

More Observations

(Some of these are not original, but some are. References forthcoming.)

1. Why is there something rather than nothing? The best answer I've heard so far is 'so that love could be possible'. (Buddhism.)
2. What is at the center of the universe? The best answer I've heard so far is 'laughter'. (Buddhism.)
3. Is there emergence? The quantum state of two entangled electrons is given by a function over the whole system (both electrons at once), and is explicitly *not* given by one or two functions over the electrons individually. So the properties of even a 'most basic' physical system are not functions of the properties of its 'parts', even at the 'bottom' quantum mechanics level. This would seem to satisfy some definitions of emergent, but maybe not others.
4. Say a structural property P of a system M is *computably emergent* if it is not a (mathematical) computable function of the parts of M , m_i , and their properties, p_i . Say a structural property Q of a system N is *NP-complete emergent* if it is not a (mathematical) NP-complete function of the parts of N , n_k , and their properties, q_k . Etc. (This line of thinking assumes that 'parts' and 'properties' are well-defined in some sense.)
5. The teeth of the Anthropic principle are based on what one conditions on. If one conditions on *potential* universes, then it seems things could have been very different (and is each possibility equally likely?) If one conditions on the way we (humans) are now, here on earth, it seems which universe is the *actual* one is constrained to be the one it is. There are in-between cases. This is an instance of 'two-dimensional semantics'.
6. I don't *presume* to assign this or that property to God(s).
7. In a perspectival ontology, there is no question of 'why the *whole* thing?' because there is no perspective from which the whole is surveyable (that is, for the (possibly infinite) collection of explanations (of 1. the logically previous, or 2. the temporally previous) of what came before the *whole* thing)... A perspectival oroboros works in this connection, too. In this (implausible) case, each part of the oroboros has an 'explanation' or 'cause', but there is no ontological perspective from which the *whole* oroboros needs an explanation.
8. If we make no *assumptions* about the beginning, do we have *nothing*, or do we have *possibilities* of things? Having possibilities might require an assumption. On the the other hand, having nothing might require an even stronger assumption. Leibniz: the 'something' must be a necessary entity whose mere possibility contains within it the seeds of its actuality [refs.]
9. To the physicalist/materialist I would ask: what *would* count as a proof (or demonstration, or persuasion) that there *are* qualia that are not reducible to the physical in any way?
10. People (including Chalmers [refs.]) have noted the following progression. One may start out as a materialist. But one should eventually be able to understand dualism at the most basic level, for oneself. But that's not (necessarily) and endpoint. From dualism, one can go to panpsychism, monism, idealism, etc. For example, an electron has the properties of spin, charge, and so forth. But what is the electron itself **made** of? Instead of proposing some 'other' stuff called 'the material', it is more

parsimonious to suppose that the stuff electrons are actually made of are qualia ('atoms' of subjective consciousness), as this is required by and consistent with our macroscopic subjective experience (consciousness), and it is these qualia that have the properties of spin, charge, and so forth.

11. Everything we do now is temporary in some sense, since extrapolating the exponential rate of the advancement of technology from the available data implies the technological singularity is in 2045. [Kurzweil].

Previous observations

(Some of these are not original, but some are. References forthcoming.)

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 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*.