

On a mathematical possible extension of space-time in the special theory of relativity to six dimensions and its relation to near-death-experiences and to the mind-matter problem in general. by Jan Pilotti

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The four-dimensional space-time in special relativity, which exclude signal velocities greater than that of light ($= c$), can, as is easily shown, mathematically be extended to six dimensions, three space- and three time-dimensions. This makes it possible to include velocities greater than c .

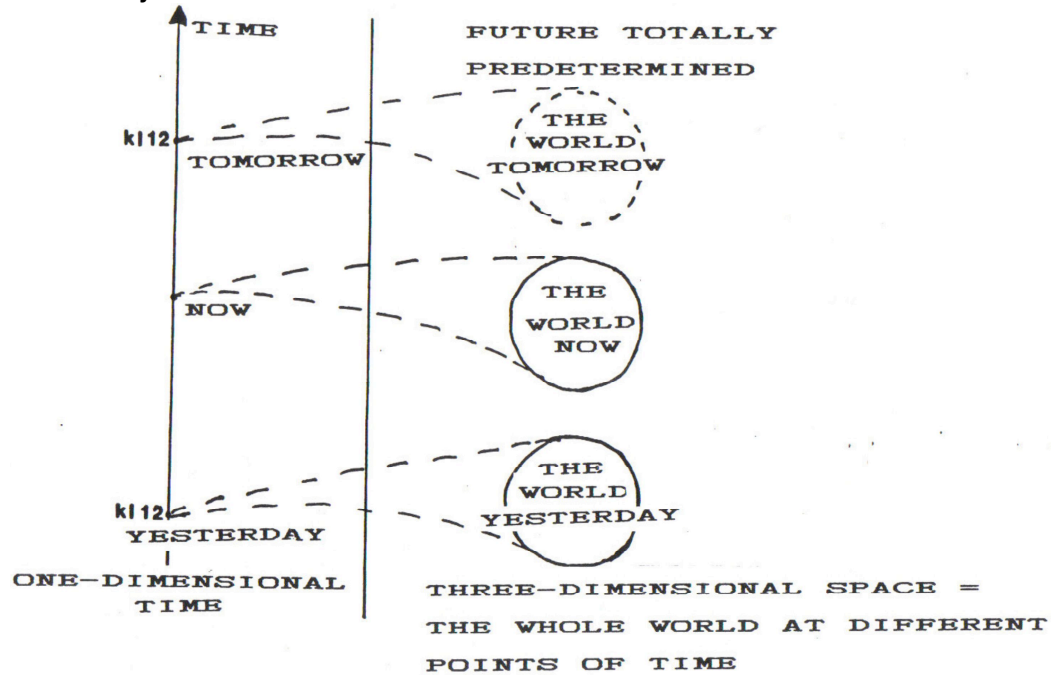
The interpretation of the extra dimensions is unfortunately not straightforward within ordinary physics and signal velocities $> c$ is usually interpreted as leading to relativity in order between cause and effect and to the possibility to affect ones past life, with possibly absurd consequences, why most physicists abandon the idea.

To overcome this problem it is first argued that the near-death-experiences (NDE), in which one often sees ones whole lifetime as a whole at once, i. e. as extended in another space-dimension, seems well to express the idea of space-time in the theory of relativity. It is thus proposed that the theoretically useful concept of space-time, where all that has happened, happens and will happen exist, is open to experience as in NDE.

