

# A cosmology based on panpsychism

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*Abstract. The assumption of materialism underlying mainstream scientific research is that all is matter and energy. However, some phenomena are inexplicable when materialism is assumed. A cosmology based on a form of panpsychism is proposed which can explain such phenomena. Panpsychism is the concept that consciousness is the essential nature of all that is. The cosmology offers a novel understanding of the experience of matter. A matter object exists as a non-localized, holographic-like representation in the energy of consciousness. The representation is transformed by the perceptual process into a localized form with recognizable attributes such as colour and shape. The sensations are irreducible properties of consciousness, and so all matter is an illusion generated by the perceptual process.*

## 1. Introduction

In the typical scientific mindset, matter is assumed to be inanimate and to not have a sense of conscious awareness until it is a component of a living system. The awareness is often thought to be an emergent property of a sufficiently complex physical system such as the mammalian brain. Such consciousness is explained as an illusion created by complex physical interactions inside the material brain.

In this article, the practicality of the materialists' assumption that everything is fundamentally physical is challenged in favour of another that has greater explanatory power. Consciousness is assumed to be a non-physical energy that is the foundation of all that exists, including our matter universe. It is defined as a non-local, universal, creative life force. This philosophical position is known as a form of panpsychism - the belief that all of existence is imbued with consciousness or some form of awareness. The assumption allows us to understand phenomena that currently confound materialistic science.

Philosophical views such as materialism and panpsychism (e.g., Mathews, 2011) are alternative assumptions on which scientific research is based. Since they are assumptions, the research can not directly address their validity. The preferred view by scientists should be one that has the most explanatory power. However, most mainstream scientists unquestioningly accept the belief in materialism (Sheldrake, 2013), and the belief is often vehemently defended. Interpretation of scientific research based on a belief system is not as objective as many people would like to think.

The panpsychism assumption is supported in this article by obvious conscious experiences that we all have, as well as an instance of anomalous behaviour of matter. These experiences are difficult to explain from the materialism point of view. However, they appear to be natural outcomes of the proposed cosmological framework based on panpsychism. In this framework, all mental events, including physical experiences, occur in an abstract "consciousness space".

An important influence on the development of the cosmology was the analysis by Close (2000) in the book, "*Transcendental Physics*". Close discussed the implications of well-known experiments in physics. His reasoning about crucial experiments endorsing the Copenhagen interpretation of quantum mechanics supports the need to reinterpret the basics of human science. That is, the science must be based

on the concept that the quantized universe of matter arises from the properties of consciousness space. The proposed cosmology based on panpsychism is a significant step toward fulfilling this requirement. It enables us to understand phenomena introduced in later sections.

## 2. A panpsychist cosmology

Panpsychism holds, in general, that all that exists is consciousness and is aware. To the materialist, this is ridiculous. The property of awareness is obviously associated only with beings that have brains and can communicate. However, this constraint may be too limiting. Plants do not have a nervous system, yet some can respond intelligently to messages sent by other plants (Mancuso et al., 2015; see book review [here](#)). Even simpler physical systems appear to show behaviours that might be interpreted as awareness when they self-organize in response to changes in the environment. Awareness may not be recognized in what we consider inanimate objects, simply because the objects have no organs with which to communicate.

In the proposed cosmology, consciousness is an energy that forms all that exists, including our universe of matter and any other states of existence not accessible to us. The energy of consciousness is aware and includes self-aware entities that may exist in apparent separation from each other. In this organization, a complex entity is composed of facets that are less complex entities. All are facets of what we might call *total consciousness*.

The energy of this total consciousness is organized hierarchically according to a dimension of vibration. The dimension has an ordinal scale in that a given vibrational state is higher or lower than another. Every conscious entity exists in a limited range of vibrational states appropriate for that individual. The entity has a position on the dimension beyond which it cannot go. This position is known as its *highest possible vibration*. Each entity behaves like a low-pass filter so that it is normally not aware of vibrational states higher than its own highest state.

