

## How A Posteriori Physicalists (Should) Get Our Phenomenal Concepts

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**Phenomenal concepts** are concepts that refer to phenomenal properties of experiences. A posteriori physicalists are those who maintain the identity of phenomenal states and properties with physical ones, but hold that phenomenal-physical identities are not knowable *a priori*. This paper catalogues the possible accounts of phenomenal concepts available to a posteriori physicalists if we make two demands of a posteriori physicalists' phenomenal concepts that others have suggested should be made. The first demand is uniquely pressing for a posteriori physicalists and is **(1)** that phenomenal concepts not be transparent. A **transparent** concept reveals the complete nature of its referent to a concept user who applies it,<sup>1</sup> which means that one's application of a transparent concept entails one's being in a position to know *a priori* all of the essential truths about its referent. A concept that is not transparent is one whose deployment does not reveal the complete nature of its referent to the concept user. The second demand is the background assumption of accounts of phenomenal concepts in general **(2)** that phenomenal concepts be constituents of thoughts that have Fregean contents. On a Fregean view of contents, a concept refers to its referent under a mode of presentation that is also identified with the informational value of the concept.

I argue that if one holds that phenomenal concepts are not transparent and accepts the framework on which they are constituents of thoughts with Fregean contents, then one is restricted to accounts of phenomenal concepts on which these have descriptive contents that are not revelatory of the complete natures of their referents. Since a coherent, a posteriori physicalist view arguably must maintain the non-transparency of phenomenal concepts, and since many parties to the phenomenal concepts debate, including many a posteriori physicalists, hold that phenomenal concepts are constituents of thoughts with Fregean contents, it follows that the relevant parties are logically constrained to endorsing views on which phenomenal concepts have descriptive contents whose informational values are non-identical to those of their referents.

The main argument of the paper can also be written in the following way:

(P1) If Fregeanism is true, then phenomenal concepts either “refer directly” xor<sup>2</sup> have contents that are descriptive and whose informational values are non-identical to those of their referents.

(P2) If Fregeanism is true and phenomenal concepts “refer directly,” then phenomenal concepts are transparent.

(P3) If a posteriori physicalism is true, then it is not the case that phenomenal concepts are transparent.

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<sup>1</sup> Diaz-Leon 2016 (p. 7), Goff 2011 (p. 195), Loar 1990 (p. 85), Morris 2020 (p. 2, 4).

<sup>2</sup> “xor” is the notation I am using for the exclusive or, which is the truth-functional operator whose truth table is the same as that of the non-exclusive or except in the row where both disjuncts are true, where the exclusive disjunction is false.

(C1) If a posteriori physicalism is true and Fregeanism is true, then phenomenal concepts do not “refer directly” (By (P2) and (P3)).

(C2) If a posteriori physicalism is true and Fregeanism is true, then phenomenal concepts have contents that are descriptive and whose informational values are non-identical to those of their referents (By (C1) and (P1)).

In my terminology, concepts that “refer directly” are those with descriptive or non-descriptive modes of presentation, the informational values of which are identical to their referents. Some concepts that “refer directly” have descriptive modes of presentation. It follows from this definition that the only concepts that do not “refer directly” whose contents are individuated by Frege’s criterion are those with descriptive contents whose modes of presentation have informational values that are not identical to their referents.

The first section of the paper argues for (P3) of the above argument. The second provides necessary background for understanding my argument for (P2). The third section argues that if Fregeanism is true and phenomenal concepts “refer directly” and have descriptive contents, then phenomenal concepts are transparent. The fourth section argues that if Fregeanism is true and phenomenal concepts “refer directly” and do not have descriptive contents, then phenomenal concepts are transparent. Since these are the only two types of “directly referential” phenomenal concepts, sections three and four together establish (P2) by showing that if Fregeanism is true, then all “directly referential” concepts are transparent. The rest of the paper considers accounts of phenomenal concepts that are “directly referential” if their originators adopt a Fregean view of thought contents. The accounts I consider have also been endorsed as being compatible with a posteriori physicalism. I make the case that the implications of the premises established in the earlier sections should actually lead a posteriori physicalists to reject these views.