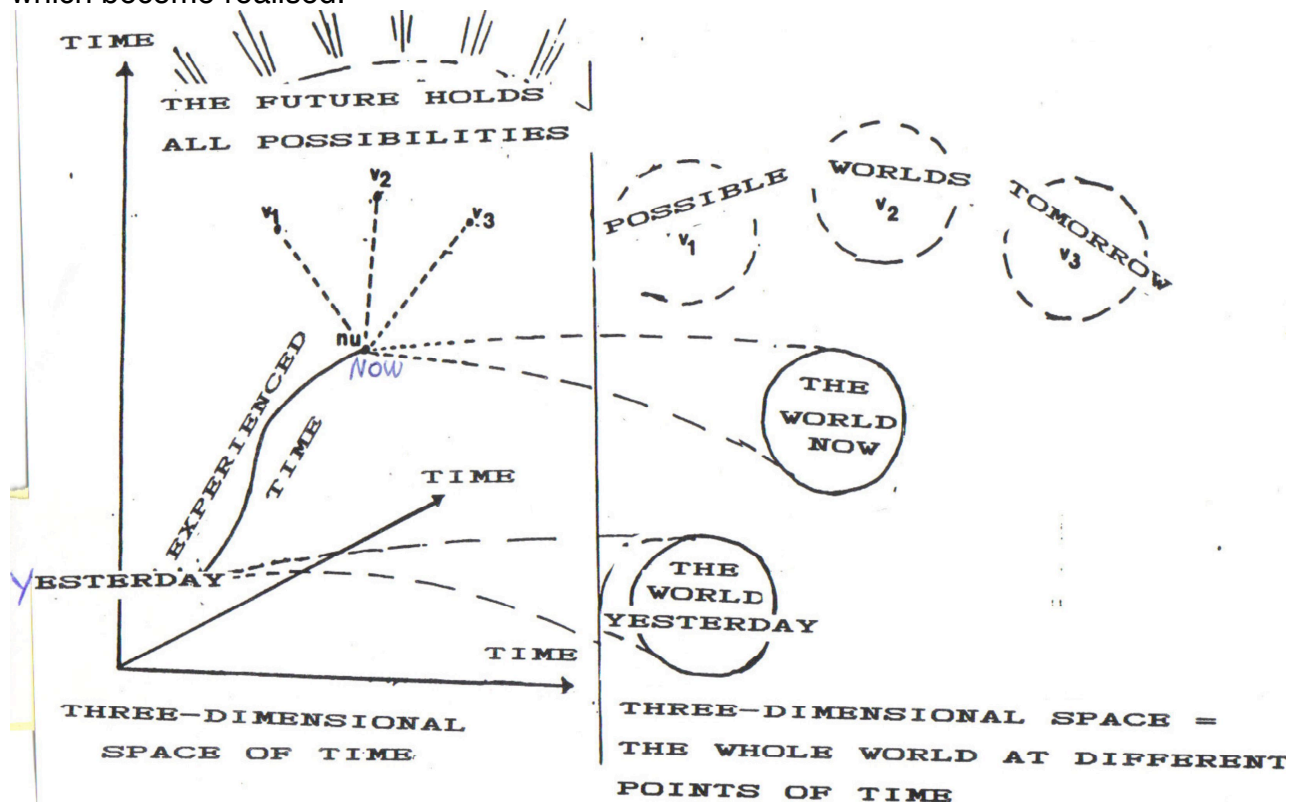
It is further proposed that matter and mind can be seen as two aspects, namely space-aspect resp time-aspect of the space-time "contents" or "Being" identifying sensory experiences, not with the brain but with the matter in space outside the brain, and the mental (memory, thoughts etc) with events outside of the now. Also the relativity of order in causality is seen as an asset when superlight signals is not seen as concerning material objects but as mental. This because for the subject the future (=thoughts of the future) affects the actions even if for an observer seeing the actions from outside it is a relevant description that the actions "creates" (manifests) the future.

In a four-dimensional space-time, seen as a one-dimensional time-string with "pearls" of whole three-dimensional worlds at each time-point, we would have an

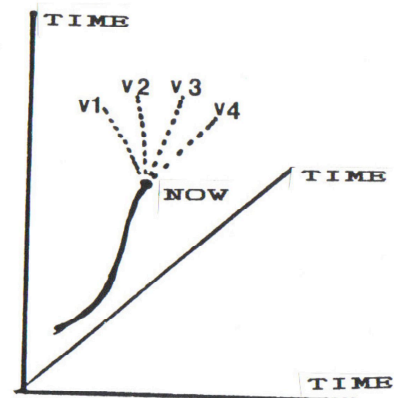
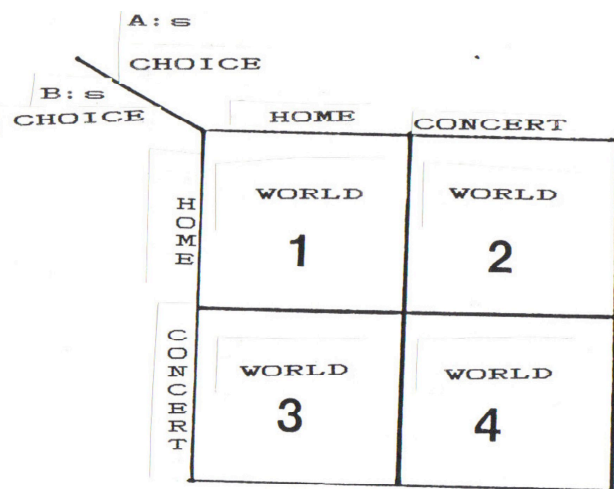
absolutely deterministic world.



In the six-dimensional space-time we can conceive of a three dimensional timebox where every point is a whole possible three-dimensional world and which are accessible to our consciousness as thoughts ,ideas, memories etc . Thus we can see that there are many possible futures depending upon which of all the possible worlds which become realised.



This is in this view not predetermined but depends upon the result of all the choices of all intentional beings . This seems to correspond better to our experience of free will as well to the indeterministic quantum mechanics.



It is further argued that the classical (Newtonian) physics is no basis for absolute determinism, as it can not foresee intentional actions. Rather that intentional actions sets the limit to classical determinism which works only on ordinary level where it is easy to separate matter from intentional beings. The inevitable indeterminism in quantum mechanics can thus be interpreted as that on QM level we can not separate matter and intention. It is finally argued that this gives an alternative realistic solution to the problem of wave-function collapse in QM (cfr Schrödinger's cat paradox) which contrary to von Nuemann's infinite regress of observers and to the many-worlds-interpretation emphasises both a respect also for all other intentional beings and moral responsibility for actions.