the grail as a person in the world, one is wasting one's power to awaken to the true nature of one's being. That power is one's focus of attention, which one wastes as one focuses attention on the world. This waste of time and energy is the meaning of the wasteland in the grail legend. One only discovers the grail if one withdraws one's focus of attention away from one's life as a person in the world and shifts one's focus of attention onto the true nature of one's being.

The search for the grail is all about the search, and is never really about finding the grail. One can never really find the grail. One is the grail. One can only be what one really is. The grail is the true nature of one's being. Everything else that one takes oneself to be is delusional.

Living a life in the world is never about finding one's true self. Such a thing does not really exist. Living a life in the world is only about creating a false self. One is actually creating a false self through one's false belief in it, and that creation process is inherently emotional. Awakening



from delusion is only a process of giving up the desire to create this false self so that one can discover one's true being. This discovery can only be made when one is without a sense of self.

## **If You Meet the Buddha on the Road, Kill Him**

In the journey to awakening, one can only go further if one kills the Buddha. The Buddha is the highest sense of self, the ascended Atmanic Self at the central point of singularity, which is the highest level of consciousness one can have while one still perceives one's world. As long as one has a sense of self, one is seeing two, while in reality, there is only one. As long as one has a sense of self, one also has a sense of other. To go further into the source of consciousness, one must become selfless. The source is pure oneness, and has no sense of self. To go further, one must kill one's own sense of self before one can experience this ultimate state of No-self.

Killing the Buddha is another version of the Zen saying: "When you reach the top, keep climbing". The highest sense of self is not the final destination of the journey. There is still further. One is not done with one's journey until one is without a sense of self, no matter how high and glorified that self might be. The goal of the journey is not to become a high and mighty self. The goal is to become selfless. One is only done when one is truly selfless.

## **Falling into the Void**

Going further means that even the highest sense of self is left behind. When one shifts and stabilizes one's focus of attention on this highest sense of self while one also completely withdraws one's attention away from one's world, something very strange happens. One's world disappears from existence since one is no longer present to observe it, but one doesn't stop existing. One knows that one exists as nothingness as one passes through the gateless gate or the doorway of one's sense of beingness. This is often described as falling into the void.

One's firmly focused attention on one's sense of beingness brings one to the edge of the abyss that separates being present as an observer of one's world as it appears to come into existence from the void of not being present as one's world disappears from existence. In some mysterious way, one's individual sense of being present as a divided presence of consciousness, the Atmanic or *I Am Self*, returns to and reunites itself with the undifferentiated, unlimited and unchanging consciousness of the void, which can be called the Brahmanic consciousness of No-self.

The journey to awakening is taken by a self within a time-bound world, but the final destination of the journey is outside of time and has no self. The observer's own sense of beingness is the gate or the doorway to No-self, but one can only pass through this doorway and reunite oneself with No-self if one is without a sense of self. In a very real sense, the gate is the highest sense of self that one can ever know oneself to be, which is the highest level of consciousness that is present at the singularity at the center of one's world. One can only pass through this gate when one becomes selfless. The gate only opens and becomes gateless when one becomes selfless.

When the gate opens, one can cross over to the other side. As the abyss opens and one crosses the edge of the abyss, one dissolves into the abyss like a drop of water dissolves back into the ocean. One's *I Am* consciousness returns to and becomes one with One consciousness.

This ultimate experience of No-self is the experience of the true nature of one's own being. In Advaita Vedanta, this is described as Brahman is the only truth, and there is ultimately no difference between Atman and Brahman. There is only one truth. That truth is the unlimited, undifferentiated and unchanging nature of Brahmanic consciousness, which is the source of individual Atmanic or *I Am* consciousness. Unlimited consciousness is the only truth.

## **Everything is an Illusion of Unlimited Consciousness**

The holographic principle is telling us that everything is an illusion of unlimited consciousness that arises from the limitation of consciousness by an observation-limiting holographic screen. Without that limitation of consciousness, there is only the nothingness of unlimited empty space. The holographic screen encodes information for everything observable within a bounded region of space, but the screen can only arise as a bounding surface of space when energy is expended. The holographic screen is really a mental screen that constructs mental concepts. Everything is conceptual in the sense that everything is a form of information energized in the flow of energy. Concepts only become meaningful within the energetic context of their mental construction.

As neuroscience has recently discovered but enlightened being have known forever, concepts are only given meaning within an emotional context. Emotional energy establishes the energetic context within which all mental concepts are constructed and within which all concepts become meaningful. This emotional construction of mental concepts is the inherent nature of all belief systems. Although not often recognized, all belief systems must begin with a single core belief, which is the belief in the nature of one's self. One can only begin to build a belief system if one first believes in oneself, not just in the sense of having confidence in oneself and one's abilities, but in the sense of believing that one is a self.

## **The Core Belief in Self within all Belief Systems**

A heretic is someone who does not believe in the prevailing religious belief system. A crackpot is someone who does not believe in the prevailing scientific belief system. All belief systems are inherently false since they are based on false assumptions. These false assumptions are inherently irrational since they are based on emotions. The only reason anyone believes these irrational belief systems is due to their emotional nature which gives them a feeling of reality, but the reality that all belief systems arise in is no more real than an imaginary virtual reality, like images projected from a screen. There are no true belief systems, just as there is no true self.

