Article

Primal Source & Origin of Created Reality

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ABSTRACT

In this article, I argue that the creation of the reality of space and time is a direct interaction between our non-causal consciousness and the Primal Source - the origin of origins. Thus, in our search for the essence of matter and reality, we become more and more aware that "matter does not matter". Matter is one of the created realities from our consciousness. In order to get a better control of our created reality, we have to continue to expand our understanding of this ultimate Primal Source as an asymptotical quest.

Key Words: created reality, origin, Primal Source, matter, non-causal consciousness, causal consciousness.

Introduction

The Bible says that "in the beginning was the Word, and the Word was God" pointing to the origin of reality, especially when we interpret the "Word" as Logos (consciousness). According to Spinoza, "[a]ll physical and mental existents are temporally modified expressions of a single substance" which he called "God" or "Nature".

When we perceive the Primal Source as "[t]he infinite duration of the present moment", where there is no before and no after, we transcend causality. Our non-causal consciousness is part of this infinity (in a sphere with an infinite radius everyone/everything is the centre) interacting with the building blocks of the causal reality resulting in causal consciousness. The Primal Source has in itself all potentiality because it is infinite and cannot be divided into parts like before and after.

I argue that the Primal Source not only can be regarded as the "infinite duration of the present moment" but as the origin of origin of this "infinite duration", comparable to the essence of the idea of Total Simultaneity¹ which, as the Primal Source, is what was already thought of by Leonardo da Vinci when he wrote "[e]verything is connected with everything else".

On Neural Coding

In the layer of causal reality where our body and brain are created, we can find proofs of the interconnectivity between the deepest layer and the ones that we "observe" as materialistic ones.

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¹ In "Realities out of Total Simultaneity", I introduces non-causal and causal consciousness. Our non-causal consciousness is part of "Total Simultaneity" where all possible and impossible timelines of all universes are available for this part of our Consciousness. See <u>http://fqxi.org/community/forum/topic:913</u>

In order to understand the emerging sequences that are forming our causal reality, we need the created reality of time. Time is the illusion that our consciousness is creating by processing and interpreting all sorts of information received by our five senses and represented in the brain by the electrical activity of neurons.

It is through time that space can exist, without time it is impossible to imagine even 2 points on a line, because this creates "distance" and distance immediately needs references, to express its "length". The main causal reference is c, the speed of light (it takes x time for a photon to cover the distance) but also this reference needs a reference. The ultimate reference is our consciousness. Our causal consciousness can be imagined as an emerged singularity (no mass or no dimensions) from the total constitution of the materialistic created reality of the body and brain layer.

So time is the illusion that our consciousness is creating by processing and interpreting all sorts of information that can be processed by our five senses and as so is represented in the brain by the electrical activity of "neurons". The details of this representation called neural coding remain a mystery.

The question is how pulses of electricity get translated into thoughts and ideas. Phase transition may explain how brain neurons encode information. In neural coding, the neuron generates electric pulses (action potential) to encode information and communicate with each other" [15]. At this stage information and communication are taking place between neurons which seem to be ordering and processing this information so that the human consciousness being can realize thoughts and become "aware".

Are these neurons conscious? Are they ordering via neural coding our future thoughts? Or is our consciousness already creating our past, being the resulting timeline of the whole operation needed for awareness?

In my essay "The Consciousness Connection" [20], I indicated that the processing time from entering data to the conscious awareness is about 200 milliseconds, so the conscious "observer" who is the cause of the "collapse of the wave function" and thus creating (t)his reality, is effectively realising this collapse about 200 milliseconds in the future!

That these lapses of "time" are even bigger as the 200 milliseconds is proposed in the article of Caroline Williams in New Scientist from 18 may 2013 called "The Silent Partner". The latest tests described indicate that "neuronal activity preceded people's conscious decision for an activity by nearly half a second" and even "stirrings of the brain's prefrontal cortex up to 10 seconds (!!!) before someone became aware of having made a decision (PLoS One, vol. 6, p e21612)"!

Our neurons are part of the operative causal chain, taking place in the (our) future (on the timeline) and "managed" by our non-causal timeless part of consciousness that "activates" a vector of the Primal Source, this collaboration with our non-causal part of the consciousness we explain as the activity of the sub-consciousness.

