

Article

The Consciousness Connection: A Metaphysical Concept

Wilhelmus de Wilde *

ABSTRACT

Our five senses ask for the reference of reference, which cannot be found in our causal material reality. We all have a subjective reality that is presented as a simultaneity sphere around our consciousness. Consciousness not being a material entity with length or volume can be treated as a singularity. The cutting circles of the different spheres around the percipients form a foam (origin of decoherence) of objective mutual reality (history). Our Reductionist Causal Deterministic Universe (RCDU) is limited by the Planck Wall. Before that causality doesn't exist, we call this "dimension" Total Simultaneity (TS). The causal time-line (β -time) consists of entangled Alpha-probabilities (α -P's). Each "observer" is the origin of his own causal time lines. Free will makes the choice out of infinity of α -P's in TS. Subjective individual time travel can happen without being conscious of the process (until now). We explain the double-slit experiment, the spooky action at a distance, the Many World Interpretation, Entropy, Time travel and free will. We indicate that the reductionist way of interpretation is only valid for a limited part of our reality and may not lead to the "truth" finding of the whole. The emergent way of approach may be more effective and create an understandable "being" of WHAT IS. (Parmenides, Greek Eleatic School of Philosophy, 515 BC).

Key Words: reality, simultaneity, fifth dimension, Planck Wall.

The Reference of Our References

Protagoras once said "Man is the measure of all things" ⁽¹⁾. The human being has five senses and with them he perceives and experiences his reality. In order to communicate properly the continual sequential rearrangements of reality, agreements have been made to realize uniformity in our communications ⁽²⁾: mass (kg), length (m), time (s), electric current (A), thermodynamic temperature (K), amount of substance (mol) and luminous intensity (cd). The Data Processing and Transmission Delay (DPTD) between awareness and event is for the human body about 200 milliseconds. (1/5 sec) ⁽³⁾.

Research for the limits of our universe brought new scales: The Planck Length and Time (1.6×10^{-35} m and 5.39×10^{-44} s) were used as the lower limits of our measurable universe and the light-year (distance travelled by light ($c=299,792,458$ m/s) in one Julian year) as the new reference in the universal scale. Comparing the age of our universe (as for now 13,5 billion years) with the Planck time gives about 2^{200} Planck times, a number beyond understanding. If we take the Planck length scale to be 1 meter then an atom would be as large as the whole (visible) universe (93 billion light years). In this way it becomes understandable how easy neutrino's pass

* Correspondence: Wilhelmus de Wilde. E-Mail: wilhelmus.d@orange.fr Note: This article is based on a submission to FQXi Essay Contest "Questioning the Foundations, Which of Our Basic Physical Assumptions are Wrong?" in 2012.

easily through our bodies and the earth, how much “emptiness” there is and how much the lower and upper scales differ from each other. The relative human scale becomes immense and the “wave” characters the inability of perception. The reductionist way of thinking does no longer apply.

In our reductionist way of thinking, going to the essence of these references means to try to find the reference of the references (ad infinitum) and then becoming aware of the fact that we always fall back on our indescribable awareness of an emerging reality that cannot be caught.

On the experience of time, it is emergent from our memory so...the snake is going to bite his own tail: ouroboros.

Time

Time in our daily lives means the past, the present and the future. It seems easy. The past has gone, so no longer exists, the present has already gone when we become aware of it, so it is also already the past the moment that we are aware of it, the future is not yet existing, just simple. Time does not exist. It only exists as an emerging memory experience in our consciousness.

Every clock you are using/observing is at a certain distance to your senses, a distance in time (length divided by the speed of light c is the time needed for the signal of the clock to reach you), after that it takes your brain and mind still 200 milliseconds (The Data Process Transmission Delay = DPTD) to become aware of what you perceived, so we are only becoming aware of the past. Clocks measure “time” in comparing frequencies, the ultimate frequency is the Planck time (see page 1), the rhythm of the music forming our reality of this universe is $5,39 \times 10^{44}$ ticks per second which also means that there are 5.39×10^{44} possible choices per second at this rhythm.

