

Higher Dimensional Models: Making Space and Time for Psi

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1. *Describe the model/theory in a few sentences. Mention its assumptions.*

Since psi involves an interaction between consciousness and the physical world, any theory for it requires some sort of extension of physics. This is not implausible since physics regularly undergoes paradigm shifts and there is some indication from physics itself that consciousness is a fundamental rather than incidental feature of the world. However, the new paradigm will require one to reassess the traditional divide between matter and mind. This talk will discuss the hyperspatial model of psi. This involves a higher dimensional “reality structure” and is reminiscent of ideas already invoked by modern physics. It relates to the traditional signaling and quantum models of psi but goes beyond them. The starting assumption is that many psychic experiences (eg. telepathy, clairvoyance, apparitions, OBEs, NDEs) seem to require the existence of some form of communal space. This is not the same as physical space but a higher-dimensional space of which physical space and ordinary perceptual space (including memories and dreams) are just a lower-dimensional projections. This space is termed the “Universal Structure” and can be viewed as a sort of extended reality - an information space which goes beyond physical space but subtly interacts with it. The crucial step is the identification of the Universal Structure with the higher-dimensional space invoked by modern physics. In particular, the physical world is regarded as 4-dimensional “brane” in a higher-dimensional “bulk”. This identification allows an amalgamated description of physical, psychical and even some mystical phenomena, these forming a natural continuum. The extra dimensions of the Universal Structure comprise a hierarchy of times, with closed timelike curves being associated with the minimum timescale of consciousness or “specious present”. Psi is then interpreted as a variation in the specious present (an increase for ESP and a decrease for PK) and there could be levels of consciousness for which the specious present is much longer or shorter than usual.

2. *Which psi phenomena (GESP, macro-PK, micro-PK, etc.) does the model explain?*

This theory purports to explain *all* aspects of psi (both macro and micro), as any ultimate theory must. Of course, there are different opinions about which psychic phenomena are real and therefore need to be explained. But the notion of invoking lots of ‘little’ theories to explain each new phenomenon (like Ptolemaic epicycles) has little appeal. Furthermore one needs a theory which accommodates *all* mental phenomena – normal, paranormal and transcendental - and not just the ones labelled psi. After all, there is already a huge problem extending physics to accommodate ordinary mental phenomena (sensory perception, memory, dreams etc). Ultimately, one needs a theory of consciousness itself, this underlying all mental experiences.

3. *Which phenomena are left unexplained?*

There are many levels of theoretical explanation (physical, chemical, biological, neurological, transpersonal etc), I am proposing a physical theory, so this does not purport to explain all aspects of psi, although arguably this is the most fundamental. Even from a physical perspective, I do not claim to have a full explanation of psychic phenomena because the physical model which is my starting point is itself not fully understood. Also I am primarily explaining interactions with the physical world rather than mind-to-mind interactions.

4. *Does the model assume ontological dualism?*

This is a simplistic question because there are many forms of dualism, so one cannot give a simple yes/no answer. Even the distinction between materialism, dualism and idealism is not clear-cut in a theory which purports to extend physics to accommodate mind. Indeed, many of the usual philosophical distinctions may need to be revised in a final theory of psi, including the division between matter and mind, famously introduced by Descartes. While I reject the one-level reality of standard materialism, there is a sense in which my model is still physicalistic.

5. *Does the theory rely on, violate or extend mainstream theories?*

5.1. *Of physics? (QP, 2nd law, causality, others...)*

This depends on what is regarded as mainstream. My approach connects with higher-dimensional models like M-theory but not all physicists like such models, because they are very speculative, perhaps being closer to mathematics than physics and forever untestable. Such theories are at least respectable in the sense that eminent physicists work on them, although most would not agree with how I apply these theories.

5.2. *Of consciousness? (Penrose-Hameroff, Tononi, others...)*

My approach assumes that the brain is a filter rather than a generator of consciousness. This is not the standard view but it does have many eminent advocates (eg. James, Bergson, Huxley). Psi may provide the best evidence for the filter proposal but it is not the only evidence. Whether consciousness interacts with the brain through quantum processes (viz. Penrose-Hameroff) could apply in either the filter or production model.

5.3. *Of neuroscience?*

The filter theory of consciousness certainly does not reflect the mainstream neuroscientific view of the brain but it is not clear that experimental evidence excludes this and some may support it. For example, recent research suggests that psychedelic states of consciousness may be associated with a decrease in activity in the parts of the brain where one would expect an increase.

6. *What are specific predictions of the theory?*

In this theory, many psychic phenomena (especially macro ones) can be interpreted as influences or intrusions from higher dimensions (i.e. those going beyond the four dimensions of space and time in classical physics). However, in order to provide *quantitative* predictions for psi, rather than a purely qualitative description, one needs to

introduce some notion of information transfer, as in the observational theories. For example, the magnitude of possible PK effects may be determined by the information processing ability of the brain. But what if consciousness is not always associated with a brain? In the latest version of my model, psi experiences may involve a variation in the specious present, ESP being associated with an increase and PK with a decrease.

7. *Can the theory explain individual (psychological) effect size differences and experimenter effects?*

I am proposing a physical theory, so this does not purport to explain psychological aspects, even though these are of great interest to parapsychologists. However, in so much as all minds are connected in my model, the experimenter effect is necessarily a qualitative feature.

8. *What direct tests can falsify the theory? Have these been made and what are the results?*

Any disproof of higher dimensions in physics would falsify my approach. For example, evidence for the higher dimensions of M-theory are currently being sought at the Large Hadron Collider. However, such experiments may only constrain the nature of the extra dimensions (eg. their number or scale) and not exclude them altogether. If my specious present proposal is valid, then there is natural link with the CIRTS model of Bierman because there is no distinction between past and future on a timescale less than the specious present, this implying the restoration of time-symmetry. So his answer to this question carries over to my model.

9. *What tests can support the theory? Have these been made and what are the results?*

One test of higher-dimensional intrusion would be certain observational features of macro-psi (apports, apparitions, poltergeist phenomena etc). Another type of evidence would come from psychic *experiences* (i.e. features of ESP, OBEs, NDEs etc), although this would not qualify as experimental evidence. There are also interesting claims that psychedelic experiences exhibit higher dimensional visual aspects. If the LHC ever found extra dimensions, there would be the weird implication that it was somehow probing mental space!

10. *What open theoretical questions (big or small) does the theory need to address?*

Will the final theory of quantum gravity (i.e. the marriage of relativity theory and quantum theory) involve consciousness in some way or does consciousness have no connection with physics? Is there a deeper theory of physics which underlies both quantum theory and mentality or does standard quantum theory alone suffice to explain mentality? Will there ever be direct experimental evidence for higher dimensions from particle physics or is the idea just a mathematical speculation? If the extra dimensions

are detected, how can they be linked to psi and how can one persuade mainstream physicists to even contemplate such questions?

11. *Is there an incisive experiment that would advance the theory?*

The notion of the specious present could be probed experimentally (via physics, neuroscience or parapsychology) and this might elucidate the issue of whether the brain as a producer or filter of consciousness. In this context, I agree with the importance of closed-timelike effects, highlighted by Bierman. Indeed, consciousness itself is associated with closed timelike curves in this model.

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