

# Conscious spacetime

## A possible connection between phenomenal properties and six-dimensional spacetime

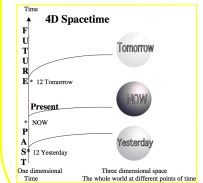
An Event is What happens  
Where and When

described in plain language, as a physical reality and/or conscious experiences  
Where can formally in 3D space (length, breadth, height) be given as a set of points with coordinates  $(x, y, z) \in S$  relative a frame of reference. When can be described as an interval  $\Delta t$  where  $t$  is measured with a clock

### Spacetime

• **Einstein's special theory of relativity** shows and experiment verify that moving rods are shortened and moving clocks go slower with a factor  $f = \sqrt{1 - \frac{v^2}{c^2}}$   
 $c=300\,000\text{ km/s} = \text{velocity of light}$   
 $v=260\,000\text{ km/s}$   $f=1/2$  in figures

• **Space and time are relative**, different for observers moving relative each other, but  
• **Spacetime intervals are absolute**.  $\Delta s^2 = c^2(t_2 - t_1)^2 - (x_2 - x_1)^2 - (y_2 - y_1)^2 - (z_2 - z_1)^2$  same for all observers, and  
• **Spacetime is more fundamental**.  
• **Simultaneity is relative**: Observers in relative motion have different sets of events as simultaneous. A moves relative B and a clock C. When A passes B at M the clock C exists at time  $t$  for B but the same clock C exists at time  $3t$  for A due to relativity of simultaneity. Taking existence as absolute, that is not dependent on observer, the clock C exists at two moments of its history. This can be generalised so the clock exists at all times, as a worldtube and every 3D object exists as a 4D object extended in time. Thus  
• **Spacetime is ontological four-dimensional, so all events, past, present and future, "exist at once"** are equally existent in four-dimensional spacetime. (1)



4D spacetime can be visualised as a one-dimensional time-line where all time-points are full three dimensional worlds at that time. The entire history of the World and of every object is given once and for all as the Worldtube and the objects 4D unchanging worldtube and in 4D no change at all. But why do we experience 3D objects as changing in time? Related to consciousness and brain! Brain limit 4D reality to 3D with time? "Time is a moving image of eternity"(Plato) Memory in spacetime?

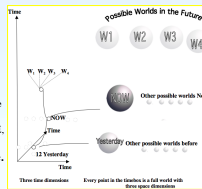
### Near-death-experience:

"Total awareness, I could see everything at the same time and it was not limited by distance and not limited by time either ... felt as if everything was happening at once. Past, present and future, it all felt like it was happening simultaneously". (2)

This experience can be interpreted as **direct conscious experience of four-dimensional spacetime**

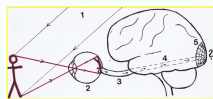
### 6D Spacetime

Mathematical and physical arguments exist (3) for  
• **extending the theory of relativity to six dimensions, three space and three time dimensions.** Can be visualised as a  
• **three-dimensional time-box where all time-points are full three-dimensional possible worlds at that time.** In analogy with experience of the 4D spacetime in NDE.  
• **six-dimensional spacetime of possible worlds can possibly be related to conscious experience.**



### What can a brain really do?

"No one has produced any plausible explanation as to how the experience of the redness of red could arise from the action of the brain." (Crick F., Koch C. (4))

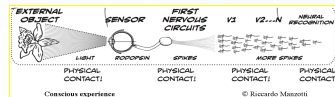


### Where are our sensory experiences?

• **Where is this poster located?** (think you are at the poster in connection to the frame of your eye and brain.  
• **Where is your visual experience of the poster located?** If you say "in my brain or in my eyes", how can you see the poster out there in front of your head?  
• **Learnt "projection"** with survival value (Georg von Bekéy (5)). But **how learnt?**  
• **"Subjective localization of a sensory stimulus in space...still mysterious..."** (Benjamin Libet (6))

### More than the brain Externalism

Riccardo Manzotti (7)  
• **questions the common view that experiences are representations of the world inside our brain.**  
• **suggests the whole chain of physical and causal continuity from the object in the world to the sense organs and all brain processes, not just the end part in brain, is identical to our conscious experience.**



Manzotti et al (8) also argues that "Reality and the mind share the same ontological status... Our access to the world is understood, to a greater or lesser extent, to be direct rather than mediated, representational or illusory."

### Sensory experiences outside the brain

• **Not any experience localised in my (phenomenal) brain, and I doubt that any one else has.**  
• **Sensory experiences seem to me localised outside my (phenomenal) brain, in the body or in the space around.** Touch in the body. Taste in the mouth. Smell in the nose. Sight and hearing is out there in the space around the body. Hearing also in time.  
• **Neither experience of any process distinct from the object in "pure" sensory experience.** Rather it seems  
• **sensory experiences are localised in events in 3D space now outside the (phenomenal) brain, events also related to (phenomenal) matter.**  
• **"I experience a red apple, because, for a moment, I am identical with the red apple I have an experience of."** (Manzotti (9))