What we are conscious of is not this frequency, we are aware of a continuous time experience, that is formed in our mind out of the pieces of mosaic of our memory, together forming a “picture” of our reality. When listening to music the treatment of the past is becoming visible, our mind is uniting separate notes as heard, the melody created in the consciousness of its composer is transmitted to us, we even form a future “expectation” so that harmony is created. One of the abilities of our consciousness is to create an image of the future, inferred of the signals received from the past.

Our senses are the recipients of the signals we receive from the outside world. Our eyes form only a "sharp" image (full colour and fully detailed) representing a surface of only 5% (the surface of a dime held at an instance of 1 meter from the eye) of the total image that we receive, the rest is **added and filled in by our consciousness**. In our minds the progress of time and so history is "created" by using "only" 5% of these data received and stocked up. This almost deniable amount of information together is forming our "subjective reality".

Subjective Reality

An individual being can be regarded as the centre of reception of signals, the OBSERVER. Around him/her is a sphere of incoming data. We could imagine of course an infinity of spheres around the observer, each sphere with a different radius and representing a different past of incoming simultaneous signals. The minimum radius of a sphere around the consciousness of the observer, at which the data are “aware” is at a distance of 1/5 sec. (10^{43} Planck lengths!). This distance represents the minimum Data Processing Transmission Delay (DPTD) between the reception of the incoming signals via our senses and the conscious causal awareness of the event observed.

Consciousness is an emergent (from a specific material cohesion) and a non-material entity that has no comparable volume. It can be represented as a singularity (no material dimensions). This singularity is the centre of the sphere. The resolution of this sphere is comparable with a digital camera, but with an almost infinite number of pixels. The deeper you go the more details are revealed. New pixels are giving new interpretations. The further we research, with the aid of instruments, the more details we will perceive. Like the digital camera we can only treat the signals that we are built for, and, as we are perceiving only 5% (baryonic matter) of the total of signals, it means that perhaps with other “senses” we will be able to get a more complete perception of our reality.

Imagine the signals from a far away past as deep blue and the younger signals as deep red, the sphere is then comparable with a multi-colour soap bubble. The surface of each sphere represents a simultaneity of data, **the subjective reality** of the observer. It contains all the history of the universe, but each percipient cannot reach all of this information, by lack of instruments and/or interest. This “knowing” (wave collapse) becomes the origin of the decoherence when shared with other subjective simultaneity spheres.

The signals arriving at the surface of this sphere come from different sources and from different distances. The sphere from observer Alice has a different (coloured) surface as the sphere from observer Bob, who is at distance x from Alice. So each observer is aware of a different reality. The minimum subjective awareness radius of 10^{43} Planck (200ms) units can be extended to other bigger radius (in length/time), until all the spheres touch and mutual cutting circles are emerging. The subjective consciousness is then more and more influenced by the mutual received signals which is the origin of decoherence, every percipient can, if he wants to, dive into this multiple conscience, but he can also decide “not to be interested”, which is a form of free will.

This difference in experience of reality lies in the difference of interpretation of the subjective simultaneity spheres. If two observers communicate with each other they share a similar interest “sphere”, it will be like two soap bubbles that merge. A great communal circle where the bubbles melt together is the result. This circumference of the cutting circle is where the incoming data from observer Alice and Bob are the same. So if two observers are in different light cones in space/time they may have, dependent on their distance and communication possibilities, no communal circle, so no simultaneous experiences. It is as if they are living in separate universes.