Consciousness space, in all its complexity, is analogous to a single waveform that represents all that is. It reconfigures itself with the energy of thoughts. A thought held by an individual entity is created when the entity has the intention, and is encoded as components of the waveform. When a being has the intention to create, it modulates its highest possible vibration with the contents of its thoughts. The modulated vibration combined with the original unmodulated vibration creates an interference pattern that is stored in an all-pervasive substrate of consciousness. We may recognize that this creation process is analogous to the making of a simple hologram in our physical reality. States of consciousness, ordered according to their vibrational levels, are analogous to the spectrum of light.

A creation is experienced anew when it is acted upon by a being's perceptual process. Like creation, perception is a function of all conscious beings. Perception transforms the information in the waveform into the discrete thought that created it. Like the image of a physical hologram, the thought is recovered by "illuminating" the stored pattern with the unmodulated original vibration. It is reconstructed in the perceiving being's consciousness so that it becomes part of its experienced reality. Other beings who have access to that vibrational state can also reconstruct the same thought. That is, they can share that reality with its creator. A being whose highest possible vibration is too low would not be able to do so.

Consciousness has many different kinds of potentials that can be actualized when the creative and perceptual processes are invoked by a being's intention. Some potentials of the energy of consciousness are the sensations elicited in a perceiver by the perceptual process. The experience of colours and other

sensations such as taste and smell are irreducible properties of consciousness. In general, the experience of one's environment is a dynamic conglomeration of consciousness potentials.

Our understanding of matter depends entirely on our perceptions. Therefore, all material things exist as potentials in consciousness. The potentials are activated when the perceptual process transforms holographic-like representations of physical objects. We propose that these energetic patterns exist in a space in consciousness called the etheric realm. The non-physical, distributed patterns in this realm make sense to a being only when transformed by its perceptual system. The transformations appear in the being's mind as features of the physical environment. That is, a being experiences specific properties of an object because the perceptual processing of the object's etheric representation activates certain potentials in the being's consciousness. So the physical universe and all it contains is an illusion created from holographic-like representations in the energy of consciousness.

The behaviour of the physical illusion is constrained by the "laws of physics" which are determined by the properties of the etheric representations. The etheric patterns contain potentials that define the properties of physical objects such as electric charge. These etheric potentials may well be related to the collection of wave functions in quantum mechanics defined as probabilities. The "collapse of the wave function" by observation, according to the Copenhagen interpretation of quantum mechanics, is the selection by the perceptual process from the possibilities contained in the etheric representation of an object.

The etheric representations of physical matter are not the only kind of creations existing in consciousness space. Therefore, they must be distinguishable from all others that are not perceived as matter. The distinguishing variable is the vibrational state. That is, an etheric pattern is perceived as matter when it has the physical vibration. Etheric patterns that do not have this vibration are not perceived as physical. If the physical vibration of an etheric pattern were altered significantly, the object perceived as matter would dematerialize. The etheric representation would still exist, but since our perceptual process would not be able to transform it successfully, it would not be perceived.

### 3. Phenomena not explained by materialism

The assumption of materialism has blinded us to phenomena that should be taken as clear evidence in favour of a different philosophy such as panpsychism. The most obvious examples are our sensations which clearly do not belong to the materialist's domain of matter. The limitations of materialism are also evident when matter does not behave like matter should. The following sections discuss in more detail phenomena that a materialist cannot explain.

#### 3.1 The experience of sensations

We all experience sensations. We taste our food, smell the perfumes of flowers, appreciate the colours we see around us, and feel the light touch of a feather stroking the skin. These sensations are called qualia by philosophers (see [Internet Encyclopedia of Philosophy](#)). Materialistic science generally refuses to acknowledge their existence as real, referring instead to physical correlates of these sensations. For example, rather than addressing the sensation of a particular colour, the scientist measures the wavelength of light striking the retina that produces that sensation. There is a conceptual discontinuity between a sensation and its physical correlate, but its importance is rarely acknowledged. The best that the materialist can do is pretend that the discontinuity between the representations does not exist, or that the sensation is merely an epiphenomenon produced somehow by neural activity. Ironically, this means

that the materialists' understanding of physical reality is mediated by subjective states that are deemed to be irrelevant.