The belief in self is an inherent part of all belief systems. One is actually creating a false self through one's belief in it, and that creation process is inherently emotional. One must believe in

one's self before one can believe in any belief system, but that belief in self is no more real than an observer out in an audience believing that it is the animated image of a character that appears in a movie it is watching as the images of the movie are projected from a screen to the point of view of the observer out in the audience. All belief systems are false just as all sense of self is false. There is no true self and there are no true belief systems. The only real option anyone ever really has is to believe in false belief systems and a false self or not to believe any of it.

The thing about the so-called rational mind is that it's all based on a false assumption that's inherently emotional. Consciousness falsely believes that its existence depends on the survival of its animated life-form in the world it perceives since it really feels self-limited to that animated life-form as it perceives the self-limiting emotional energy that flows through and animates the life-form. Once this false assumption that its existence depends on the survival of its life-form is made, then the so-called rational mind can take over and create all kinds of mischief.

There is really nothing rational about the mind. The mind is purely emotional. The seat of reason is in consciousness, not in the mind. When the mind appears rational, as during logical analysis, it is only because consciousness is using the mind as a tool. The logical analysis is only valid to the degree the underlying assumptions are valid. When the mind operates in its usual emotional way, the mind is using consciousness in the sense of consciousness emotionally identifying itself with the mind of its life-form. It all hinges on the focus of attention of consciousness. If that focus of attention is emotionally biased based on a false emotional assumption about the nature of its existence, then all use of the mind as a rational instrument of logical analysis is suspect and likely wrong. At the end of the day, the only real power consciousness has is its focus of attention. How else can anything appear to happen?

There is one last level that nullifies the idea of cause and effect. The holographic projection of images from the screen to the observer is the nature of observation. Quantum theory tells us that observation is a process of quantum state reduction that reduces the quantum state of potentiality to an actual observable state. This is inherently a choice about what to observe. The quantum state can always be formulated as a sum over all possible paths, where each path is weighted with a probability factor that's essentially the wave-function. Each observation is not only a choice about what to observe but also which path to follow. In the sense of an observer following a world-line, each choice is a decision point on the observer's world-line where the observer chooses which path to follow and what to observe. Physicists would have us believe the choices are made randomly, since that is the only way the laws of physics can have any predictability, just like a probability distribution must be randomly measured for it to have any predictability. If bias arises in the way choices are made, then all bets are off and the laws of physics lose their predictability. As is well known, people make their choices in emotionally biased ways. At the level of personal choice, even the laws of physics do not apply. There isn't even the predictability of a crap shoot. Personal bias tells us the dice are loaded and the game is rigged.

## **The Ultimate Choice and the Experiment of One**

There is another possibility in addition to the probabilistic worldview of quantum theory. There is the possibility that everything in the world is completely determined and there's no potentiality, at least not at the level of the world. This is the worldview of the Bohmian pilot wave theory of the world. There's an assumption in this theory that at the level of the universe everything is totally determined. Pilot wave theory is inherently deterministic even though it makes the same predictions as quantum theory. There are hidden variables in the theory that determine everything. We haven't discovered those hidden variables, but if we did and knew what they were, in principle everything would be completely determined. The universe would just be a big deterministic clockwork structure. The problem with determinism is there is no room for potentiality, and without potentiality there is no choice. Without choice there is no need for consciousness. Determinism can never explain consciousness, so who is observing the whole thing? Who would know about the deterministic hidden variables? Is consciousness an illusion of determinism or is determinism an illusion of consciousness?

Enlightenment proves the existence of consciousness, but this is always an experiment of one. One proves the existence of one's consciousness for oneself. When one becomes enlightened, one knows that one exists as nothing but consciousness. When an observer withdraws its focus of attention away from its world and shifts its focus of attention on its own sense of beingness, the observer's world disappears from existence and only the true nature of one's being remains. The ultimate nature of existence remains. The observer's underlying reality remains. That underlying reality has nothing to do with whatever appears to happen in the world the observer observes. That world could be totally deterministic and yet the consciousness of the observer could still have the choice to watch whatever appears to happen in the world or not to watch it. That could be the only choice that consciousness ever really has: to be present to observe its world or not to be present; to become enlightened or not to become enlightened; to be or not to be.

Maybe Shakespeare had it exactly right. Determinism narrows down the issue of choice to a single question: Who am I? The paradox is that when one becomes enlightened and knows what one really is, one also knows what one isn't. One isn't a person in the world one perceives. Ultimately, one has no need to live a life in that world, and need not even be present to perceive that world. One always has the choice to exist as nothingness. An enlightened being can just as easily answer the Who am I question with I am not as with I am.