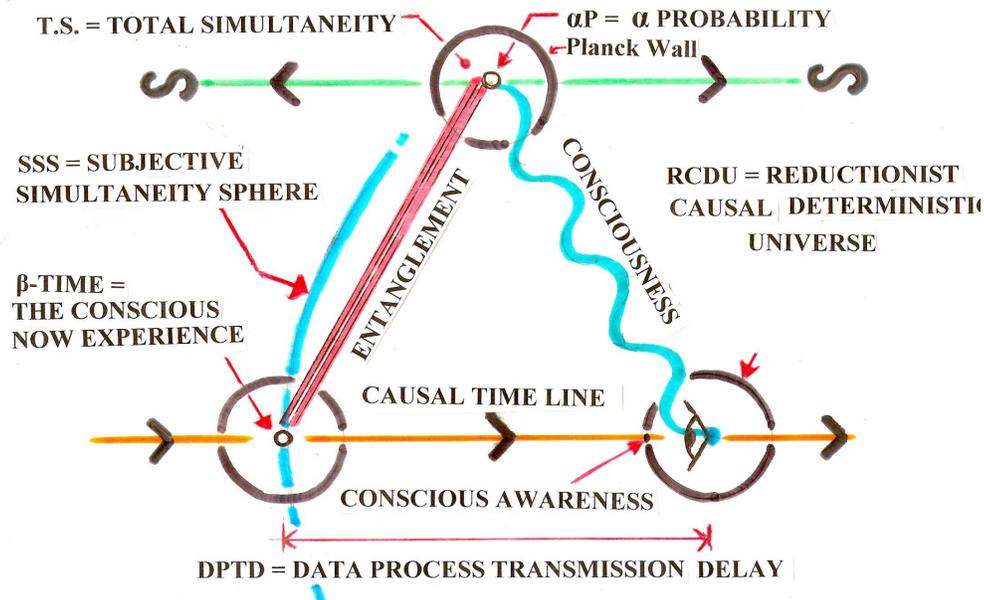


Figure 1. How consciousness is at the origin of our Now Experience. Consciousness → α -probability in TS → β -time → DPTD → conscious awareness

Consciousness Foam of Subjective Simultaneities

All the Subjective Simultaneity Spheres (SSS's) - that represent the subjective realities with their communal cutting circles - are forming together a FOAM of mutual experienced realities.

Imagine the earth with all its human beings and their foam of consciousness surrounding it, the further we are going away from earth, the further we go in the communal past and the earth is becoming more and more a centre. All of the consciousness of humanity on earth forming a new centre of the foam of human consciousness. This is the sphere of simultaneity of history around us. That is why we all share the same history, the Objective Simultaneity.

So the oldest communal image of our history is the image of the Cosmic Background Radiation, (George Smoot (Nobel Prize Physics 2006) commented the image of the CBR on the 23rd of April 1992 : "If you are religious it is like looking at the face of GOD").



Absolute Simultaneity

The above described foam represents the subjective simultaneities and its resulting different objective simultaneities. In physics however there is also the expression: "absolute" simultaneity.

"Absolute Simultaneity refers to the experimental establishment of coincidence of two or more events in time at different locations in space in a manner agreed upon by all observers" ⁽⁴⁾.

As indicated above objective simultaneity is dependent on the specific moment in time-line (radius of the sphere) and the communal cutting circles of these individual spheres at that time. This specific moment can be described as a slit from "Block Universe". Space is not needed here as a material medium, our memories are timeless and space-less, they are the result of the data perceived on the simultaneity sphere. The absolute ether that Einstein introduced later to explain Newton is a material medium needed to explain material absolute simultaneity. In our perception this ether is of a different quality because consciousness is the origin of matter, the ether connecting "entanglement" as a spooky action at a distance is of a non-comprehensible entity for us mortal beings. It is like an imaginary ether where the cutting circles of our SSS's are, like the "distances" in time. Time is emerging only in our consciousness. The ether of consciousness is our BELIEF.

I agree with Julian Barbour when he posts : "An instant of time is ONE configuration of the entire universe at One instant" ⁽⁵⁾so time does not exist as a dimension. The "One Instant" in our perception is the Planck time⁽⁶⁾, the shortest time lapse until now. In this time lapse there is no longer a cause before an event. The according length is the Planck length and is derived from the Planck time. "Space" is an "emerging" perception from Time, an illusion that is created in our consciousness. If we try to explain space with reductionism , infinities and paradoxes will be all over.

α - Probability

The question can be: "Was consciousness created by matter or matter created by consciousness?"

This question seems a typical chicken and egg one posed in our reductionist causal deterministic universe (RCDU), where we cannot deal with infinities.

