

Re: 'Multiverse Theory' – Universe is a Virtual Reality Matrix

Source: <http://sci.tech-archive.net/Archive/sci.astro/2004-08/0320.html>

From: Alex Green (dralexgreen_at_yahoo.co.uk)

Date: 08/04/04

Date: 4 Aug 2004 04:36:35 -0700

070-3993938@comhem.se (Torbjørn Larsson) wrote in message
news:<70b38f8b.0408031929.2de1dcda@posting.google.com>...

>>> *A model of consciousness must explain why we have a focus – thinking
>>> about things – and how taskswitching is done, both unconscious (sudden
>>> noises et cetera) and conscious – choosing to interrupt the 'now'
>>> activity..*

>>

>> *The 'choosing to interrupt the now activity' is probably not a
>> conscious activity because we are only conscious of actions and
>> thoughts after they have occurred. What seems to happen is that the
>> non-conscious parts of the brain feed what we call 'conscious
>> decisions' into conscious experience so that the flow of the decision
>> becomes part of conscious experience. The decision is part of
>> conscious experience but not a conscious action. There are no
>> 'conscious actions' because conscious experience is always after the
>> event.*

>

> *The model must first explain why the consciousness has a focus.*

A model of how we process information about the world must explain
this but a model of conscious experience can just assume that a
processor has provided data that has a focus.

> *I'm aware that some research seems to show that the consciousness is
> playing 'catch up' – ie apparently trying to explain why we did what
> we just did after the fact. I'm not sure if this is generally
> accepted.*

There is considerable evidence for this such as the readiness
potential, auditory continuity illusion, Libet's experiments etc.
However, you and I can observe this directly. Say 'Now!' – when is the
present? It is always past in conscious experience, conscious
experience needs time. (See the section on time in:
<http://www.users.globalnet.co.uk/~lka/conz.htm>)

- > *This is not relevant here however, since I was saying that the model*
- > *must explain why we feel that we most of the time took a conscious*
- > *decision to do that we did.*

The reason for this is that the contents of conscious experience are produced by non-conscious processes and form source data for non-conscious processes. (please see the section on time in the link above).

- >
- >> *Brain dead is dead as in no synchronous nerve activity. The patients*
- >>> *you refer to may be left on life support until the body fails – but I*
- >>> *don't think this is done often since it is possibly painful.*
- >>>
- >>
- >> *The synchronous activity is derived from the feedback path to the ILN.*
- >
- > *Fascinating, if true, that such a small part of the brain makes the*
- > *difference between life and brain dead. I will probably study this*
- > *more. However, this was just an aside remark.*
- >
- >>
- >>>> *Clearly consciousness is about global stability of the nervous system.*
- >>>> *Not the performance of specific tasks.*
- >>>>
- >>>> *Stability is a prerequisite for consciousness, not the other way*
- >>>> *around as you suggest.*
- >>>>
- >>>> *I am suggesting that the two are the same thing. I do not believe*
- >>>>
- >>>> *I think you mean here that they are codependent but not equal*
- >>>> *phenomena.*
- >>>>
- >>>> *there would be any need for consciousness in an information processing*
- >>>> *system if the world is stable. In a processing system stability can*
- >>>> *always be obtained by feedback to ensure that the right things are*
- >>>> *being modelled and that control is accurate. But is the world stable?*
- >>>> *Returning to our thread title, it is wholly possible that the world is*
- >>>> *part of a 'multiverse'.*
- >>>>
- >>>> *There is a huge difference in stability in the physical system that*
- >>>> *constitutes a nervous system and in the whole world.*
- >>>>
- >>>> *If you suggest that there need to be an observing consciousness in*
- >>>> *order to hav a stable world, we seem to be left with two choices:*
- >>>> *1. Since the creation of the world there has existed consciousness*
- >>>> *within it, let's call them gods. (Discounting the possibility of*
- >>>> *consciousness without a physical template.)*

I dont think conscious entities 'create' anything by observation, they would merely select a subset of a multiverse. That subset will have

the physical form that allows consciousness.

- > 2. *The world existed in an undecided quantum state for 13 billion*
- > *years until the first consciousness to arise observed it and the whole*
- > *world of undecision collapsed. (Assuming humans were the first*
- > *consciousness.)*

I don't see why it should collapse. The part of the multiverse that allows the physical phenomenon of conscious observation would become 'our part of the universe'.

- >
- > *I think I can shave of a lot of split hairs in this question with*
- > *Occams razor. The world has always been just as we observe it.*

Which is what I am saying. The part of the multiverse that sustains the physics of consciousness has probably always (since big bang) been just as cosmologists suggest we would have observed it. The other parts do not sustain observation. This is just a form of the 'Anthropic Principle'.

