Introduction to non-referential terms and the Calculus of Qualia

Referential vs. Non-referential terms
A Brief Example
A Trap
Another Trap
Truth and Meaning

Referential vs. Non-referential terms

It is possible to write "blackness" to refer to the experience of the subjective, internal quale of blackness. It is possible to write ▋ as another word for "blackness," another referential term. But that is not its meaning in the Calculus of Qualia (CQ). In CQ the word "blackness" is used as usual, as a symbol that refers to something other than itself. But ▋ is the immediate subjective experience (quale) that arises in the reader's mind. "Blackness" refers to the color or quale. But ▋ in no way refers, *not even to itself*, it is strictly non-referential. It's presentation instantiates it. We can write

(1) blackness ≠ ▋

as the two terms have radically different meanings and behaviors. This contrasts with hieroglyphics, emojis, colors here-to-fore used in presentations about consciousness by philosophers, and, in fact, all other terms heretofore used by philosophers. For example the emoji

(2) :-)

refers to the writer or sender being happy or smiling. Thus it is referential. Another example is that the symbol "3" refers to the number 3 (whatever it is). In contrast, in CQ, ▋ is non-referential. It doesn't mean something else. It is not *about something* or does not *point to something*, not even itself. An example of something that refers to itself is *this*. But a non-referential term's presentation instantiates it and that's the end of the story. This requires some conceptual and experiential realignment, as all paradigm shifts do (see the sections below). The theory involving non-referential terms, the Calculus of Qualia, has been developed and applications worked out elsewhere. See the many unpublished papers [1, 2, 3, 4, 5, 6, 7, 8, 9, 10].

A Brief Example

Using referential terms, we may write

(3) blue + yellow = green

But that's not true using non-referential terms. We can define a "qualation" as an equation that uses non-referential terms, i.e. qualia. Then we have the qualation

(4) ▋ + ▋ ≠ ▋

because ⬛ did not appear on the left side of the qualation (4) and it would require the generation of a new quale that was not given (experienced) on the left side. Instead we have

(5) 🟦 + 🟨 = 🟦 + 🟨

because, as we were given only the two non-referential terms on the left side, they are all we can conclude that we can experience on the right side. They don't refer to anything outside of themselves (or even themselves), so there is nothing else that they could be other than what they already are, other than the already given presentations.

In extensive discussions (not given here) it has been confirmed this is not some trivial definitional trick or sleight-of-hand or illusion. This is a paradigm shift. For extensive discussions see [1].

A Trap

There are many important differences between blackness and ⬛. One of these is that blackness has counterfactuals, but ⬛ does not have counterfactuals [1]. One trap I would like to caution against is writing the latter term as something else, perhaps "blackness 2," and then argue that it does have counterfactuals. But that would be an outright mistake. The whole point is that the non-referential latter term cannot be replaced by a referential term. This applies when considering *any* properties of the latter. (Note the term "latter" in the previous sentence, for example, is also a referential term.)

(An oversimplified very short version of the argument, given extensively with examples elsewhere about counterfactuals is that it is easy to imagine counterfactuals to blackness, but a counterfactual to ⬛ would have to specify it (so that a possible world could be specified to not contain *it*), which would instantiate it, which would give it as factual. QED.)

Another Trap

In the Calculus, ⬛ stands ontologically, by itself. This is like how a structure stands by itself in Structural Realism or how a physical object stands by itself in Physicalism. It does not require some *other* entity to be conscious or aware or be a substrate of it, though in some cases it could be a part of a presentation of sensations.

Truth and Meaning

The inclusion of non-referential terms in language is so radical and significant that it is worth situating it in terms of the traditional theories of truth and meaning—those of referential terms.

Major Theories of Truth:
1. Correspondence Theory:
   - Traditional view: Truth is correspondence between propositions and facts in reality.
   - CQ relation: Challenges this for qualia, as ⬛ doesn't "correspond" to external facts but is directly presented.