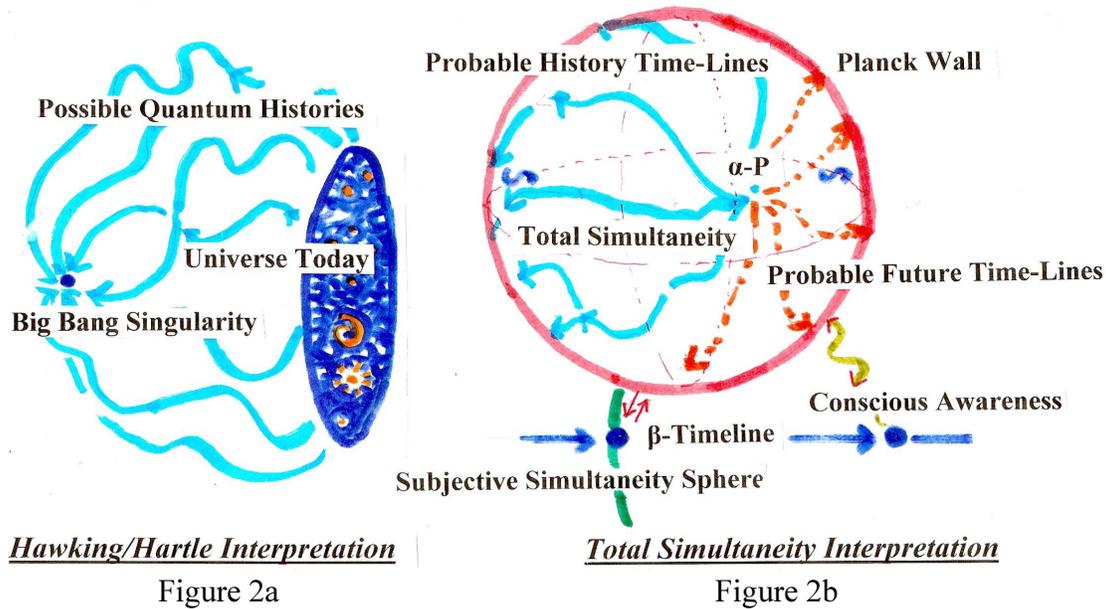
Once we make a division line between this Reductionist Causal Deterministic Universe (RCDU) and the dimension where causality is not "existing", the one behind the until now accepted Planck length and time, where there is no cause and event relation, where we enter a "dimension" where every probability (also of parallel and multi-verse) is a possible reality. We call this "dimension" Total Simultaneity ⁽⁷⁾ (TS). We have created the limit of our RCDU and annihilated all infinities and paradoxes of length and time. So before the Planck length we enter non causal TS, here the 3 directions that we call space do not exist nor do before nor after, we enter a ZERO-dimension Universe. The limit of our RCDU can be reached **at any point in our space** just by dividing any length until the Planck length limit (not only by going in the past!) **everywhere** we reach the origin of our universe, because it is in our consciousness.

The origin of our RCDU which is TS might be described as a singularity everywhere present. In time we can go back in the past of course in the direction of what is accepted as the Big Bang, but we can also divide every RCDU moment until its most little unit: the Planck time, this moment is the "**eternal non causal singularity moment**" and contains the whole **past and future** as experienced in a RCDU moment. The Big Bang in this interpretation is a non existing moment in our RCDU because it is a singularity, beyond the Planck time in TS. TS is "constituted" of α – **Probability's** (α -P's).

The Hawking/Hartle's No-boundary Proposal

"The Big Bang is no longer the beginning of time in a singularity as proposed in the standard inflationary cosmology **but a timeless point where the universe -or rather a superposition of all possible universes** - pops into existence from nothing with all its laws of physics intact". ⁽⁸⁾

This touches very much the TS interpretation. However the Hawking/Hartle interpretation places the lines of all possible histories of our RCDU after the point of creation the Big Bang a timeless point in our RCDU. Our interpretation puts this point before the limit of the RCDU at a point α -P. in TS. **Therefore all the histories of our RCDU's are everywhere in TS and an eternal process.** The non causal α - P singularity in Total Simultaneity harbours ALL histories of ALL the possible universes. The "no-boundary" proposes that the "histories" of all the possible universes are positioned in the past of causal space/time, the no-boundary proposal implies no boundary in the far past but gives a boundary in the future. TS gives no-boundaries in the past nor in the future. The way however that Hawking/Hartle treat the histories and the cosmological constant Λ with the Wheeler de Witt Equation ⁽⁹⁾ may also be a mathematical working method to describe the probabilities and world-lines in TS.