The main implication of my claim in this paper is that there is a consistency issue with a posteriori physicalist views on which phenomenal concepts “refer directly,” are not transparent, and are constituents of thoughts with Fregean contents. One corollary is that those who are not a posteriori physicalists but nonetheless reject the transparency of phenomenal concepts and do not question the assumption that phenomenal concepts are constituents of thoughts with Fregean contents are similarly committed to the conclusion that phenomenal concepts have descriptive contents that do not reveal the complete natures of their referents.

It is worth making the argument that the non-transparency of phenomenal concepts prevents a posteriori physicalists from endorsing “direct reference” accounts of phenomenal concepts for two reasons. The first is because there are grounds for thinking that phenomenal concepts are rigid designators, or concepts that fix the same referent in every possible world.<sup>3</sup> Because a view on which some phenomenal concept “refers directly” may better guarantee that it fixes the same referent in more possible worlds than a Fregean view on which it does not “refer directly,” a “direct reference” view of how phenomenal concepts refer would seem to better

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<sup>3</sup> Kripke 1972 (p. 148).

accommodate the view that phenomenal concepts are rigid designators than a non-“direct-reference” Fregean view. The second reason my conclusion is noteworthy is because descriptivism about phenomenal concepts without “direct reference” is typically associated with a priori physicalism. For example, on a well-known realizer functionalist view, phenomenal concepts fix their referents via a description of a functional role that is occupied by a mental state.<sup>4</sup>

### **I. If a posteriori physicalism is true, then it is not the case that phenomenal concepts are transparent.**

This section argues that if a posteriori physicalism is true, then it is not the case that phenomenal concepts are transparent. Others have argued for this claim on the grounds that the transparency of phenomenal concepts would undermine the basis for a posteriori physicalism as a view.<sup>5</sup>

To understand why, recall that a posteriori physicalists deny that phenomenal-physical identities are knowable *a priori*. Taking this position allows them to appeal to the nature of phenomenal knowledge in response to arguments against physicalism that infer an ontological gap between phenomenal properties and physical ones from the apparent epistemic gap between our knowledge of facts about phenomenal states and our knowledge of facts about physical states.

One way a posteriori physicalists have tried to explain the epistemic gap is by developing a suitable account of phenomenal concepts. An account of phenomenal concepts appropriate for this purpose would illuminate how we can use phenomenal concepts to refer to properties of experiences without being aware that these are identical to physical properties. The **phenomenal concept strategy** is the argumentative approach employed by a posteriori physicalists who use features of phenomenal concepts to explain the epistemic gap between our knowledge of physical states and our knowledge of phenomenal states in a way that does not entail an ontological gap between them.<sup>6</sup>

Philip Goff has argued that in order for a posteriori physicalists to provide an account of phenomenal concepts that can explain the epistemic gap, they must suppose that phenomenal

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<sup>4</sup> Levin 1991 (p. 234).

<sup>5</sup> Goff 2011 (p. 193), Morris 2020 (p. 2).

<sup>6</sup> Balog 2012 (p. 22), Chalmers 2010 (p. 309), Diaz Leon 2016 (p. 1), Schroer 2009 (p. 506), Stoljar 2005 (p. 470).

concepts are not transparent concepts.<sup>7</sup> A transparent concept is one whose application reveals the complete nature of its referent, where the referent's nature is understood to be its non-contingent essence.<sup>8</sup> The concept of circularity<sup>9</sup> is one example of a transparent concept that is non-phenomenal. This is to say that applying the concept of circularity reveals the complete nature of the property of circularity to the user of the concept, or that when one applies the concept, all of the essential aspects of the property to which the concept refers are involved in fixing its referent. If a posteriori physicalism is true, phenomenal concepts cannot be transparent because the view says that phenomenal properties are essentially physical. If phenomenal concepts revealed the complete natures of phenomenal properties, then their application would also have to reveal the essentially physical natures of phenomenal properties.