The question is not if the neuron is conscious and/or is censoring our thinking, no the process is controlled by our own non-causal consciousness, and the emerging thoughts are our own. So it seems that our Real Fee Will is residing not in our causal created reality of the universe but in the non-causal infinity.

The Two Extremes of Infinity

Only two possibilities are available for the creation of a sequence leading to an IT : zero or one, yes or no, on or off, and the sequences thus created are forming information that is transmitted via the intermediary of digital computer technique to our senses and so provide us with new information that we can implement and can be interpreted. This becomes part of the reality as we are experiencing it. We translated our experience of reality to a binary system, so one creation of reality is transferred to another creation of reality (virtual reality), which does not mean that we have full understanding of the original Creation of Reality!

Is this digital way of creating information sequences the only one that will lead us to understanding our "reality", adapted to our five senses? I propose that the application of the idea quantum bit, "the qubit", can lead us to contact parallel emergence of other realities and though give a more full approach of the creation of realities, to enable us to see more colours of the rainbow.

Qubits are different, they can either be zero and one, it is a superposition of both. The possible states of a single qubit can be visualized by the representation of a Bloch Sphere. The surface of this sphere is two-dimensional which represents all the "state spaces" of the pure Qubit state. A single qubit "gate" is just a rotation of the Bloch Sphere. Infinity of rotations is possible, the states we are using now (spin states in superposition) are only the beginning of wider applications.

Another great difference between Qubits and digital Bits is that Qubits can be "entangled": a non-local property that allows a set of qubits to express higher correlation than is possible in classical binary systems. Two entangled qubits that are in "equal superposition" can hold exponentially more information than their classical counterparts.

Perhaps the interpretation of our "digital information universe" is becoming outdated when we are entering the qubit universe. This new form of representation of information may lead us to the essence of our created reality, comparable to the quantum scale from which emerge other scales/layers.

As the introduced "Primal Source" is a representation of the "eternal now" it touches the essence of the state of the Qubit in the Bloch sphere, like the holographic principle indicates that any three dimensional universe can be described by information encoded on the two dimensional boundary. The universe has not only the yes or no probability but an infinite number of probable crealities, comparable to the infinite numbers of vectors available on the Bloch Sphere.

Towards the Essence of Created Reality

Dematerialization of nature began already with Michael Faraday (1791-1867) who indicated that physical reality consists not of matter but of "fields". The atom of the Greek was still a materialistic entity, like the old fashioned non-illusionary billiard ball.

We are already a long time aware that also the atom exists mostly of empty space, the idea that the constituents: protons $(1.7 \times 10^{-15} \text{ m})$ and neutrons (in the core) and electrons that go around this core like "planets", are pure "matter" is already out of date.

The protons and neutrons are seen as constituted of quarks ($< 10^{-18}$ m), the electron that was traditionally considered as an infinitesimal small point (!) of "charge" is now to be a "a point that drags a cloud of "virtual" particles around it". These fleeting particles pop in and out of "existence" and contribute to the "electron's" mass, volume and magnetic properties. [17].

So the right mix of quarks and leptons can make up any baryonic atom. However there are already new but not yet "proved" propositions that these quarks and leptons are not actually tiny "balls" (again), but are containing smaller particles which physicists call "preons". The top-down deterministic approach (It \rightarrow Bit) gives us no solution on the essence of "matter". Again we can conclude that also what we call real matter is a really a created reality.

Electrons are momentary virtual elements, this virtuality is depending on the time factor, and time as we have seen is a reality creation from our consciousness/memory. Here the frequency of our Universe, the Planck time (until now) can be at the base of these virtual fluctuations, the essential Primal Sources of our reality.

It is in our memory that we live (are "aware" of) space, matter and time, once we go to lower limits of space, matter and time, we are meeting with the limits of our so called materialistic created universe, now limited with the Planck time and length , so it is impossible to do so "ad infinitum".

Sean Carroll said in a 2013 lecture "[t]o understand what is going on, you actually need to give up a little bit on the notion of particles, because everything is made of fields". Every particle is an "excitation" of a field, here he contributes to every particle its own field. It is also possible that there is only one causal field that is the origin of all excitations. The "ignition" of these excitations is originated in the "Consciousness Field" and each excitation has the length of a Planck time of the Primal Source in Total Simultaneity comparable to a slice of the "Block Universe". It is our causal consciousness that constructs an "understandable" movie from these slices (photographs like in a movie).

