

## Observations

1. When we pass away, our body is, for example, buried 6 feet underground in a wooden casket. Eventually, the physical body and brain decays into the material around it, into the casket and surrounding dirt. The molecules of the brain start interacting with the molecules of the casket, dirt and further outward into the earth, quantum mechanically. But this physical brain was, in one way or another, correlated to subjective experience. It is not implausible that the subjective experience was correlated with the *information* contained in the physical brain. And, in quantum mechanics, *information is never lost*. Thus this consciousness would continue on, after passing on, only now the physical part of the information gets more spread out, into the casket and into the earth, and, from then on, out into the universe.

(The 'information' has to be sensitive to the finite speed of propagation of signals between the Brain's various parts, both before and after decay. I don't know if IIT does this...).

2. Suppose Alice chooses of her free will the orientation of her Stern-Gerlach device and measures the orientation of the spin of the electron that goes through her device. Suppose Bob then chooses of his free will the orientation of his Stern-Gerlach device and measures the orientation of the spin of the electron that goes through his device, at event(s) that are space-like separated from Alice's choice and measurement outcome. One expects the classical correlations in experiments. But one gets *greater-than-classical* correlations, i.e. the quantum correlations.

Suppose the statistics of these (previously entangled) pair of electrons, even if up only to stochasticity, is a function of (events/processes in) the intersection of their past lightcones. Extrapolating backward, one gets to the big bang. This, super-determinism, establishes all correlations in the universe at the big bang. But then why don't we see *greater-than-quantum* correlations? ... Certainly, there would be correlations up to 100% (in the long-run statistics). But we *never* observe such *greater-than-classical* correlations, only quantum correlations. Therefore, the observed statistics of the universe are not consistent with the theory of super-determinism. Instead, they are consistent with free will.

3. I walk on some trail. But then, relative to my head, I'm moving the entire earth under me. This is a non-inertial frame of reference, but that's not the point. The point is, little 'ole me, with just a little bit of will power, can move the entire earth!! Think about that the next time you take a walk!

4. Suppose it were discovered Aristotle had been right all along and the seat of consciousness is in the heart... we'd have different correlates, and different ideas about the correlates of qualia, but we'd have the same qualia. Therefore qualia and their physical correlates cannot be the same thing. [refs.]

5. The answer to the hard problem must itself be an experience (if it is to contain qualia in the answer, which it must). So when we get enough technological additions to the brain, then we can *calculate* brain processes (for example the combination of the processes of the class 'explanations', the processes of the *idea* green, and the processes of the *quale* green. Then we could *induce* what the brain processes would be that are correlated to the experience of the *solution* to the hard problem. *Then* we'll experience the solution to the hard problem, if there is one.

6. The water a fish is in, one wants to say, may not be obvious, but is nevertheless self-evident, to the fish (mod intellectual ability). The same with our unadorned awareness (fish) and our qualia (water).

One can be aware of, for example, the color green (in the present). One can also have an *idea about* the color green. One can be aware of this idea as itself an experience of qualia, too. One can also be aware of both the qualia of the idea and the qualia of the color green at the same time.

That is the form (experience) that the answer to the hard problem will take. In that case, the *idea* will be *about* the correlates (such as a physical brain) of the qualia. (It's probably sufficient to just do the qualia green. If we include the qualia of the idea about brain state(s), there might be an infinite regress (we have to change the idea about the physical brain to accommodate the fact that we are experiencing both kinds of qualia, etc.), which might or might not have a limit.)

7. Aren't you glad you were born human? There are two answers: one conditional on you-*then* and one conditional on you-*now*.

8. It would be very surprising if the universe were fine-tuned for life in the usual sense of this question. Suppose the mass of the proton were changed by  $10^{-22}$  (or whatever), so our universe would be different. But it could be that the new universe had consciousness, with similar structures made of perhaps different particles (functionalism/structuralism). But we might not need the assumption of having the same structures, anyway. Moreover, there are  $10^{1000}$  universes that are only  $10^{-25}$  between these two universes, etc. Some of these would be very close to our own, and contain life just like in ours.

9. Why is there something rather than nothing?... end points of the spectrum: only the observable (indeed solipsistic) universe exists, vs. all mathematically consistent universes exist. What would be the selector in between? Not necessarily linear order. Einstein: any choice? Leibniz.

10. *Why* would you make a universe that has *pain* in it? ... could it have been otherwise?

11. Star Trek or Star Wars? Star Trek happens mostly in our galaxy, whereas Star Wars happens in a galaxy far, far away. Therefore, they are in different galaxies, which could conceivably have different laws of physics, so *we can have both*.

## References

forthcoming