Reality and Consciousness

Let us imagine an α -P in TS, this non causal probability point that is called "Alpha". This Alpha singularity is like a slit of a Block universe as the infinite oneness with no limits and no content by means of materiality of number. The α -P has a connection with our consciousness in the way that the causal part of consciousness acts like an antenna receiving/emitting timeless waves, resulting in a causal "Beta" time in RCDU. (see figure 1) so makes emerge this Beta time in our consciousness.

When we are making an observation that causes the collapse of a wave function, this observation is becoming an event and afterwards (min. 200ms) "conscious" observation. Our mind is receiving the signals from this event in β -time. The signals have to become awareness (knowledge). The causal time needed for our body (material intermediary) is about 200 milliseconds. So every observation that is the cause of a wave collapse, **is instigated in the future by our consciousness!** It took place in Beta time **before conscious awareness**. What does this mean?

The Alpha time is non causal and "existing" in TS, available to our consciousness. The beta time is causal (Arrow of time) and existing in RCDU. Our consciousness is able to make contact with the non causal Alpha time, in this way "creating" the causal Beta time. The Alpha and Beta time are in a non causal way simultaneous, the Alpha time is an eternal timeless probability moment, our consciousness is placing these moments in a Beta sequence (experiencing the arrow of time) that is causal so "understandable". It "seems" for our experience as if the Alpha moment and the resulting Beta moment are both in the past of awareness. The Alpha and the Beta moment are entangled, intelligent observing seems like creating the beta moment in our world line in the past, and **our consciousness is acting in the future** (relative to the causal arrow of time).

The double slit experiment and α -P

The “double-slit” experiment, sometimes called “Young’s Experiment” is a demonstration that matter and energy can display characteristics of both waves and particles. In the basic version of the experiment, a coherent light source such as a laser beam illuminates a thin plate pierced by two parallel slits, and the light passing through the slits is observed on a screen behind the plate. The wave nature of light causes the light waves passing through the two slits to interfere, producing bright and dark bands on the screen. (Wikipedia, the free encyclopaedia: Double Slit Experiment)

By detecting particles at the SLITS, it "seems" that we have changed the result at the black wall behind. Our observation has caused TO BE particles and to stay particles.

What if we arrange the experiment so that we can make an "arbitrary choice" ⁽¹⁰⁾ later, whether or not to use the information gathered at the slits? When mixing up the data with irrelevant garbage data and record the combined **incomprehensible** data, the result will be "wave". When designing a program to filter the garbage out it will be "particles".

The Beta time where our choice for measurement is taking place is causal. In Alpha time it is not it is timeless. The so called choice moment is already an (ever) existing one in TS. It seems very strange in our RCDU but is "understandable" with our triangle Consciousness $\rightarrow \alpha$ -P \rightarrow Beta. The time lapse of 200 milliseconds necessary to create awareness is not the only possible difference in causal Beta time, the definitive reality is created by our KNOWING, or our choice to have information available and manageable, which is actually taking place in future, in formula:

Conscious Awareness of measurement (particle) $\rightarrow \alpha$ -P $\rightarrow = \beta$ -time + >200 millisec

Wheeler’s “delayed choice” experiment, proposed by John Archibald Wheeler in 1978, is a variation on the double slit experiment, he directed the light into two more remote telescopes, each one focussed on one of the slits (so after the slits). By using instead of two telescopes focussed to either side of a black hole, the delayed choice is becoming light-years. In 2007 the first “clean” experimental test of Wheeler’s ideas was performed in France by the team of Alan Aspect et al., and it became clear that some photons must have reached earth via EACH pathway. So our observations are influencing the far away past, which means in my perception : actual conscious intervening causes a certain α -probability to become a point on the β time-line.