- >
- > > *Consciousness evolved as a tool for evolutionary competition, as every*
- > > *other biological property. It think it's considered as probably*
- > > *evolved from the widespread ability to model –others– state of mind –*
- > > *dogs can certainly do that.*
- > >
- > > *Conscious experience is simply your view of the world – look around,*
- > > *this screen is conscious experience. This view is remarkable: things*
- > > *in conscious experience have a directedness towards an observation*
- > > *point which we call a 'view', it not simply things laid out in 3D.*
- > > *The view corresponds with how the world would appear if it were*
- > > *possible to view it from a 'point eye', a single geometric point in*
- > > *the head. This allows angular separations to take the place of 3D*
- > > *separations so allows a small volume of brain to model a spacious*
- > > *world. Conscious experience evolved as a tool to navigate the world.*
- >
- > *I was saying that your model isn't biological since you argue that it*
- > *is codependent with the 'stability' of the world. A 'stable' world,*
- > *however you define this, existed before consciousness. Consciousness*
- > *evolved in it!*

Yes, because it was possible in this particular bit of the multiverse that quantum physicists in decoherence theory call the 'environment'.

- >
- > *If you happen to have a cat, or even a plant, at home, you now that*
- > *they can move or grow just as well without consciousness.*
- > *Consciousness is however a great tool to understand others behaviour,*
- > *and even some of your own at times. It has been suggested that the*
- > *origin of consciousness may lie here.*

This suggestion is due to people who believe that conscious experience is a process rather than a state. It is evidently a particular state, look around, it has a geometric form.

>
> > > *1. The Copenhagen Interpretation is generally dead – brain dead since
> > > so few people think it's correct. Today's quantum physics study some
> > > alternatives.*
> >
> > *I think you will find that whether it is Zurek or Gell–Mann or Zeh
> > they all say that their operational approaches are compatible with the
> > CI.*
>
> *Compatibility doesn't mean equality. And we have alternatives like the
> many–world approach that are completely different. The point is still
> that CI isn't believed to be correct.*

The operational interpretation of quantum theory (decoherence theory) is based on the CI, being predicated on the concept of information transfer in micromasurements. But this is a technical matter in the context of our discussion. I do not believe in the cheap sci fi version of the CI where observation creates phenomena – this is NOT part of the CI.

>
>
> > > > *of the world is uncertain unless it is possible to incorporate it into
> > >*
> > > *It isn't uncertain since it's a causal theory – but states may be
> > > undecided and tangled together before decoherence. By the way, this is
> > > Naive Realism since the measured state is incorporated directly into
> > > the perceptual field.*
> >
> > *Decoherence results from micromasurements in which variables become
> > correlated with states in the measuring apparatus. The
> > apparatus/environment presents a 'preferred basis' against which these
> > correlations occur. The measured state is incorporated into the
> > environment in the form of something such as a reflected photon, this
> > then forms part of an image on both retinas and the combination of
> > binocular retinal data, data about balance, muscle state, ambient
> > sound etc. are combined to form a conjoint perceptual field in the
> > brain.*
>
> *Either you mean as earlier that the brain is doing the measurement
> whereupon the measured state is 'incorporated into the coordinate
> system of a conscious observer' ie directly into the conjoint
> perceptual field of your model, which is Naive Realism.*

How can this be 'Naive Realism' if the state that is conscious experience is a field of neural activity based on sense data? Naive Realism is the belief that the perceptual field is things in

themselves.

- > *Or 'The measured state is incorporated into the environment' whereupon*
- > *our receptors observe it, whereupon the quantum nature of the world is*
- > *of no concern visavi the model.*

The first part of this statement is clearly true: "The measured state is incorporated into the environment' whereupon our receptors observe it"

The second part does not follow because the brain is a system of billions of microscale devices. Even if the probability of a synapse being in a superposition of states for 0.5 secs was 10^{-12} there would still be plenty of superposed synapses. One synapse could create a decision such as pressing a button that launches some missiles that destroy the world. The world may then have branching histories.

- >
- > > *Since the explanation you finally gave after (1) leaving brain*
- > > *function behind,*
- > >
- > > *I discussed consciousness in the context of brain function, especially*
- > > *brain damage and loss of conscious experience. See above.*
- >
- > *You stopped arguing that consciousness can be explained by modelling*
- > *the brain function in itself and involved quantum physics of*
- > *observation. You repeat the argument above.*

The empirical model does not depend on QM. QM has only been introduced to show that an epiphenomenal conscious experience is possible and could have a role. If we confine ourselves to an information systems approach the epiphenomenal nature of conscious experience is incomprehensible.

