

## Consciousness in discrete space

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*There are reports about human experiences of time that are not in line with Einstein's theory of Special relativity and not in line with the rate of change of the electromagnetic field at the smallest scale size. Some psychological reports describe human experiences about the metric of time that defy physical reality as we know it. These reports question the reliability of our understanding of time.*

### Introduction

We cannot imagine how a person who falls from a building can see his whole live as a video stream before his eyes during a couple of seconds “free fall”. It is reasonable to assume that human emotions must be related with the universal electric field, because emotions have a long duration in relation to thoughts. Emotions and thoughts are mutual related so it is also reasonable to assume that thinking is mainly a manifestation of the magnetic field. Or at least a direct related vector field. Because phenomenological reality is a creation of the electromagnetic field.<sup>[1][2]</sup>

But a “video stream” of a whole live in just 2, 3 seconds... The signal transmission of the “tangible” human brain has a duration of milliseconds so it isn't fast enough to replay all those memories, even if the data of the information is heavily compressed and parallel replayed...

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### Quantum fields

The universal electric field and the magnetic field are corresponding fields. That means that a local quantum of energy generates corresponding vector(s). The quantum of energy has a constant linear velocity, known as the speed

of light. But a vector doesn't transfer energy thus the vector acts instantaneous, in correspondence with the evolving topological deformation of the quantum of energy. In other words, in vacuum space there are no quanta without corresponding vectors.

Unfortunately in physics we can only measure local differences of the universal electric field that are quantised. That means we measure *no quantum* or *one quantum* in between  $5,99 \times 10^{-23}$  second. But the number of changes by the corresponding vector are “unlimited”. See figure 1: the evolving energy is the grey surface, 10 arrows symbolise the fluently changing vector, but the real number of different magnitudes of the vector are enormous. Because the increase of the local amount of energy of one quantum is “analogue”.

Experiments have showed that certain “obstacles” – like the double slit experiment – can force an electromagnetic wave out of “synchronisation” (interference pattern). But there must be other mechanism everywhere in the universe that creates local divergences between quanta and vectors (for example the vectors of Newtonian gravity). Because a local surplus of vectors can represent an enormous amount of data if it is not completely tied to the slow evolving of quanta (one-to-one relation between the quantum of energy and the corresponding vector magnitude).

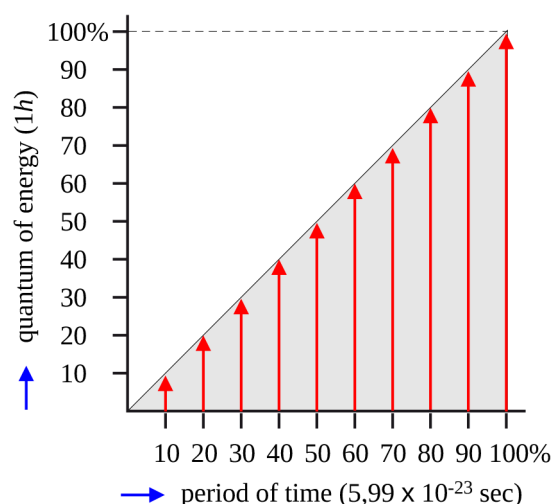


figure 1

## “Supernatural” reality

But it is not only the problem of the experience of slow and fast durations of time (we humans don't experience time as [a fixed metric](#)). There are serious descriptions of the existence of another reality too. A different reality that is mostly termed as “afterlife” in nearly every culture on the planet. Although its existence is mostly ignored in modern physics. Fortunately not in the renowned medical journal *The Lancet*.<sup>[3]</sup>

For example, the Swedish scientist [Emanuel Swedenborg](#) (1688 - 1772) wrote about his experiences in this different reality. His book “Heaven and Its Wonders and Hell”<sup>[4]</sup> is well known and he has published an impressive number of books about the subject. One of his most interesting books describes life on other planets in the solar system and other star systems.<sup>[5]</sup> There is also [the Urantia book](#).<sup>[6]</sup> An extensive 20<sup>th</sup> century description from another reality by a spiritual medium (see the link).

Personally I am not religious and I have no supernatural capacities either. But I have no arguments to doubt that another reality can exist “parallel” to the human experience of reality. A parallel reality that is created by the same basic quantum fields as matter and electromagnetic waves in “our” reality. So actually, it is not a supernatural reality at all, it is just part of ordinary physics. Not at least because the descriptions of the “supernatural reality” seem to align with the distinct properties of vectors.<sup>[2]</sup>

There is a direct link between this parallel reality and our “atomic” reality and that is consciousness. Because the general opinion is that humans who have died, don't have lost their consciousness. Moreover, consciousness isn't an independent phenomenon. Every human body is also the environment of countless bacteria (mainly in the intestine). The total weight of all these bacteria is nearly 1 kg and research has shown that bacteria show individual behaviour. So we have to conclude that every consciousness shares its volume with a much larger consciousness. Moreover, we don't think about the Milky Way as a living being because gravity is transparent for humans. But we cannot ignore the logic that our personal consciousness exists inside the consciousness of the Milky Way and maybe even inside a much, much larger consciousness too. See [panpsychism](#).

Actually, our opinion about thinking in relation to the ability to act is not what we mostly assume. Experiments have proved that we don't act after we have made a conscious

decision.<sup>[2][7][8]</sup> It is probably impossible to prove that in science, thinking and drawing conclusions is excluded from the fact that the human awareness “walks behind”. In other words, our common belief that we are independent and reasonable thinkers is not true.

Suppose that a living being is a duality of a material body and a “non-material entity” that can manipulate the motion etc. of the material body. So I can state that the “non-material entity” influences the direction of the interplay of the material body with everything around. This is not a shocking proposal because in physics the law of conservation of momentum describes the duality.

In our universe every change is a transformation of the local universal electric field and its corresponding magnetic field.<sup>[1]</sup> Every quantum of energy has momentum and momentum represents a local amount of energy and the direction of the transformation in relation to everything around (the vector). All the energy in the universe is conserved – law of conservation of energy – so all the directions – the total magnitude of all the vectors – is conserved too.

There is a mutual relation between local amounts of energy because these are variances within the universal electric field (deformed parts of the units of quantised space). And there is a mutual relation between local magnitudes of vectors, because all the vectors in the universe are mediated by the same universal scalar field, the flat Higgs field.

A quantum of energy cannot pass on within the universal electric field at a velocity  $> c$  (speed of light). But vectors don't transfer quanta so vectors act instantaneously. The duration of the linear transfer of 1 quantum of energy ( $h$ ) from one unit of quantised space to an adjacent unit is about  $5,99 \times 10^{-23}$  second and the length of its trajectory during the pass on is about  $0,5 \times 10^{-15}$  m. However, the velocity of the generated vector by the quantum is instantaneous. So its influence cannot be determined. We know that the influence of the vector is strengthened by other vectors in the same direction (and trajectory) and weakened by vectors in the opposite direction. A vector with a huge magnitude “don't notice” small vectors (like  $10^{24} - 1$  is in practice equal to  $10^{24}$ ). Actually, we don't notice the molecules of the air either when we walk around.

The consequence is that consciousness must be a local configuration of vectors within a “sea” of other vectors. And there is no physics law that forbids local configurations of

vectors, like described in (some) books about the afterlife. However, the “power” to generate vectors is the scalar mechanism of every unit of quantised space.<sup>[9]</sup>

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