- New theory needed: "Presentational Truth Theory" where truth for qualia is their immediate, non-referential presence.
2. Coherence Theory:
    - Traditional view: Truth is coherence within a system of beliefs.
    - CQ relation: Potentially compatible if extended to coherence of qualitative experiences.
    - New theory: "Qualitative Coherence Theory" examining consistency within qualia-space.
3. Pragmatic Theory:
    - Traditional view: Truth is what works in practice.
    - CQ relation: Could align if "what works" includes direct qualitative efficacy.
    - Extension: "Qualia-Pragmatic Theory" defining truth as what works in qualitative experience.
4. Deflationary Theory:
    - Traditional view: "'P' is true" is equivalent to P.
    - CQ challenge: "█ is true" doesn't reduce to anything simpler.
    - New approach: "Qualitative Deflationary Theory" where truth for qualia is their mere presence.
5. Semantic Theory:
    - Traditional view: Truth defined by a language's semantic structure.
    - CQ challenge: Non-linguistic qualia terms don't fit this framework.
    - New direction: "Qualia-Semantic Theory" defining truth by the structure of qualia-space.
6. Consensus Theory:
    - Traditional view: Truth is what is agreed upon by a community.
    - CQ challenge: Private, subjective qualia resist consensus.
    - Adaptation: "Intrasubjective Consensus Theory" - truth as consistency across one's qualia.
7. Constructivist Theory:
    - Traditional view: Truth is constructed by social processes.
    - CQ relation: Could extend to construction of qualia-based realities.
    - New approach: "Qualia-Constructivism" - truth as constructed qualitative frameworks.

Major Theories of Meaning:

1. Referential Theory:
    - Traditional view: Meaning is the object/concept referred to.
    - CQ challenge: Fundamentally incompatible with non-referential qualia terms.
    - New theory: "Presentational Theory of Meaning" - meaning as direct qualia presentation.
2. Ideational Theory:
    - Traditional view: Meaning is the mental idea associated with a term.
    - CQ relation: Potentially compatible if ideas are understood as qualia.
    - Extension: "Qualia-Ideational Theory" - meaning as qualitative mental content.
3. Behavioral Theory:

- Traditional view: Meaning determined by stimulus-response patterns.
- CQ challenge: Doesn't account for intrinsic nature of qualia.
- Revision: "Qualia-Behavioral Theory" - meaning as patterns of qualitative responses.

4. Use Theory:
   - Traditional view: Meaning determined by how a term is used in language.
   - CQ challenge: Non-linguistic qualia terms don't have conventional "use".
   - New approach: "Qualia-Use Theory" - meaning as patterns of qualia in consciousness.

5. Verificationist Theory:
   - Traditional view: Meaning is the method of verification for a statement.
   - CQ challenge: Direct qualia can't be "verified" in the traditional sense.
   - New theory: "Qualitative Verification Theory" - meaning as method of qualia apprehension.

6. Truth-Conditional Semantics:
   - Traditional view: Meaning given by truth conditions.
   - CQ challenge: Non-propositional qualia don't have truth conditions in the usual sense.
   - New direction: "Qualia-Conditional Semantics" - meaning given by conditions of qualia presence.

7. Conceptual Role Semantics:
   - Traditional view: Meaning determined by inferential role in a conceptual scheme.
   - CQ adaptation: Could apply to roles of qualia in qualitative reasoning.
   - Extension: "Qualia Role Semantics" - meaning as inferential role in qualia-based cognition.

8. Causal Theory:
   - Traditional view: Meaning fixed by causal history of term usage.
   - CQ challenge: Non-causal, intrinsic nature of qualia doesn't fit this model.
   - Revision: "Qualia-Causal Theory" - meaning fixed by patterns of qualia co-occurrence.