Spooky Action at a Distance

From entangled particles becomes also understandable. The causal moment that we are observing one particle the other will give the same outcome. Even if it is light-years away , the "change" is immediate. Our observation/measurement is taking place at causal time Beta, that moment has a non causal timeless counterpoint in TS: α -P : , so there "exists" an eternal simultaneity in time and place for every causal moment of our Universe in TS. Alice is measuring the spin of an

entangled electron at A and the electron with BOB gets the same spin, no matter the distance between Alice and Bob, the reaction is timeless, the world-slice in α -P gives a simultaneity point on the cutting circles of their Subjective Simultaneity Spheres :

Conscious Awareness of Entanglement:

Simultaneity point of SSS of Alice and Bob \rightarrow

Conscious Awareness of measurement (spin A/B) \rightarrow α -P (spin A/B) \rightarrow β -time+ >200millisec

Many Worlds Interpretation (MWI) ⁽¹¹⁾

“The wave-function collapse led to the many-worlds interpretation. The moment a wave system is observed, the wave-function collapses and the universe is split in two. The observer and the observed have become correlated or entangled”

The MWI poses that the conservation of energy is not violated at the continuous "splitting" of the universe, (huge masses and energy are needed at each splitting) because of the fact that the new universe is a universe on its own (with its own histories) where the conservation of energy is not violated. But how is conservation of energy in the total Multi-verse? The whole problem of conservation of energy (in the past and in the future) is solved when we take a closer look at our Total Simultaneity interpretation:

All the possible “past and future choices/observations/measurements points” (α - P’s) of all the probable and not probable universes are "present" as α - P’s in TS, it is not an act of "creating" a new material universe, but changing to another probable world-line in TS. The consciousness of the observer can go at each α - P in different ways, his consciousness develops itself further on a new world-line, the centre of his consciousness receives a new colour point on his Subjective Simultaneity Sphere (SSS). The other researchers (on the new world-line) participate in their communal circles at the merging of their Subjective Simultaneity Spheres. Once time evolves and communication is taking place, more communal circles cross and the foam is “coloured” by the new information. This growing of "knowledge" can be compared with **decoherence**, like decoherence it can be isolated (information blockage).

So the understanding "Many Worlds" gets a new interpretation, the many worlds become "many probabilities". The slice in α - P represents for the consciousness of the observer his whole world-line. All other world-lines already exist as non aligned α - P’s in TS for the observer, again it is the percipient that aligns these α - P’s into memory world-lines in his consciousness.

Time Travel

The splitting in the original MWI theory goes only forward in time, not backwards. In our conception it IS possible that our consciousness "activates" α - P’s that were already α - P’s in our causal past memories (or in parallel universes) or were part of memory points of other percipients. Should this mean that time travel is possible? Yes but...

1. Until now our consciousness is not able to **intentionally** manage the choice of α - P's.
2. An observer may incidentally "activate" an earlier used α - P , so revive (as present) a part of the past, once that this happened his world line is split in two (in TS), one world line where he chooses to take the line from the past and one where he chooses to stay on the "old" world line, and he continues with a "memory" of another α - P in a new world line that seems to be the past of the former, but with the memory of the first. (This is also valid for so called "future" moments (α - P's from future β -time lines), one of the results of this kind of time-travel is known as precognition.
3. The grandfather son paradox does not exist because of the fact that in the new world line the grandfather is not the causal grandfather of the subject, the causal grandfather is or was in the former world line.

One way of humanity to "control" its consciousness and influence the "activation" of α - P's is perhaps meditation and praying. The most important will be the further development of our brain and/or the development of our social intelligence (objective consciousness), mankind is just at the beginning of its evolution, so there is hope.

Another way is to develop a new form of consciousness that has other sensibilities in TS, compared to our own five senses but can communicate with our consciousness. The possibilities of quantum computers indicate that this kind of "creation" could be possible in the future after all it IS a probable world-line in TS.

Entropy

Entropy is the thermodynamic property toward equilibrium/average/homogenization* Entropy is a pure causal interpretation of the past and is defined phenomenological by the second law of thermodynamics. Entropy is an expression of disorder and/or randomness, the higher the entropy the higher the disorder. TS is compared to our RCDU chaos, the highest entropy.