Because subjective sensations are not physical, materialists do not consider it important to understand their nature. So how and where else could they be represented? Sensations are obviously the end-point of the perceptual process. We are aware of them, and so their non-physical representations must be accessible to our consciousness. According to the panpsychist cosmology, all things that could ever be experienced as potentials in consciousness. A particular potential is actualized when the intention of a conscious being initiates the creative process. So awareness of a physical stimulus is created when a sensory process activates a particular potential in the consciousness of a being.

A physical stimulus in the environment is first processed by a physical sense organ. Information in the etheric representation of the stimulus is transferred by the non-physical etheric body component that is part of the sensory system. These etheric potentials are transformed by the being's perceptual process to higher vibration potentials in the being's consciousness. Activations of the consciousness potentials create awareness of the sensation. Colour, taste and other qualia are particular properties of consciousness that cannot be analyzed further.

Our experiences of sensation support the view that the physical realm is an aspect of an all-inclusive consciousness. The panpsychism assumption permits a reasonable explanation of how physical stimuli are transformed to subjective sensations. Unlike materialism, it does this without having to deny the obvious qualitative discontinuity between subjective sensations and correlated physical processes.

### 3.2 Formation of an apport

Physical objects known as apports are sometimes seen to appear "out of thin air". The apport may appear spontaneously (Roll, 1972), but usually it happens when a physical medium is nearby (Solomon and Solomon, 1999; Foy, 2008; Keen et al., 2011; von Ludwiger and Nahm, 2016). One such object was created for the author during a physical mediumship séance held by the German medium, Kai Muegge, in November, 2013.

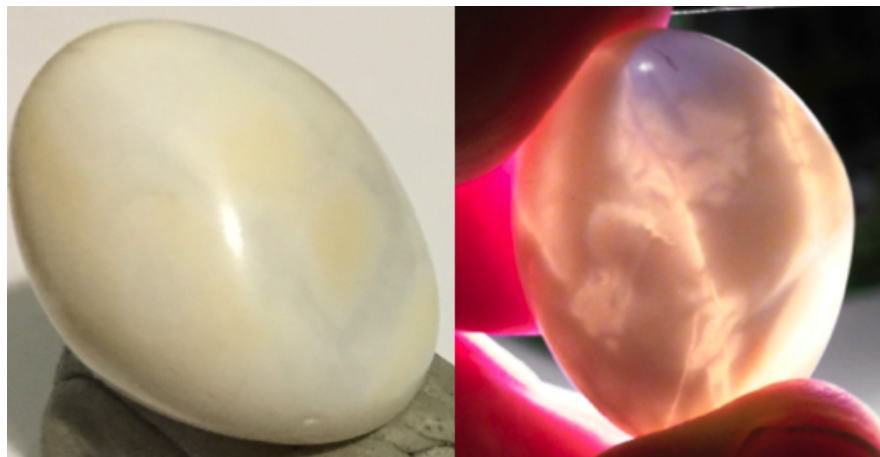


Figure 1. Left - the crystal apport in normal lighting; Right - the representations of two human faces inside the backlit crystal.

The apport formed in midair under the medium's downturned palm while it was illuminated with soft red light. The author was seated near the floor with an unobstructed view of the locus of materialization under the medium's hand. Materialization appeared to coincide with a brief twinkle of whiter light just before the object fell into the author's waiting hands. It was the pale white crystal approximately 2 cm x 3 cm in size shown in the left panel of Figure 1.