## **We Built this World**

The holographic principle in the context of dark energy gives a broad conceptual overview of the nature of the world and how the world operates, but it doesn't explain the details of how that world appears to operate. For example, it does not tell us what sets the 19 free parameters of the standard model of particle physics. This overview tells us the laws of physics spontaneously

emerge in the world like everything else in the world, but the key point of this overview is that everything emerges within consciousness. Everything appears to come into existence within the point of view of consciousness, and everything disappears from existence within the point of view of consciousness. It is the consciousness that arises at the point of view of the observer that is observing whatever appears to come into or go out of existence as the observable images of all things are projected from the observer's holographic screen to its central point of view.

The only way we can understand what sets all the parameters in the laws of physics is the idea of quantum state reduction, which is always a choice the observer makes about what it observes in its world. The observer is choosing from a smorgasbord of potentiality that we call the quantum state of its world. The observer makes this choice at every decision point on its world-line as it focuses its attention on its world. The laws of physics spontaneously emerge due to the holographic nature of the observer's world, but the observer is always free to set the parameters in any way it wants so that things turn out to its liking. Maybe things are a bit more complicated than this since the observer's world shares information with the worlds of other observers to the degree their respective holographic screens overlap. Maybe all the observers make their choices and build their shared consensual reality together.

## **Why Physics is Wrong**

Maybe physics has the whole thing ass-backwards. For most physicists, the world of matter, energy, space and time is the only reality they recognize, and they believe that somehow the laws of physics are written into the ultimate nature of reality. Maybe this is flat-out wrong. Instead, we could start with a different concept of the ultimate nature of reality. We could start with nothing.

This nothingness can be imagined as an empty space of potentiality. In physics, this empty state of potentiality can be called the true vacuum state or void, which in-and-of-itself has no energy and no information. There are no laws of physics encoded in the void, only infinite, unchanging, undifferentiated nothingness. Yet in some mysterious way, this empty space of potentiality has the potential to create a world for itself and observe that world from the central point of view or singularity of that world. It creates that world through the expression of energy, which we understand as dark energy and the accelerated expansion of space. It observes that world from the central point of view of that world, which always arises relative to a holographic screen that encodes all the bits of information for all the forms of information that can be observed in that world. It observes that world in the sense of holographic projection of observable forms of information from the holographic screen to its central point of view.

Everything in that observable world is composed of bits of information, which John Wheeler expressed with the slogan *It from Bit*. The creation of all forms of information in that world can be understood in terms of non-commutative geometry applied to a bounding surface of space,

where the bounding surface, which is an event horizon, arises in the observer's accelerated frame of reference as energy is expended. The holographic principle is automatically in effect whenever non-commutative geometry is applied to a bounding surface of space, and the laws of physics, like Einstein's field equations for the space-time metric, spontaneously emerge in the 3+1 dimensional space-time geometry of the bounded space from the holographic way fundamental bits of information or entropy, which are the thermodynamic degrees of freedom quantized in quantum theory, are encoded on the two dimensional bounding surface of that space. All the laws of physics for that world spontaneously emerge as thermodynamic equations of state from the way bits of information are encoded on the bounding surface.

The natural process of creation can then be understood to begin with the empty space of potentiality that creates a world for itself through the expression of dark energy that gives rise to the accelerated expansion of space and the holographic encoding of bits of information on a bounding surface of space, which it then observes from the central point of view of that world through holographic projection. Even this process of holographic projection requires the observer to be present at the central point of singularity of its world and to observe its world as it focuses its attention on its world. The observer's world only appears to come into existence when the observer is present to observe it. When the observer withdraws the focus of its attention away from its world and is no longer present to observe it, its world disappears from existence, and only the underlying reality of empty space remains.

In-and-of-itself, the empty space of potentiality cannot be conceptualized. The creation of any concept requires the expenditure of energy, which leads to the encoding of information on a holographic screen that arises in an observer's accelerated frame of reference as that energy is expended. The concept is an organized form of information that arises from the holographic screen and is projected to the observer's central point of view. The observer's consciousness can only understand the meaning of the concept in the energetic context within which it is created.

In-and-of-itself, the empty space of potentiality expresses no energy, encodes no information, and creates no concepts. The empty space of potentiality can only create concepts through the creation of a holographic world, which in some mysterious way it is able to do as it expresses itself with the expression of creative energy. The empty space of potentiality can only perceive the concepts it creates for itself as it perceives those concepts from the central point of view of the holographic world that it has created for itself. The empty space of potentiality can only give meaning to those concepts in the energetic context of that creation. Without that creative process, there is no holographic world, there are no concepts, and there is no meaning. The empty space of potentiality only has the potentiality to express itself in this creative way. In-and-of-itself, it knows nothing and does nothing because it is nothing.

What is this empty space of potentiality? Who can say. As Joseph Campbell liked to say, it is beyond names and forms. It can only be described in terms of negation, or what it is not. It is not

a thing. It is not part of the world it creates and observes. In the Tao, it is called the void. In Zen, it is called the No-thing. In Advaita Vedanta, it is called Brahman.

That empty space of potentiality is the true nature of what everything really is in the sense of the consciousness that creates and perceives all things. It is the true nature of what exists before anything appears to come into existence and the underlying reality that remains after everything disappears from existence.

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