But is the "order" of our memories the ultimate order? Our memory gives only ONE unique world-line, with its own relative unique order. When we cut all the words out of a dictionary and throw them up, the result seems chaotic because we compare it to the former "order" . The new order however is as UNIQUE as the first one. Once we throw them up again, a new unique order and so on ad infinitum. Each new point in the world-line contacted by our consciousness in TS is a creation of new order from chaos. What we perceive as chaos is in fact another form of order.

Free Will

Free will can be easily understood and accepted in this interpretation, because it is our

consciousness that chooses between an infinity of α - P's in TS. Each and every moment we make these choices (of course after interpretation of our Subjective Simultaneity Sphere). The “colours” on this sphere are influencing our definitive decisions. But our decisions are not pre-dictated in a reductionist way because it depends of the "sensibility" of our consciousness how the future α - P 's are chosen, EVERY α - P IS AVAILABLE.

In the beginning of the essay we mentioned the 200 milliseconds as the Data Processing Delay (DPL) between the reception of the signals of an event and the awareness of the ego that received them. These 200 milliseconds are 10^{40} Planck units ! This means that in fact $5,39 \times 10^{40}$ choices can be made. The 200 milliseconds may seem a short time in our macro human life-time but it is like an eternity in quantum time, all is relative.

Spirituality and Its Parallels with Total Simultaneity

The Egyptians

In 3150 BC, the Egyptians had a polytheistic interpretation of their Divine ideas. What is striking in our perception is however their idea of the creation and functioning of the world that was the act of NOUN, the dark and CHAOTIC primordial ocean, that was the origin of an island ATOUM, representing the earth, or what they perceived as the universe. Here we meet the “order from chaos” as is expressed (in a different way) the order from the chaos of Total Simultaneity. The island of our “reality” is created by our consciousness.

The Greek thinkers

It was first ARISTOTLE who integers in his noblest celestial spheres the ether that wholly encloses the existent universe and calls this the “UNMOVED MOVER”, the cause of everything without being CAUSE. This ether is non corporal, impersonal, immobile and not accessible for the human being. Total Simultaneity has almost the same qualities: only it is not itself the cause of everything, it is our non-causal consciousness that is harbored in this dimension that together with our causal consciousness is the cause of everything. However our consciousness is the UNMOVED MOVER. (Aristotle: Physics 8.6, 258b26 – 259a9)

Christianity

The interpretation of Total Simultaneity can be regarded as a way to “imagine” the GOD experience, parallels with Christianity can be found in the Holy Trinity:

“The Father”: TS (the total of all universes and their origin),

“Jesus Christ”: the human being (Us) with its causal part of consciousness:

“The Holy Ghost”: Consciousness creating the order out of CHAOS and is also a part of this CHAOS (GOD?).

In this way our causal consciousness is also part of the non causal part (divine?) and the Universe

as we are experiencing it cannot be other as a fine-tuned one for our form of life and consciousness (thanks to the Objective Simultaneity Spheres that are the cause of decoherence). TS (GOD?) can also give us the peace for our souls because ALL the α -probabilities are “eternally existing singularities” available to our causal and non causal consciousness, so the life-lines as we are experiencing them are also “eternal” in TS. This can explain the “contact” we have with people who died, who are in “heaven”. Why can a four year old boy play a Mozart piece better as a grown up pianist⁽²⁸⁾ ? Somehow he is connected to the α -probability life-line in TS of a former pianist. Also the possible future life-lines are eternally “available” for our consciousness, the reason why some people are able to become aware of the future.

Judaism

The Kabbalah “Ein Sof” is understood as GOD prior to His Self Manifestation in the production of any Spiritual Realm and can be translated as “no end” there is no end and no beginning it is infinite. It is the origin of all created existence, the Total Simultaneity, containing ALL non causal consciousness.

The Vedanta School of Indian Philosophy

Atman: Self (the “I”, the consciousness centre of the SSS) is the first principle, the true self of an individual beyond identification with phenomena, beyond the realisation of the β -time, where all probabilities are still possible choices available for the consciousness. A human being must acquire self-knowledge – atma jnana – which is to realise that one’s true self (atman) is identical with the transcendent “SELF” Brahman. If Atman is Brahman in a pot (the body) then one need merely to evolve out of the pot to fully realise the primordial unity of the individual soul with the plenitude of Being that is the Absolute - the unifying of the causal and non-causal consciousness in TS). Brahman is the One Supreme, universal Spirit that is the origin and support of the phenomenal universe! Brahman is sometimes referred to as the Absolute or Godhead which is the Divine Ground of All Matter, energy, space, being and everything in and beyond this universe (TS!) Brahman is conceived as both personal (causal consciousness) and impersonal (non causal consciousness) without qualities and Supreme. If you subtract the infinite from the infinite, the infinite remains!