Before the anticipated apport was produced, the medium's voice advised that it would have internal structures made of ectoplasm. The crystal was subsequently examined by backlighting it in a dark room, and this procedure revealed remarkable details in its interior. Representations of a male and female head were visible inside the crystal when it was viewed at a particular orientation. The right panel of Figure 1 shows the image of the male in the upper half of the backlit crystal, and the image of the female in the lower half.

How was the apport brought into existence? The medium in a physical mediumship séance is said to be the conduit for physical effects produced by a spirit entity. Perhaps the spirit can create the etheric representation that defines a physical object. If the new representation has the proper physical vibration, it will be perceived by physical beings as a physical object. In this particular case, representations of human heads were added to the etheric pattern. According to the presumed spirit speaking with the medium's voice, "*It is the first time that we opened the crystalline structure and embedded certain portions of ectoplasmic substance to see afterwards.*" According to this comment, the physical realization of the patterns inside the crystal were made of ectoplasm.

It goes without saying that the materialists' assumption cannot explain how an object could pop into existence in midair. The flash of light accompanying the materialization confirmed that an anomalous event had taken place. Further, the structures inside the crystal representing two different human heads are highly unusual and would most likely not be found in a natural crystal. The cosmology based on the panpsychism assumption provides a path toward understanding how the apport was created.

## 4. Discussion

In the panpsychist cosmology, matter is represented in consciousness as a spectrum of quantized potentials. Particular potentials are selected by a being's perceptual process. The selected quanta are transformed to higher-vibration consciousness potentials, and sensations attributed to matter are experienced. All aspects of the process take place in consciousness, so matter is an illusion created by consciousness.

The mechanism for the matter illusion is relatively easy to grasp. Nevertheless, it is difficult to accept that the true basis of reality is hidden by the very convincing illusion. We have been indoctrinated with the assumption of materialism from an early age. However, as inexplicable phenomena continue to be experienced, current scientific theories may eventually give way to a world view that accepts the primacy of consciousness.

But for the present, the belief exists among many scientists that consciousness will be explained if the bounds of materialistic physics are pushed far enough. For example, an article by Mitchell and Staretz (2011) holds the common view that consciousness is equivalent to information processing. They proposed the Quantum Hologram Theory where everything is connected to everything else by quantum entanglement. When the internal representation of a thing in a being's mind resonates with emissions of an external object, it is recognized by the being. The process is said to be analogous to the recognition of

an object by a bat when the bat receives the echoes of its sonar emissions. Pattern classification and recognition of signals in such a resonant loop is thought to be “*the basis for the most fundamental level of perception in all living organisms.*” The representations of all objects are stored holographically and non-locally in the physical zero point field, able to resonate with any brain tuned to do so.

The authors are careful to say that the theory does not operate outside the normal 4-dimensional space/time reality. It is just a way to conceive of a vast information storage and retrieval mechanism in nature. But the theory is also presented as a basis for understanding consciousness. They say that the model “*describes the universe as a self-organizing inter-connected conscious holistic system.*” However, there is no consideration in such a materialistic theory of the qualitatively different nature of non-physical sensations. Without this, no physical theory can be extended to accommodate the experience of such sensations, and conscious awareness in general.

The Quantum Hologram is said to be a model of how reality works. Nevertheless, Mitchell and Staretz (2011) acknowledge that “*the energy transfer mechanism by which the classical states of a remote object are affected remains elusive.*” That is, the model is unable to explain anomalous effects on the environment such as the sudden appearance in midair of the apport shown in Figure 1.

Tegmark (2015) suggested that consciousness may be understood as a property of an as yet unrecognized physical state of matter. He believed “*that consciousness is the way information feels when being processed in certain complex ways, i.e., that it corresponds to certain complex patterns in spacetime that obey the same laws of physics as other complex systems.*” His comment that information can be felt begs the question, “What does the feeling?” Consciousness was compared to the behaviour of any other physical system containing complex information. A unit of consciousness was said to process information as a computer, and so consciousness was again regarded as nothing more than the property of a dynamical information processing system.