There are two main points that have been cited in favor of rejecting the implication of conceptual transparency on an a posteriori physicalist view of phenomenal concepts that the application of these would reveal the essentially physical natures of phenomenal properties to concept users. The first is that it does not intuitively seem like the physical natures of phenomenal properties are revealed to us when we use phenomenal concepts to mentally token them. The second is that allowing phenomenal concepts to reveal the essentially physical natures of phenomenal properties could prevent them from explaining the epistemic gap. If phenomenal concepts revealed only the physical essences of their referents and no more than that, it would follow that one could deduce all of the knowable facts about phenomenal properties *a priori* from facts about the physical properties with which the physicalist would identify them. This would be incompatible with the a posteriori physicalist's denial of the claim that all phenomenal facts are *a priori* deducible from physical facts.

Ultimately, these points provide a view-specific rationale for a posteriori physicalists to abandon the project of providing an account of phenomenal concepts on which these are transparent. To reiterate, the first point is that allowing transparent, a posteriori physicalist phenomenal concepts would violate the armchair intuition that our phenomenal concepts do not reveal the physical natures of any properties. The second point is that doing so would amount to an admission that phenomenal-physical identities are knowable *a priori*.

## **II. Setting up the argument for the claim that Fregeanism and “direct reference” imply the transparency of phenomenal concepts.**

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<sup>7</sup> Goff 2011 (p. 193). Goff takes this to be a fundamental problem with a posteriori physicalism as a view, as he holds that phenomenal concepts are transparent. However, I am remaining neutral on this question while accepting Goff's conclusion that a posteriori physicalists seem committed to the non-transparency of phenomenal concepts.

<sup>8</sup> Goff 2011 (p. 195).

<sup>9</sup> in the geometric sense.

This section provides background information that will be helpful for understanding my two-part argument in the following two sections that if Fregeanism about the contents of thoughts is true and phenomenal concepts “refer directly,” then phenomenal concepts are transparent. Because we have established that there are view-specific constraints pushing against a posteriori physicalist accounts of phenomenal concepts on which these are transparent, it follows that if a posteriori physicalism is true and concepts are constituents of thoughts whose contents are Fregean, then it is not the case that phenomenal concepts “refer directly.” That many a posteriori physicalists do accept Fregeanism means that the non-transparency demand should prevent them from adopting accounts of phenomenal concepts on which these “refer directly” or are otherwise transparent, given that concepts that “refer directly” are transparent on a Fregean view of thought contents.

First, it will help to say more about Fregeanism. Those involved in the phenomenal concepts debate typically take “concepts” to be constituents of thoughts whose contents are Fregean propositions.<sup>10</sup> A Fregean proposition can be identified with the mode of presentation of a truth value, or, on some interpretations, with the truth conditions of a sentence. Ball writes that phenomenal concept theorists consider **Frege’s criterion** for the difference of senses of propositions to be the criterion for the individuation of thought contents. The criterion as Ball states it says that “in normal cases two contents are distinct if one can rationally hold conflicting attitudes toward them at the same time.”<sup>11</sup> Since propositions that contain exclusively coreferential concepts, at least some of which differ in sense, have different contents, this criterion for the individuation of propositional contents determines how conceptual contents are individuated on a Fregean view.

Moreover, the ability to rationally hold conflicting attitudes toward two conceptual contents should be necessary as well as sufficient for the distinctness of their respective concepts if Frege’s criterion is the only one used to individuate conceptual contents. For this reason, I will take **Frege’s criterion** to be the biconditional claim that two concepts are distinct iff one can rationally hold conflicting attitudes toward them at the same time. This move is not unprecedented, including among others working in the phenomenal concepts debate. For example, Chalmers individuates phenomenal concepts using epistemic intensions, which he states are like Fregean senses in “individuating concepts according to cognitive significance at least up to the level of *a priori* equivalence.”<sup>12</sup> Peacocke states that he individuates concepts at the level of Fregean senses, and takes two concepts, C and D to be distinct “if and only if there are two complete propositional contents that differ at most in that one contains C substituted in one or more places for D, one of which is potentially informative while the other is not.”<sup>13</sup>

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<sup>10</sup> Ball 2009 (p. 936), Balog 2012 (p. 22), Diaz Leon 2016 (p. 3), Tye 2009 (p. 39).