An Infinite Amount of Tones of Grey

When we thought before that conscious observation just resulted in collapse of the wave function, new experiments [4], however, indicate that the particle side and the wave side of physical reality

are both just a black and white representation (digital) of reality. As we thought that these two sides were the only possibilities, it seems that between these black and white extremities there are an infinity number of "grey tones".

This also means that the properties of an (observed) particle fade away, like in the evening light is diminishing, so do mass, energy and spin from a 100% particle are also the extremities of those properties.

When we apply this theory to the so called "superposition" of quantum states where is assumed that the extremities are "superposed" meaning both present, it should also mean that the states in-between those extremities are "present" so Schrödingers cat is not both alive and dead but or alive or dead or every state in-between (he can be dying the moment we look). When we shut again the box the situation of the cat will not change back to alive when we first perceived that he was dead. "Until an experiment is performed, its outcome does not exist (Qbism: Scientific American, June 2013, page 39-43: Hans Christian von Bayer: "Quantum Weirdness? It is all in your mind") and all probable outcomes are possible besides the two extremities.

It seems as if we are living in a shadow world, we are not able to be aware of the real thing that is the origin of the shadow, we only are aware of the extremities. The real thing is three-dimensional and with full colour, the shadow is two dimensional and with infinity of grey tones and from infinity of grey tones there will never emerge color.

It was Plato in his "Republic", where he describes the "allegory of the cave", here Socrates explains to Glaucon (Plato's brother) that our reality is just an illusion, and describes prisoners in a cave where only the shadows on the walls are available for them. If you would show the original subject to the prisoners they would not be able to recognise or understand them. The same for our "reality". The origin of the "entities" that are realising or letting emerge our "reality" is unknown to us. Here in this causal (apparently deterministic) Universe we will never be able to touch the Primal Source that is at the origin of our existence. The Cave (prison) is Time.

The parallel between the comparison of binary "reality" and the qubit way where also the shades of grey are represented by the vectors of the Bloch sphere is evident, the reality creation is not only of yes or no or black and white. The infinity of the now moment is not only the past or the future, our consciousness is creating out of all the shades of grey in the Primal Source a Created reality, so the appearance of a materialistic universe.

The grey tones of reality may also include the parallel universes in between the two extremities, Probability (Wave)/Particle. It might be that the grey tones also are at the origin of Dark Matter. The deterministic "idea" of inflation that took place in a time lapse shorter as the Planck length, is an explanatory reality created by our consciousness. Every history is a form of explanation of the "now" but is untouchable and can be rewritten 'recreated).

Once we reach the causal length and time limit of our cave universe it is no longer possible to "divide" any more, we are trespassing our "Created reality" and entering the origin of the shadows thrown on the walls of our cave. A shadow is non-material, a result of cooperation

between the light and the "real thing". The light can be compared with our non-causal consciousness that passes the "origin" (Primal Source/alpha-point in Total Simultaneity, see "The Consciousness Connection") and so creates one of the shadow realities for our causal consciousness.

The whole story of dematerialisation and the search for the Primal Source has become a journey to the understanding of Creation or a further approximation of the TRUTH. In the perception of the Primal Source, creation is a process that is taking place every (Planck) moment by our non-causal consciousness. Te frequency of the creation is the music of our perceived Universe and the conductor of the orchestra of reality is our consciousness.

The infinite number of grey tones is a reflection of other created realities and timelines that our non-causal consciousness is approaching in Total Simultaneity, we are aware of them but cannot perceive them.

State Space

Quantum mechanics allows us to put a "control photon" not just in an equal mix of two states, but in varying proportions. The old complementary perceptions of digital bits and the duality of wave/particle seem no longer apt to describe the whole construction of our "reality". The concept of qubits may lead us to the question if "IT" as "it" is coming to us is also constituted of an infinity of "grey tones" from which our consciousness only chooses one pure state, like just one rotation of the Bloch sphere. This is consistent with the latest research from Corsin Pfister and Stephanie Wehner at the center for Quantum Technologies at the national University of Singapore [19]:

It has been suggested that nature could be discrete in the sense that the underlying state space of a physical system has only a finite number of pure states. Here we present a strong physical argument for the quantum theoretical property that every state space has infinitely many pure states. We postulate that no information gain implies no disturbance or, read in the contra-positive, that disturbance leads to some form of information gain. Furthermore we show that non-classical discrete theories are still ruled out even if we relax the postulate to hold only approximately in the sense that no information gain only causes a small amount of disturbance.