These and other authors tried to discover how consciousness arises from matter when they should have asked how matter arises from consciousness. They do not consider how the experience of sensations would be represented as information like everything else. Qualia are usually dismissed as the physical end state of a chain of neurophysiological activity. But the final step in any perceptual process is the experience, and this is qualitatively different from the preceding physical brain states. A viable theory of consciousness must recognize this. It should also accommodate the occasional unusual behaviour of matter such as the appearance of apports.

Not all contemporary scientists are completely caught in the trap of materialism, however. A well-known proponent of a reality that goes beyond materialism is the biologist, Rupert Sheldrake. Sheldrake is best known for his theory of formative causation, the idea that nature has memory (Sheldrake, 2009). He proposed that non-material morphogenetic fields exist which guide the formation of disparate objects like crystals and biological bodies. The shape of a body of matter is influenced by resonance with a field that represents that class of shapes. For biological bodies, the field would act in concert with the available genetic material. He also proposed that sequences of learned behaviours can be represented in these fields, and so a task learned by laboratory animals is more easily learned by different animals subsequently exposed to the same task.

In a conversation with the physicist, David Bohm, Sheldrake said, “*The developing organism would be within the morphogenetic field, and the field would guide and control the form of the organism’s development. The field has properties not just in space but in time. ... These morphogenetic fields are*

*built up causally from what's happened before. ... The more often a particular form or field happened, the more likely it would be to happen again*" (Sheldrake and Bohm, 1982). Sheldrake's morphogenetic fields influence the formation of matter, and matter is seen as separate from such fields.

The non-physical morphogenetic fields in Sheldrake's theory influence but do not create the physical forms, so the materialism assumption remains. Further, the morphogenetic fields are not an energy of consciousness, since Sheldrake believed that consciousness is "*restricted to human beings and, perhaps, some of the higher order of animals*" (Sheldrake, 1988). He does not accept the primacy of consciousness that is the foundation of a cosmology based on panpsychism. However, in more recent publications, he appears open to the possibility (Sheldrake, 2009, 2013).

Hameroff (1998) proposed an interesting theory to explain how cellular processes in the brain communicate with consciousness (see also Hameroff and Penrose, 2014). According to their "Orch OR" theory, consciousness exists in the space/time geometry of the universe at the smallest possible scale. Cells communicate with it via a process of quantum superposition and collapse that Penrose calls "orchestrated objective reduction", or "Orch OR". This process is said to occur in microtubules which are part of the cytoskeleton structures present in all cells of the body.

Hameroff "*sees the universe as an ocean at the level of Planck scale geometry, containing precursors of consciousness, proto-conscious qualia, as well as precursors of mass, spin, electrical charge and other fundamental components, ranging up to biomolecular scales*" (Hameroff and Chopra, 2010). Communication with this ocean via a sequence of quantum computations gives rise to the experience of consciousness. Note that qualia are included as "proto-consciousness" to be felt when activated by the "Orch OR" quantum process. This is similar to the experiences of sensations as consciousness potentials. Further, Hameroff proposed that matter receives its properties from precursors in consciousness, and this seems analogous to etheric representations as the basis of matter. Although he does not take the panpsychist's view, the theory could evolve in that direction.

Appropriately, given the philosophical nature of the discussion, scientists specializing in different disciplines are tentatively progressing from a science of matter to a science of matter and consciousness. As we saw, a biologist, a neurophysiologist, and a theoretical physicist have developed important theoretical insights that acknowledge a relationship between the universe of matter and a non-physical realm that has properties of consciousness.

The matter universe is a construct within a multidimensional consciousness space that has many other states of existence and consensus realities. Some are commonly experienced as dreams (Waggoner, 2009), and less commonly as out-of-body or astral travels (Ziewe, 2008). These can feel as real as the familiar universe of matter. The cosmology based on panpsychism allows such experiences to be acknowledged for what they are.

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