<sup>11</sup> Ball 2009 (p. 936).

<sup>12</sup> Chalmers 2004 (p. 296).

<sup>13</sup> Peacocke 1992 (p. 2-3).

On the standard Fregean picture of how terms refer, senses are modes of presentation of referents. The sense of a term is identified with both its reference-fixing description and its informational value. That is to say that according to Fregeanism, concepts refer indirectly. If a concept refers indirectly, or via a reference-fixing description, the referent of the concept is fixed in a concept user's mind by her subjective awareness that the reference-fixing description has been satisfied. The concept picks out its referent by way of this awareness. The reference-fixing description associated with the concept characterizes properties (or aspects) of the concept's referent that uniquely fix it.

To motivate the claim that Fregeanism, understood as the view that the contents of thoughts are propositions that have descriptive contents individuated by Frege's criterion, is a background assumption of the phenomenal concepts debate, it will help to consider the rationale that posteriori physicalists in particular have to embrace this assumption.

One reason why a posteriori physicalists would seem to be committed to Fregeanism in the specified sense is because they hold that there is an explanatory gap between the way experiences subjectively feel and the physical processes that cause those experiences, and that the existence of this gap can be accounted for by special features of phenomenal concepts.<sup>14</sup> The alternative to Fregeanism about propositions is Russellianism, which is the view that propositional contents are identical to structured propositions whose constituents are objects and properties.<sup>15</sup>

To see why a commitment to the capacity of features of phenomenal concepts to account for the existence of the epistemic gap implies Fregeanism, suppose that some a posteriori physicalist held that the contents of thoughts were Russellian. Further recall that on a physicalist view, facts about phenomenal states are ultimately identical to facts about brain states. One implication of adopting the view that the contents of thoughts are Russellian propositions in this context would therefore be that the contents of our thoughts about facts about phenomenal states would be identical to those facts. However, if phenomenal states are just brain states, the identification of the contents of thoughts about phenomenal states with facts about brain states does not seem compatible with a view on which there is a distinction between the way we conceptualize facts about phenomenal states and the way we conceptualize facts about brain states. Since the a posteriori physicalist is committed to there being such a distinction, they cannot endorse the view that the contents of thoughts are Russellian propositions.

Direct reference is another manner in which a concept can refer to its referent, and is usually introduced as taking for granted a Russellian view of propositional contents. Many direct reference theories of names were formulated in direct opposition to the descriptivist identification of the reference-fixing description of a term with its semantic content and the

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<sup>14</sup> Chalmers 2010 (p. 253), Loar 1990 (p. 84), Tye 2000 (p. 23).

<sup>15</sup> Speaks 2015 (p. 100-103).

Fregean view of propositions associated with it.<sup>16</sup> From now on, I will call views on which concepts refer directly **referentialist** views and views on which they have descriptive contents that are also identifiable with Fregean senses **descriptivist** views. On the type of referentialist view opposed to descriptivism, terms that refer directly simply have no modes of presentation, although their informational values are identified with their referents. Since descriptive contents are a type of mode of presentation, it follows from their having no modes of presentation that directly referential concepts do not have descriptive contents.

Although Fregeanism by definition rules out the possibility of directly referential concepts, some Fregean views try to account for the possibility of the kind of direct reference that is found on referentialist views. I will call the Fregean versions of directly referential concepts “directly referential” in order to make clear that they do not refer directly in the referentialist sense. That is, a “directly referential” concept is like a directly referential one in that its informational value is identical to the referent of the concept. However, unlike a directly referential concept, a “directly referential” one is forced to take on a mode of presentation so that it may be assimilated to a Fregean view of contents. On Fregean views, “directly referential” concepts either have descriptive modes of presentation xor they do not.

### **III. If Fregeanism is true and phenomenal concepts “refer directly” and have descriptive contents, then phenomenal concepts are transparent.**

“Directly referential” concepts that have descriptive modes of presentation involve a **direct acquaintance theory of direct reference**. On this type of theory, “apparently directly referring expressions used must be abbreviations or disguises for something like Fregean descriptions.”<sup>17</sup> This is to say that the descriptive modes of presentation involved in fixing the referents of concepts that adopt a **direct acquaintance theory of direct reference** are complete descriptive characterizations of the concepts’ referents themselves.