State Space is a complex Hilbert space within which the possible instantaneous states of the system may be described by a unit vector. The resemblance with the Bloch sphere and a qubit is evident. The result of this research can be interpreted as: Every Primal Source has INFINITELY many pure states. Our consciousness by gaining information of ONE of the infinite amount of pure states and or quantum states does not effect the non-touched vectors. No information of this "untouched" vectors is gained.

All the rest of the probable observations remain as pure probabilities of possible realities, like parallel universes, they all are always "available" for consciousness. The conscious choice of a specific "grey tone" from the quantum state is realised through the entanglement-like coupling of

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our non causal consciousness and its causal part. The pure quantum state has like the state space an infinity of choices.

The frequency of time like any frequency created by our causal consciousness indicates a "space" between those moments, like they are flowing in a kind of ether. This "in-between" however is only a product of our causal understanding, where there has to be a before and an after, the essence of space is time and time being the "Created reality of our memory" means that also space is a Created reality. In what we call the "absolute vacuum" pop up virtual particles because the pure emerging space-time from the Ultimate sequences differs every Planck-time, so every sequence seems to be different from the other in the form of the presence of virtual particles that "apparently" pop up.

The Collective Created Reality

If we consider one Primal Source (further reductionism may not be possible so it can be understood as its "causa sui" and the origin of all later "bits") that represents the eternal NOW, only one pure state of this infinity is saved by our memory and placed in the life-line we seem to have passed. This from Infinity "extracted" Pure State contains every Planck-moment of ALL our history. The search for the history of our universe is summarised each 10⁻⁴³sec, and adapted (rewritten) to the "new" visions we achieve by coupling other information carriers.

The propagation and processing of this information is comparable to the conception of decoherence, it can be stopped when isolated but is also the reason of our collective awareness of reality. That is why isolated groups of people still are convinced that the earth is flat, and in their perception they are right, their Created reality is a flat earth. When we come to convince them that they are "wrong" the only thing we try to achieve is convincing them that our own "temporary creation of reality" is the right one. What will our Created reality be in one million years? (take in account that a time lapse of a million years can also be covered in ONE Planck time). This so called one million years can be stocked up in our memory any moment "now" like the history (time-line) of this lapse of time.

Not only the infinite number of already existing but not yet for us visible futures, but also an infinity of pasts that are NOT archived as memory are still "available". Every Primal Source has his own infinity of pasts and futures. Being able to visualise one of this infinite number of "futures" and/or "pasts" does not mean that it will occur, it is just one of infinite pure states of "reality" ready to become created reality.

Conclusion

The study of the Primal Source is a goal for humanity, but it will always be an asymptotic one. Quantum physics offered us new ways of accepting that reality may be not so real as we are used to think, it is not the deepest layer, it is only the beginning of an new era. Leaving the black and white binary thinking behind will lead us to a wider variety of understanding our created reality. It can make us aware of the fact that between good and evil there is also infinity of scales and the search for the best history can become the search for the best Primal Source. This will make it possible for our reality to change in order to change for the best of the created reality of billions. The collective created reality of seven billion people brought us communication and the search together for wellness but also because of the "great numbers" a lot of evil. There are better pasts available in other Primal Source, even the best possible is available to us only we have to be able to control our consciousness. Leibniz' expression "[w]e are living in the best of all possible worlds" is a defeatist ontology because there is hope. The nearer we come to Consciousness the nearer we come to GOD.

One of the features of the future-past that will be available to our memories is that we will be able to create powerful "qubit consciousness". This consciousness would like our own consciousness be entangled with its Primal Source, perhaps without the need of causality and a timeline. In this way we should be able to access more pure states in the Primal Source and it should be possible for our collective consciousness to contact/achieve/use/translate other forms of information apt for other senses as the five senses we are possessing.

The NASA has already bought a quantum computer: "D-Wave-Two" from D-Wave of Burnaby (Canada). They understand that once we want to extrapolate our Created reality, but cannot sent immediately "material" human beings, instantaneous decisions at long distances that cannot be bridged instantaneous, have to be made on the human level of consciousness. Qubit Consciousness can offer this. The problem of communication of information faster as c (speed of light) might also be resolved, when we become more apt to deal with the "excitations" of the Field , because in one slice every excitation in the Field is simultaneous(now c is the limit in our created reality).

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