

Six Applications of the Calculus of Qualia 1 30 2023

Introduction

A Calculus of Qualia (CQ) was proposed in [Merriam 2022b] in which

(A) red \neq ■

because the subjective experience of the left hand side is of *refers to* (or of a *word* and a *reference to*), but the subjective experience of the right hand side is of *redness*. By *refers to* I could just as well say *is about* or *points to*. It is critical to appreciate for oneself that the subjective experience of the right hand side does not refer to anything, *not even itself*.

It's interesting to note that the left hand side would be changed if we moved from English to German, whereas the right hand side would remain unchanged. On the other hand, if we moved instead to a sufficiently color-blind appreciation of (A) then the left hand side would remain unchanged but the right hand side would be changed. Since the invariants of the left hand side and the right hand side are not the same then the left hand side and the right hand side cannot be the same thing.

When a Zen master says something like 'a teaching is not a teaching' or 'a teaching is no teaching' they have in mind something analogous to (A).

Application 1. The case against Materialism and Illusionism

Application 2. Ineffability

Application 3. Hard Problems

Application 4. Knowledge Argument questions

Application 5. Argument for A-theories of time

Application 6. Possible qualia are necessary

Application 1. The case against Materialism and Illusionism

I think Materialism and Illusionism are based on the possibility that we can be wrong about our own (apparent) subjective experiences, like the following: in certain situations it is possible that

(B) When I am experiencing red I make the mistake of thinking that I am experiencing green.

Yet consider

(C) When I am experiencing ■ I make the mistake of thinking that I am experiencing ■.

I can see how (B) could be true but nevertheless I *cannot* see how (C) could be true. It seems to be tautologically false.

Application 2. Ineffability

(D) your experience of red

may or may not be the same as mine, but

(E) your experience of ■

is undefined (it is intrinsically *my* experience).

This latter observation is one of the pillars of the Presentist Fragmentalist interpretation of quantum mechanics [Merriam 2022c].

Application 3. Hard Problems

(F) How and/or why is a material brain associated with phenomenal consciousness?

is not a Hard Problem, it refers to Hard Problems.

(G) How and/or why is my red *red*?

is not a Hard Problem, it refers to a Hard Problem.

(H) How and/or why is my red ■?

is a Hard Problem. There is a different Hard Problem for each quale.

(I) How and/or why is Paul Merriam's red ■?

is a Hard Problem, but in view of (E) it is well-defined only for Paul Merriam.

Application 4. Knowledge Argument questions

With respect to the Knowledge Argument there are, in view of (A) and (E), irreducible differences between the following 6 questions.

When the black and white room is left and the colorful world is entered,

- (1) Does Mary see red for the first time?
- (2) Do I see red for the first time?
- (3) Does Paul Merriam see red for the first time?
- (4) Does Mary see ■ for the first time?
- (5) Do I see ■ for the first time?
- (6) Does Paul Merriam see ■ for the first time?

The answers to these questions may overlap. But the questions themselves are not inter-reducible.

Application 5. CQ argument for A-theories of time

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 CQ.

The A-series is future/present/past and some notion of 'becoming'. The B-series is earlier-times to later-times. The value of the former change, the values of the latter do not (on timelike worldlines, in view of General Relativity). An A-theory has both an A-series and a B-series. A B-theory has only a B-series.

It's often supposed or argued that time is indexical, like space. Here is an argument against that conclusion based on the CQ.

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). Just as (7) is experiential and not reducible to indexicality, so is (5). I conclude A-theories are correct.

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

Application 6. Possible qualia are necessary

This section is somewhat speculative.

I argue that even though

(1) $\diamond \text{redness} \not\rightarrow \square \text{redness}$

nevertheless

(2) $\diamond \blacksquare \rightarrow \square \blacksquare$

Consider

(3) red is possible

(4) \blacksquare is possible

We can conceive of possible worlds which contain red and possible worlds which do not contain red, so (1) is unproblematic (so far as this note is concerned). We can conceive of possible worlds which contain \blacksquare . But when we try to conceive of possible worlds which do not contain \blacksquare we are stuck, because \blacksquare is *already* in our consciousness, so any such possible world, which is in actuality in our minds, can only exist along with it (so far as this note is concerned). (The supposition that all possible worlds exist or are actual is case (3) and not case (4). For the lie of the land see [Menzel 2022].) In the CQ paper it was noted that if a sufficiently colorblind person apprehended (2) they might experience blackness instead of redness. But the argument might go through anyway. And *if* they were to experience redness in the way that we do then the chain of reasoning would follow.

But surely we can conceive of possible worlds which contain Paul, experiencing redness, and possible worlds which contain Paul, not experiencing redness, and possible worlds which do not contain Paul. But in these cases we are again back in case (3) and not in case (4).

Given the empirical, experimental result that \blacksquare could indeed exist (2) and (4) imply

(5) $\square \blacksquare$

And given that \blacksquare stands in for any quale whatsoever (not just a redness quale), we conclude

(6) $\square [q]$

For all qualia [q].

Incidentally, this offers a new solution to the problem of evil: pain exists in the universe because pain, too, is made of qualia.

References

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