### But where are our mental images?

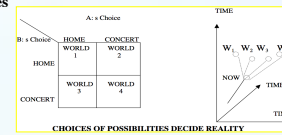
Thoughts (going to bed tonight), memories (breakfast this morning) and mental images (pink elephant) are not events in the 3D space outside the brain NOW. **Must be in the brain?**  
No consensus among scientists/philosophers about localization of thoughts/the mental:  
• **in brain** because thoughts are brain processes (10). But begs the question.  
• **where you are, but meaningless to locate the thought to some part of the body.** (11)  
• **not possible to locate, seemingly, thought, the mental, in 3D space at all.** (12)  
• **in temporally extended environment outside the brain (neorealism (13))**  
• **perhaps in 6D spacetime?**

### Conscious spacetime

It is suggested  
• **Sensory experiences are events in the now, the 3D space- or matter-aspect of spacetime, outside the (phenomenal) brain.**  
• **Thoughts, fantasies and dreams, as all mental experiences, are in time, beyond the space now, the time-aspect of spacetime containing events in possible worlds in the six-dimensional spacetime.**  
• **Episodic memories are earlier realised events in spacetime.**  
• **Semantic memories and abstract thoughts are interpreted as speech in a possible world.**  
• **Emotions as tensions between memories, the realised world (including the body) and frightening or hoped for possible worlds.**

### Possibilities, reality and choices

There is a significant difference between **possibility and reality**: that which is real must have been possible, but that which is possible might happen to be real but doesn't need to happen to be real. In this view, which of the possible worlds that will become real as physical in 3D depends on independent choices of all intentional beings (human, micro, macro to be further described).



### Consciousness as fundamental

Chalmers (14) argues for taking conscious experience as fundamental alongside mass, charge and space-time. Here it is argued the need for a **temporally extended spacetime with more than one time dimensions**, in order to be able to describe e.g. localisation of thoughts about **different possible futures**. This together with mathematical and physical arguments (allows superluminal velocities) supports the assumption that spacetime is ontological 6D and that this every object and subject exists as extended in 6D spacetime. In analogy to the three dimensional timebox where every point is a world in 3D space at that time, 6D spacetime can also be represented as a 3D space where every point is the whole existence in 3D time for that point:  $\{W(x, y, z, \alpha, \beta, \gamma) : (\alpha, \beta, \gamma) \in T \in R^3\}$ . It seems coherent then to also assume that this richer structure in 6D is related to consciousness and to assume that **all events and processes in six-dimensional spacetime are phenomenal**, or have intrinsic aspects with **phenomenal properties as their grounds**. Further work is needed to develop this idea and to describe subjects and causality. Preliminary this seems possible using the result that violation of Bell's inequality implies superluminal causation and information transmission (15) and the idea that causation and information is related to will/intention and experience in superluminal realm which can be described in 6D spacetime.

Some further observations and suggestions:

• **What does the brain do?**  
Taking OOBIE at its face value, (especially those with NDE where monitoring of brain activity shows none or very low activity (16)) indicates that under special circumstances it is possible to have direct experiences of events in spacetime without the mediation of sense organs and processes in the brain. This is then coherent with the view that events and processes in spacetime are phenomenal or have aspects with phenomenal properties as their grounds and that the brain does not produce but **limit/adopt 6D consciousness to 3D world**. For ordinary experiences the brain is our "anchorage" in spacetime defining from what point we experience spacetime and on which part of spacetime we can act in 3D space through our brain and body. **Processes in sensory organs and brain don't create our experiences** but are the traces of how consciousness is brought in contact with different phenomenal properties in the six dimensional spacetime outside our brain.  
• **Conscious Monism**  
What is in the now a sensory experience/phenomenal matter, is in the next instant a memory, outside the now, that is mental. A thought is mental as a possibility in time which can be realised as sensory experience/phenomenal matter in space So in 3D perspective (phenomenal) matter and the mental can transform into each other and be seen as space- resp. time- aspect of Spacetime. In 6D perspective matter and mental are part of same extended worldtubes a form of Conscious Monism.

### One Consciousness

"... the empirical fact that consciousness is never experienced in the plural, only in the singular" suggests some kind of "unification of minds or consciousnesses" (Schrödinger (17)). It seems easier from One Consciousness to explain many individuality is due to projections in spacetime into different points of view, focused in body and brain, which gives different sets of sensory experience and mental events. To assume that 6D spacetime as a whole is one consciousness might reverse the combination problem of panpsychism, and perhaps make it easier. There are many experiences which seem to support the existence of One Consciousness. Here once more Morjan's NDE:

"I felt like I had a greater self ... It's like waking up in another dimension... This energy that I am this being is actually eternal ... Felt like I become one with everything, I understand everything and everyone now"  
"as we all shared the same consciousness... all expressions of the same consciousness"  
**All of us are just different facets of one greater whole."**

REFERENCE:  
Pilotti J. Conscious Spacetime. An outline to experiential monism.  
In The Mysteries of Consciousness. Essays Spacetime, Evolution and Well-Being.  
Fredriksson I, ed. McFarland, Forthcoming spring 2014

Full references and more info on my homepage  
[www.drpilotti.info/eng/](http://www.drpilotti.info/eng/)