Notes for "Calculus of Qualia..." 9 16 2022 work in progress

1. First section notes: subtraction

Evidently

(1) red – red = ∅

because anything minus itself is the empty set, but

(2) ■ – ■ = ■ + ■

because there are two instances of red on the left and two instances of red on the right.

Red is a reference, and ' red ' is a reference to red, but ■ is not a reference (it is intrinsic), and ' ■ ' is not a reference (see cf. or whatever...).

(Note: for multiplication put 1. so-and-so, or 2. so-and-so 2, or 3. so-and-so 3 in paper.)

Let x be a variable that ranges over the references, and [x] be a variable that ranges over instances of the quale. [x] is not a quale itself (in this nomenclature), but we will *pretend* it is an instance of the quale. Thus

(3) x ≠ ■

but

(4) [x] = ■

could be true.

2. Second section notes: incompleteness

Godel's incompleteness theorems are well known [1]. He drew a famous disjunct from the incompleteness theorems in his 1951 Gibbs lecture:

> either … the human mind (even within the realm of pure mathematics) infinitely surpasses the power of any finite machine, or else there exist absolutely unsolvable diophantine problems. [1] (in his *Collected Works*, Vol. III, in 1995)

This doesn't apply to the logic of qualia. And it's not obvious what's going on, especially given, e.g., panpsychism. And a new theory of truth must be developed. It is critical that in these logics we are *not* talking about just the *structure* of the propositions. Perhaps Penrose will be happy?… [2]

3. Third section notes: notes

3.1 It should be remembered that an instance of a color, such as those above, could just as well be an instance of any particular quale whatsoever. It's just more convenient in this case to write qualations in terms of colors.

3.2 For us,

(5)  ≠

Is true. A sufficiently color-blind person would experience (5) as

(6)  ≠

which is false. Nevertheless, while (6) is indeed false, it could be argued that *if* the color-blind person experienced (5) the way we do, then it would be true to them, too. (Perhaps their brain was modified so that they can indeed experience redness on the left and greenness on the right.) And if we experienced the qualia in (6) in the qualation then we would find (6) to be false, too.

3.3 It's possible to conceive of keeping a brain/process unchanged but associating to it different qualia as its subjective experience (spectrum-inversion). [ref.]

It's also possible to conceive of keeping a quale unchanged but associating to it different brains/processes as its physical 'substrate' (on Dualism). Perhaps this should be called physiology-inversion. [ref.]

If you could vary both there's some kind of group of symmetries eg. G_1 x G_2.

3.4 Consider

(3.4) ¸ x + [x] - ' + + ' ¸ = [x] + +

3.5 solve for x

3.6 solve for [x]

3.7 solve for red

3.8 solve for 

3.9 solve for 

Now, 3.8 and 3.9 are easy. Whatever else may be going on in the qualation, we have

(8)  =

and

(9) [redacted] = [redacted]

[x] is underdetermined, but in general

(10) [x] = [x]

and for 3.9

(11) x = etc…

and for 3.7

(12) red = etc...

maybe.

(13) cf. multiplication too: definition 1: 2[redacted] = the number 2 times [redacted] (perhaps as an ordered set), definition 2: two instances of [redacted], definition 3: undefined. Also, consider (see paper…) [redacted] × [redacted] and [redacted] × [redacted] (see paper…)

4. Fourth section notes: time.

The basic idea is that t is a B-series and [t] is an A-series. cf. paper, where [t] = τ.

5. References

[1] Godel, K., (1995), Collected Works, Vol3. III: Unpublished Essays and Lectures (S. Feferman, et al., eds.) (New York: Oxford University Press).

[2] Penrose… emporor's ….

[3] Merriam, P., "Calculus of Qualia: Introduction to Qualations 7 2 2022" https://philpapers.org/archive/MERCOQ.pdf

[4]

[5]