I now argue that a phenomenal concept that “refers directly” on a **direct acquaintance theory of direct reference** is transparent. First, consider that on Fregean views of propositional contents, the sense of a term is equivalent to its informational value.<sup>18</sup> Consider also that the referent of a directly referential concept on a referentialist view is considered to be the informational value, or content, of a directly referential concept. This follows from the Russellian view of contents on which propositions are structured entities composed out of objects and properties themselves. Since Russellian propositional contents are composed out of literal objects and properties, if we took concepts to be the constituents of Russellian propositions, their contents would be literal objects and properties. “Direct reference” tries to

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<sup>16</sup> Orilla 2018 (p. 246), Soames 2010 (p. 80-81).

<sup>17</sup> Kaplan 1977 (p. 536).

<sup>18</sup> Dummett 1973 (p. 179), Kripke 1988 (p. 433-4), Peacocke 1998 (p. 75), Perry 1977 (p. 475).

preserve the identification of the “directly referential” concept’s referent with the content of the concept.

If an apparently directly referring expression were simply a disguise for something like a Fregean description that fixed the referent of a concept whose content were conceived as that of a constituent of a Russellian proposition, then, as is true of the informational values of all Fregean senses, the informational value of that concept’s mode of presentation would be equivalent to the concept’s informational value, or content, for the concept user. Since the informational value of a directly referential concept is identical to its referent, a “directly referential” concept with the same content as a directly referential one would have a mode of presentation whose informational value were identical to the concept’s referent. Alternatively stated, the referent of a “directly referential” concept would be its own mode of presentation.

Next, if the referent of a “directly referential” concept were to *descriptively* “present itself” to a concept user in such a way that the content of the concept were identical to the referent itself, the concept’s mode of presentation would have to be a complete *descriptive* characterization of the concept’s referent. Finally, recall that Fregeans are committed to the claim that if a concept user applies a concept, she is fully aware of the informational value of its mode of presentation. It follows that if a “directly referential” concept’s mode of presentation were to involve a complete, descriptive characterization of the concept’s referent, then the application of the concept by a concept user would reveal this characterization to her.

#### **IV. If Fregeanism is true and phenomenal concepts “refer directly” and do not have descriptive contents, then phenomenal concepts are transparent.**

Another subset of “Fregean” views spell out how “directly referential” concepts refer in terms of non-descriptive roles that fix the referents of those concepts.<sup>19</sup> These views typically go under the heading of **non-descriptive Fregeanism**. On these views, the informational value, or content, of the “directly referential” concept is typically also identified with its referent.<sup>20</sup> Since the informational value of a Fregean concept’s mode of presentation is identical to the content, or informational value, of a Fregean concept, it follows from the informational value of some concept being identical to the concept’s referent that the informational value of the concept’s non-descriptive mode of presentation is also identical to its referent. Since subjective awareness of a Fregean concept’s mode of presentation is involved in the concept’s application, the concept user’s subjective awareness of the complete nature of the referent in applying the concept follows.

One might object that I should have defined “directly referential” concepts so as to include concepts whose informational values are identified with those of their referents and whose referents are fixed by non-descriptive roles whose informational values are greater than or

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<sup>19</sup> Evans 1981 (p. 283-4, 287), Perry 1977 (p. 480-482).

<sup>20</sup> Evans 1981 (p. 283).



less than those of complete non-descriptive specifications of their referents. However, I do not consider those concepts to “refer directly” because they are not individuated by Frege’s criterion, or dispositions to hold conflicting attitudes toward propositions involving those concepts and otherwise identical propositions where the relevant concepts have been substituted for coreferential ones. Since Fregeanism is not true if one adopts a view on which there are concepts, the informational values of whose reference-fixing, non-descriptive roles contain more or less information than a complete, non-descriptive specification of their referents, these concepts cannot be construed as attempts to assimilate Russellian singular terms to a Fregean theory of meaning and are beyond the scope of my argument.