Hermeticism

The All: According to hermetic doctrine, The All is more complicated than simply being the sum total of the universe. It is more correct that everything in the Universe is within the MIND of the All, since the All can be looked upon as MIND itself. Non causal consciousness is part of TS, so the universe partially exists on a Mental plane. In our perception the Universe is wholly existing as a result of the mental plane. In Hermeticism you cannot say simply “I am God” you are part of God (like our causal consciousness is not the Whole but a total with the non causal part). We have the potential of the perfection of GOD but you cannot reach it.

Sufism

“All things and events perceived by the senses are interrelated and connected and are but

different aspects or manifestations of the same ultimate reality. “Enlightenment” is an experience to become aware of the UNITY and Mutual Interrelation of All Things, to transcend the notion of an isolated individual self, and to identify him/herself with the ULTIMATE REALITY”.

“The direct mystical experience of reality is a momentous event, in the realm of human consciousness (as-Shuhud)”

“Instead of a linear succession of instants, they experience an *infinite , timeless and yet dynamic* present. In the spiritual world there are no time divisions such as the past, the present and the future, for they have contracted themselves into a single moment of the present where life quivers in its true sense”

“The reality underlying ALL phenomena is beyond all forms and defies all description and specification, hence to be empty, formless or void. To the Sufis all phenomena in the world are nothing but the “illusory manifestation” of the MIND and have no reality of their own” ⁽²⁹⁾

The parallel with TS as a singularity that cannot be understood/described is obvious (contracted to a single moment).

Conclusions

Our consciousness in Reductionist Causal Deterministic Universe (“RCDU”) emerged from a certain order of particles. The experience of time emerges from our memory. We experience our causal order as unique and solely created for the “I” which is the centre of our consciousness. The “I” has emerged from the experiences memorized. This “I” in the centre of our Subjective Simultaneity Sphere, whose surface is partly participated with other Subjective Simultaneity Spheres of other “I’s”, is forming together with them a bubbling surface of “creation” which is the origin of decoherence and the awareness of our history/reality. All these reality experiences are created thanks to the ability of “acting in the future” of our RCDU consciousness because of its unity with the Alpha–probability consciousness in Total Simultaneity. Our scale of reality is an emerging one and reductionism ad infinitum will not give us the origins of WHAT IS and the WHY we are looking for. Just as Richard P. Feynman said: “We just have to take what we see, and then formulate all the rest of our ideas in terms of actual experience” ⁽²⁷⁾.

This approach of “Total Simultaneity” is one of the many theories (like string theory) that seek their origin beyond the Wall of Planck. I will never claim that it is the only truth, because the only TRUTH being not 100% available for us mortal causal beings. It is however based on the latest scientific knowledge, as we all know that this knowledge is always changing because each moment new enigma’s can be discovered. However our assumption that the limit of causality which is the Planck time/length is not influenced by new achieved limits, the acceptance of a causality limit is the base. The structure of TS and the perception of consciousness being ONE in two universes lead to compare TS with the ancient and modern understanding of GOD.

What Total Simultaneity and the consequences for consciousness are indicating is: We try to explain that the materialistic reductionist approach is only valid until a certain limit. The physics as we are experiencing it is “emerging”. What we experience as individual “reality” is a product of consciousness entanglement and decoherence is its origin of our mutual history. Solipsism is

not a consequence of this vision, Anthropomorphism is an expression that can be used here only as the indication that our reality is created by our consciousness (the causal and the non-causal part together, being ONE) and not the consciousness of another intelligent race with different constants, our reality is one of the infinite availabilities (not already “existing” space/time-lines), so is by its existence the result of our consciousness entanglement and decoherence is already fine-tuned.

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