Observations 1 30 2023

Reference in light of Qualia Calculus (QC); Hard Problems in light of QC; The number of qualia in a room in light of QC; verification of 1st-person phenomena; more advanced neurology; 3rd-person and 1st-person aspects of a system; their symmetries; Well-tempered Clavier; the past is not determined; argument for A-theories in light of QC; frames of reference; Standard Model; String Theory; Bach; time; causality; Schrodinger equation; technology; earth; thick present; Zen; the river; free will; materialists in light of QC

1. [redacted] does not refer to red. It does not refer. As understood in the correct (qualic) language it does not even refer to itself.

2.

(1) Why is my red *red*? Is not a Hard Problem.

(2) How and why is phenomenal consciousness associated with the physical brain? Is not a Hard Problem. The question merely *points to* a Hard Problem.

(3) Why is my red [redacted]? is a Hard Problem.

(4) The information in (1) and (2) only *refer to* the information in (3).

The information in (1), (2) and (4) only *refer to* the information in (3).

3. A professor in a classroom with 25 students in it writes the world “red” on a blackboard, and next to it [redacted]. It could be argued that there is some sense in which there is only 1 red in the room, but 26 [redacted] in the room.

4. How do we know that our (enlightened) introspection is veridical? Couldn’t a 1st-person researcher claim he is Napoleon? Yes, the researcher could make that (delusional) mistake. But 3rd-person researchers can make exactly analogous mistakes. It’s perfectly possible for a researcher at CERN to think they have created a poke-dotted elephant in one of its experiments. 3rd-person results are in some sense no more reliable than 1st-person results.

There is a consensus by semi-independent researchers as to 3rd-person phenomena. But there is a consensus by semi-independent researchers as to 1st-person phenomena in the spiritual community, too, and it is non-arbitrary.

5. It’s often repeated that our theory of neurology is nascent and when it is much more advanced it will (or might) be able to ‘explain’ qualia. But that’s not true. We know that experiences are correlated to the activity (or non-activity) of neurons (and perhaps glial cells) and that these activities are electrical

signals and chemical signals in the neurons and in and across the synaptic clefts. So what more do you want? Further 3rd-person knowledge will not explain anything more qualitatively.

6. A system can be apprehended in the 3rd-person. But there is, in addition to that, also something it is like to *be* that system. This seems to be an ontological condition for anything existing.

7. There is a group of symmetries of 3rd-person phenomena, for example the Poincare group P. And there is some kind of symmetry of 1st-person phenomena, for example the identity group, I, or, if we take the resolution of things to be finite (i.e. topologically compact) some richer group J. So the set of symmetries of a system is some product P x J.

It's possible to be spatially within a brain but still be in a 3rd-person perspective. That is not what it's like to *be* that brain.

8. The Well-tempered Clavier does not mean the Equal-tempered Clavier. The proof can be found in ever-more videos online. Almost certainly Remeau temperament for each key is best.

9. The past is not determined. Here is an informal macroscopic example. If there is an 8 ball in the center of a pool table in the present (i.e. 'now') it cannot be experimentally determined if, all else being equal, it got there by being shot straight, off a bank, or remained there from a previous shot. No experiment can decide the issue. A pool player coming upon the table for the first time in this present or 'now' cannot experimentally decide between these possibilities. There is no experimental (and therefore, in this case, ontological) fact of the matter. Any theory that decides which possibility happened (such as most interpretations of Newtonian mechanics and most interpretations of quantum mechanics) would have this un-scientific property. In fact, an experimental outcome is obtained only in the present, ever. You cannot *demonstrate* to me the outcome of an experiment that happened 10 minutes ago *now*.

A memory is a kind of template that is in the present and does not constrain the past absolutely. This has to do with the continuous sense of self. But can you *demonstrate* to me that such-and-such a past is (is) the right one? The information that has rippled out into the environment is also in the present, and could have gotten there by any past states that are consistent with the present state. But sill: *there are more past states that are consistent with the present state than there are present states that are consistent with the present state*.

See also Einstein et al."It is hence to be concluded that the principles of the quantum mechanics must involve an uncertainty in the description of past events which is analogous to the uncertainty in the prediction of future events." [Einstein, A. and Tolman, Richard C. and Podolsky, Boris (1931) Knowledge of past and future in quantum mechanics. Physical Review, 37 (6). pp. 780-781. ISSN 0031-899X. https://resolver.caltech.edu/CaltechAUTHORS:EINpr31 https://authors.library.caltech.edu/2129/].

The key is that there is (ever) only *one* present moment, though it can have different configurations of objects within it. This fact is very well known in the spiritual community and is rediscovered over and over again. The result has been argued for from a philosophical angle elsewhere (see PhilPapers).

10. An Argument for Temporal A-theories Based on the Calculus of Qualia 12 23 2022

Introduction

It has been suggested that the Knowledge Argument can be applied to McTaggart's B-series and A-series to argue that the A-series contains information that the B-series does not have [Perry 2001, Merriam 2012, 2022a].[1] When Mary, having all propositional knowledge about color, leaves a black-and-white room and goes out into a colorful world it seems that she 'learns something new' (a Knowledge Argument). When Nathan, having all propositional knowledge about time, leaves a B-series room and goes out into an A-series world it seems that he 'learns something new' (a Temporal Knowledge Argument).

We give an argument for A-theories based on the calculus of qualia, developed in [Merriam 2022b].