To see that thought contents are not individuated by Frege’s criterion on non-descriptive Fregean views of concepts where these have non-descriptive roles whose informational values do not include or include more than complete, non-descriptive specifications of their referents, suppose there are two concepts, *C* and *C\**, which both refer to a referent *R* via two non-descriptive roles that have non-identical informational values. Suppose also that the informational value of both concepts is equivalent to that of a complete, non-descriptive specification of *R*, and that the informational value of a complete, non-descriptive specification of *R* is not equivalent to that of either of the non-descriptive roles associated with *C* or *C\**. It makes sense to do this if the concepts under discussion are supposed to approximate directly referential concepts, as the semantic values of such concepts are supposed to be equivalent to their total informational values. A difference between two concepts’ semantic values would therefore be required on such a view for these to be recognized as distinct concepts according to Frege’s criterion.

If thought contents were individuated via Frege’s criterion on such a view, then because you could not hold conflicting attitudes toward some proposition involving *C* and the identical proposition with *C\** substituted for *C*, Frege’s criterion could not tell you that the concepts are distinct. But on the relevant non-descriptive Fregean views, the concepts are distinct. It follows from the possibility of the type of situation specified above that Frege’s criterion is not the only one used to individuate thought contents on the relevant views. To reiterate, these are non-descriptive Fregean views on which the informational value of the non-descriptive role of a concept that fixes its referent contains more or less information than the informational value of a complete, non-descriptive specification of the concept’s referent.

Throughout the rest of the paper, I show that given the entailment on Fregean views from “direct reference” to transparency, recognitional, quotational, and indexical phenomenal concepts are transparent if these are taken to be constituents of thoughts whose contents are Fregean. In doing so, I rule these out as possible accounts of the conceptual structure of phenomenal concepts available to a posteriori physicalists. These are three of the four possible positions on the structure of phenomenal concepts that David Chalmers has identified. I give his full list with one fifth additional possibility below:

(1) Phenomenal concepts are recognitional concepts.

- (2) Phenomenal and physical concepts are associated with different faculties or play different conceptual roles.
- (3) Phenomenal concepts are indexical concepts.
- (4) Phenomenal concepts are quotational.<sup>21</sup>
- (5) Phenomenal concepts share their structure with descriptivist concepts of singular terms.

Because proposal (2) merely states a potential motive for endorsing an account of phenomenal concepts on which these have a particular conceptual structure rather than specifying a particular type of conceptual structure that phenomenal concepts must have, I will leave (2) aside in the following discussion. I also have added the item (5), which does not appear on Chalmers' original list but is the remaining logically possible alternative to the items he includes. In ruling out (1), (4), and (3) in that order, I aim to establish that (5) is the only the option available to a posteriori physicalists with regard to the conceptual structure of phenomenal concepts.

### **V. The proposal that phenomenal concepts are recognitional.**

This section argues that a posteriori physicalists should not make phenomenal concepts recognitional concepts if they accept the background assumption of the individuation of thought contents by Frege's criterion and wish to meet the non-transparency demand. It then goes on to consider the implications of this point for three accounts of recognitional phenomenal concepts that have been actually proposed as ones that are consistent with a posteriori physicalism.

Recognitional concepts of non-phenomenal properties are concepts whose referents cause a certain type of experience. The type of experience that allows one to recognize the referent of a recognitional concept typically serves as the mode of presentation of the referent. Chalmers' example of a non-phenomenal recognitional concept is that of a cactus, where the recognitional concept refers to an external cactus. When the concept user applies the recognitional concept to the cactus, her perceptual experience of that cactus fixes it as the referent of the concept.<sup>22</sup>

I now argue from the definition of a non-phenomenal recognitional concept that recognitional phenomenal concepts are "directly referential." That is, their referents are identical to their modes of presentation when their referents are phenomenal properties:

First, if the referent of a recognitional concept is a phenomenal property, it is the property of a phenomenal state. Since the referent of a recognitional phenomenal concept is a phenomenal property, it is the property of a phenomenal state.