- > *This is irrelevant argumentation; the model must be based on the*
- > *factual brain function itself.*

The empirical model is based on this PLUS cognitive psychology see:

<http://www.users.globalnet.co.uk/~lka/conz3a.htm>

Obviously we must include the introspection of conscious experience as well as brain activity in any discussion because conscious experience is the observable that we are attempting to explain.

- >
- > > *and (2) also any attempt of connecting it with*
- > > *biological reality by way of evolution, and*
- > >
- > > *The integration of sensory measurements in an observational manifold*
- > > *seems like an excellent idea for navigating the world. Obviously*

> > *evolution would select for such a thing.*

>

> *I explain above why I think your reasoning isn't about biology, is*

> *unnecessary for navigation, and why evolution can't work here.*

> *From the anthropic principle to behaviour conscious experience in the form I have described is selected by our particular environment.*

>

> > > *(3) moving into your own*

> > > *usage of Naive Realism ("The belief that what we sense is things in*

> > > *themselves", see <http://www.users.globalnet.co.uk/~lka/strongai.htm>)*

> >

> > *This usage of the term 'Naive Realism' is general in the philosophical*

> > *literature (and amongst neuroscientists). The fact that we experience*

> > *dreams, imagine things etc. should show any thinking person that*

> > *conscious experience is generated in the brain. In the case of*

> > *perception it is generated in the brain on the basis of sense data.*

>

> *I explain above why you were using Naive Realism in your earlier*

> *argumentation.*

Naive Realism is a belief that we experience things outside the body directly, nowhere in any part of these posts have I espoused this belief.

>

> > > *was solely based on quantum theory and*

> >

> > *The analysis of naive realism had nothing to do with quantum physics,*

>

> *I meant that your explanation of how the model works are only based on*

> *quantum theory of observation, not brain function.*

The QM part of the explanation was solely directed at epiphenomenalism. The rest of the empirical description of conscious experience as a 'state' is independent of QM. (As is epiphenomenalism, if QM does not explain it then another explanation is required – information systems theory is clearly unable to explain it).

>

> > > *(4) finally false on so many*

> > > *levels, when (finally!) subjected to a (not rigorous, granted) test,*

> >

> > *If you mean it is incompatible with your analysis using QM ideas I*

>

> *I mean that your model is falsified on the account that it: uses a*

> *widely believed to be incorrect quantum theory, every other time (not*

> *this time) uses it wrong since Planck scale doesn't apply, uses QT*

> *unnecessarily to explain classical processes, doesn't explain the*

> *biology and evolution of the brain, et cetera.*

- >
- > > *think you should read the following paper by one of the founders of*
- > > *decoherence theory:*
- > >
- > > *See:*
- > > *Zeh, H.D. (2000). The Problem of Conscious Observation in Quantum*
- > > *Mechanical Description. Phys.Lett. 13 (2000) 221–233*
- > >
- > > http://xxx.lanl.gov/PS_cache/quant-ph/pdf/9908/9908084.pdf
- > >
- > *Hohum. First off, it says that the Copenhagen interpretation you use*
- > *doesn't work.*

It says that the CI does not explain everything. But we all know this. The CI does not include decoherence theory but is compatible with it as far as the CI goes in this direction. The CI does not consider the nature of the observer (as Zeh says, it is 'unsatisfactory' that it avoids this).

- >
- > *Then Zeh takes the many-world theory and replaces some of objective*
- > *measurements with a restriction into conscious observers, which of*
- > *course must be true.*
- >
- > *That is, until he then uses that restriction to explain, out of the*
- > *blue, consciousness just as you do; he says that the brain somehow get*
- > *its information inserted directly into the consciousness.*

No way! He even considers memory to be 'external' to conscious experience and describes conscious experience as a view of the state of the brain. Zeh considers in his earlier papers the transfer of the state of the environment to the brain and hence to a state that is conscious observation.

http://xxx.lanl.gov/PS_cache/quant-ph/pdf/9908/9908084.pdf

- > *This is*
- > *Naive Realism, according to the definition you have given. It is also*
- > *wrong just as your first version of your model was wrong here, see*
- > *above.*
- >
- > > *Actually I know from long experience that committed naive realists can*
- > > *never shake off the prejudice, its like Catholics never losing their*
- > > *guilt.*
- >
- > *Are you _again_ suggesting that _I_ am using Naive Realism???*

My apologies for this snide remark.

Best Wishes

Alex Green