Body

Consider

(1) CA is west of NY
(2) CA is west of here
(3) April 2 is later than April 1
(4) April 2 is later than now
(5) April 2 is in my future
(6) when I look at a firetruck I see red
(7) when I look at a firetruck I see

now,

(8) (1) is like (3); these propositions express concepts; the first one about space and the second one about time
(9) (2) is like (4) is like (6); these propositions express indexical concepts
(10) (5) is like (7); these are experiences

One can have a concept about redness; that's what happens in (6) and (10). In contrast to these, (7) cannot be written without colored ink (or a colored computer screen). The information in (6) and (10) strictly do not contain the information in (7).

Is there is disanalogy here? No: (7) is the analogy to what we *mean* by (5).

I conclude A-theory is correct.

References

1 Perry argues for a B-theory in that paper. This paper argues for an A-theory.

Merriam, P. 2012, A Knowledge Argument for Time, https://philpapers.org/rec/MERAKA-2

Merriam, P. 2022a, Knowledge Arguments for time 12 23 2022, https://philpapers.org/rec/MERKAF-2

Merriam, P. 2022b, A Calculus of Qualia 9 30 2022, https://philpapers.org/rec/MERACO-7

Perry, J. 2001, Time, consciousness and the knowledge argument, The Importance of Time: Proceedings of the Philosophy of Time Society, 1995-2000. Dordrecht: Kluwer Academic (2001)

11. Relativistic frames of references are subjunctive; quantum frames of reference are not (though, of course, involve counter-factuals in a particular sense).

12. It's sometimes repeated that experiments being not in conflict with the Standard Model are bad, because they wouldn't help give us a path forward. But that's not true. If recent experiments are explained by the Standard Model that shows that our intuitions about how to develop physics are on track.

13. Philosophical Virtues of String Theory

A. Parsimoniousness. Every particle is supposed to be the vibration of a kind of string. That is radically parsimonious. There is only one kind of thing: strings.

B. Intuitiveness. The understanding of what a *vibrational mode* is is familiar, common, and not problematic.

C. Weyl Invariance. Weyl invariance is a particular kind of conformal symmetry. But some form of Weyl invariance *must* to be correct: if everything in the universe were (appropriately) doubled in size it wouldn't make any difference; there cannot be an absolute size scale. If there were, we could just double the size of the smallest scales and again there would be no difference. So if a theory is not Weyl invariant that is a sign that the theory is not correct. Obviously there are many other mathematical virtues of string theory.

D. Uniqueness. There is non-trivially only one M-theory, not just a generic set of theories.

E. Unification. Though incomplete, it provides a consistent unification of quantum mechanics and gravity (I'm told). That in itself is non-trivial as it represents an extrapolation of a very wide class of experimental results.

In fact it could be argued that String Theory has *already* been successful. Not being particularly predictive is wildly overblown in importance. String Theory is a non-trivial extrapolation of experimental results.

It could also be suspected that the next big advance will come not from calculations and complicated models, which in a narrow sense may have been carried out more-or-less as far as they can go—the branches of the tree—but from a new interpretation of quantum mechanics—a new tree trunk.

14. Mozart was “a miracle of nature”. Bach is just plain “unexplained”.

15. It’s often repeated that time is our most basic experience. That’s not quite right. A notion of “time” results from an inference from comparing two states of phenomenal experience. A state itself is more basic (and, of course, even experiencing it as a “state” carries unnecessary baggage).

16. 3rd-person causality and 1st-person causality are wildly different things (on the surface).

17. You’ve been studying the Schrodinger Equation for so-and-so many years. But for how many years have you been meditating? Can you solve (actually solve) Zen koans (and not just read about them on the internet)?

(1) To answer why is my red *red*? Is loosely analogous to learning (memorizing) the Schrodinger Equation.

(2) To answer why is my red  ? Is loosely analogous to solving the Schrodinger Equation for some given potential.

Are you aware of when ideas arise in your mind? Can you attend to the red square in (2) for 5 seconds without your awareness being distracted by ideas?

If you think the red square in (2) refers to red then you have not understood it. It does not refer, not even to itself. The experience of *referring to* is different than the experience of *redness.*

18. If there were ancient civilizations with high technology then some of their satellites would still be in orbit around the earth.

19. On one hand, I can take the earth as the center of a coordinate frame and say that I moved as I walked on a dirt path in a park. On the other hand, I can take myself as the center of a coordinate frame and say that I moved the earth beneath my feet such that a point farther along the dirt path came to be beneath my feet. I can move the whole earth just by wiggling my legs in the right way.

20. It is possible to calculate some interesting quantity (but I don’t know which one it will turn out to be) based on the ‘thickness’ of the present, given McTaggart’s A-series variable τ and B-series variable t, where the thickness is defined as some function over τ.

Merriam, P. 2022c, A theory of the Big Bang in McTaggart’s Time, *https://link.springer.com/article/10.1007/s10516-022-09623-5*

21. Zen is hard: “The original teaching of the teaching is no teaching / the teaching of no teaching is the teaching / now that I am giving you no teaching / how could the teaching of the teaching be a teaching?” --Transmission of Huangbo... but not impossible.

22. Knowing (so to speak) how to get to the other side of the river does not mean you know how to organize things on this side of the river.

23. Do we have free will? When the wave realizes it is a part of the ocean the question becomes: does the whole universe have free will?

24. The fact that I am ‘redding’ when I experience [redacted] is more certain even than that 1+1=2. Failure to appreciate this kind of thing shows that materialists/illusionists/whoever can’t see past their own concepts. In spiritual lingo they are ‘deluded’, ‘unconscious’, etc.

They are like someone who wears sunglasses but doesn’t realize it and then insists that it’s dark out in the middle of the day.

25. It appears most UAPs are mirages (in the technical sense).