Relation of Non-Referential Terms and CQ to These Theories:

1. Direct Presentation vs. Reference: CQ's non-referential terms fundamentally challenge theories that rely on reference or correspondence.
2. Subjectivity and Privacy: The private nature of qualia challenges theories that rely on public, shared meanings or truths.
3. Immediacy: The immediate, self-presenting nature of qualia in CQ requires theories that can account for this directness.
4. Non-Propositionality: Many traditional theories assume propositional content, which doesn't apply straightforwardly to qualia.
5. Experiential Grounding: CQ suggests meaning and truth must be grounded in direct experience rather than abstract relations.
6. Modal Collapse: For qualia in CQ, possibility implies actuality, challenging traditional modal distinctions in meaning and truth theories.
7. Intrasubjective Verification: CQ's emphasis on intrasubjective verification requires new approaches to truth and meaning verification.

8. Qualitative Logic: The logic of qualia composition and relation in CQ doesn't align with classical logic assumed in many theories.

New Theories Required:

1. Presentational Truth and Meaning Theory: A unified theory where truth and meaning for qualia are based on their direct, unmediated presence in consciousness.
2. Qualia-Structural Theory: Truth and meaning derived from the intrinsic structure and relations within qualia-space.
3. Intrasubjective Coherence Theory: Truth and meaning as coherence within one's qualitative experiential framework.
4. Qualia-Pragmatic Significance Theory: Truth and meaning as practical significance in qualitative reasoning and experience.
5. Non-Referential Semantics: A semantic theory that doesn't rely on reference but on direct experiential content.
6. Qualitative Compositionality: A theory of how complex meanings arise from combinations of simple qualia.
7. Meta-Qualitative Theory: Addressing how we can have true beliefs or meaningful statements about qualia themselves.
8. Qualia-Grounded Logic: A new logical framework based on the relations and operations possible within qualia-space.
9. Experiential Modality Theory: A theory of modality (possibility, necessity) grounded in qualitative experience rather than possible worlds.
10. Qualitative Information Theory: Reframing information in terms of qualia rather than bits or propositions.

These new theories would need to address several key challenges:

- Bridging subjective experience and intersubjective communication
- Formalizing reasoning about non-referential content
- Integrating qualitative and quantitative aspects of cognition
- Accounting for the seemingly ineffable nature of qualia while providing a rigorous framework
- Developing new logical and mathematical tools suitable for qualia-based reasoning

In conclusion, the Calculus of Qualia and its use of non-referential terms fundamentally challenges traditional theories of truth and meaning. It necessitates the development of new theoretical frameworks that can account for the unique properties of qualia - their immediacy, privacy, non-referentiality, and intrinsic nature. These new theories have the potential to revolutionize our understanding of consciousness, cognition, and the nature of reality itself, offering a more comprehensive approach to knowledge that integrates subjective experience with objective description.

References

[1] Do Qualia Exist Necessarily? v. 2.0 https://philpapers.org/rec/MERDQE-2

[2] A Calculus of Qualia 9 30 2022 https://philpapers.org/rec/MERACO-7
[6] Six Applications of the Calculus of Qualia 1 30 2023 https://philpapers.org/rec/MERSAO-9
[4] 7th application of the Calculus of Qualia 2 15 2023 https://philpapers.org/rec/MERTAO-12
[5] Calculus of Qualia 1: Zombies, Spectrum Inversion, Knowledge Argument, Hard Problems and Understanding their Solutions https://philpapers.org/rec/MERCOQ-3
[6] Calculus of Qualia 2: Intersubjective and Intrasubjective Verification; Experimental Predictions; Expanding Science https://philpapers.org/rec/MERCOQ-2
[7] Calculus of Qualia 3: Godel Incompleteness, CQ Transcendence https://philpapers.org/rec/MERCOQ-4
[8] Calculus of Qualia 4: Why Something Rather than Nothing; Rather than Weakest Assumptions; Contingent Possibility vs Necessary Actuality; Possibilities of Possibilities https://philpapers.org/rec/MERCOQ-6
[9] Calculus of Qualia 6: Materialism, Dualism, Idealism, and 14 others https://philpapers.org/rec/MERCOQ-5
[10] Calculus of Qualia 7: Equations vs. Qualations, Assertions with non-referential terms, Proofs, Logic https://philpapers.org/rec/MERCOQ-7