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<sup>21</sup> Chalmers 2010 (p. 310-311). A similar list appears in Sundström 2011 (p. 271).

<sup>22</sup> Chalmers 2010 (p. 310).

Second, the type of experience that allows one to recognize the referent of a recognitional concept is the mode of presentation of its referent. Since the type of experience that allows one to recognize that some property is a property of a certain phenomenal state is the same phenomenal state of which the relevant phenomenal property is a property, the mode of presentation of the referent of a recognitional phenomenal concept is the same phenomenal state of which the phenomenal property to which it refers is a property. In other words, when recognitional concepts refer to phenomenal properties, their senses are at least partly their referents.

Third, if senses are identical to semantic contents, then recognitional phenomenal concepts are transparent. This is because we have established that the senses of recognitional phenomenal concepts involve the same experiences to whose properties they refer. Because recognitional accounts of phenomenal concepts that individuate these using Frege's criterion make them transparent, proposals on which phenomenal concepts are recognitional do not meet the demand on a posteriori physicalists to endorse non-transparent accounts of phenomenal concepts.

The same conclusion follows from the definition of a recognitional concept on which a concept is recognitional iff its possession conditions include "the ability to recognize at least some things that fall under the concept as falling under it"<sup>23</sup> and its possession conditions are part of what constitutes the concept. This is the case because many have taken actually having the phenomenal state of which a phenomenal property is a property to be one of the possession conditions on the phenomenal concept of the relevant property.<sup>24</sup> On a physicalist view, this would amount to having the relevant brain state.<sup>25</sup> If possession conditions partly constitute a concept's mode of presentation, then actually having the brain state of which the physicalist would say a phenomenal property is a property is partly constitutive of the concept's mode of presentation. Moreover, if applying the recognitional concept of what it is like to have a phenomenal state with some property involves having a brain state with that property, then the sense of the concept is at least partially constituted by its referent. If senses are informational values, it follows that the informational value associated with a phenomenal concept incorporates that of having the brain state of which the phenomenal property is a property.

One could object that the account just sketched would not yield transparency, since even if having the brain state of which a phenomenal property is a property is one of the reference-fixing

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<sup>23</sup> Fodor 1998 (p. 1).

<sup>24</sup> Balog 2012 (p. 20), Diaz-Leon 2016 (p. 9), Levin 2006 (p. 88), Jackson 1972 (p. 129-130), Tye 2000 (p. 24).

<sup>25</sup> The point that the concept user's having had the brain state, to some property of which a phenomenal concept refers, is not only one of the conditions for possessing a phenomenal concept, but also one of the conditions for applying it, is supported by the observation in Tye 2000 (p. 28) that deployment of the phenomenal concept that is a posteriori identical to the concept of some brain state triggers the concept user's entry into the brain state to which both the phenomenal concept and the concept of the brain state refer.

conditions of the concept of the property said to be phenomenal, this does not imply any factual knowledge about the physical-functional role of the brain state involved in fixing the referent of the phenomenal concept within a theoretical framework. However, physicalists might consider properties that brain states have in virtue of their physical-functional role within a theoretical framework to belong to the set of essential properties of those states and their properties. It would seem to follow that a recognitional phenomenal concept would pick out a property of a brain state without revealing to the concept user any of the theoretical aspects of the property that are thought to belong to it essentially on a physicalist view. To reiterate, this objection is to the claim that on an a posteriori physicalist view, if the referent of a recognitional phenomenal concept partially constitutes its sense, then it is a transparent concept.

However, my reply is that even granting that the knowledge of the brain state involved in fixing the referent of a recognitional phenomenal concept is non-theoretical, it is easier to give up the commitment that the physical-functional role of a phenomenal property within a scientific theory is one of its essential aspects than it is to deny that the transparency of a recognitional phenomenal concept follows from the informational value of its application conditions being identical to that of its referent. In other words, given the above argument, would be easier to deny that having certain physical-functional properties is an essential feature of a given physical state than it would be to deny the transparency of phenomenal concepts on a recognitional account of these. This might actually be in service of a posteriori physicalism as a view, since it would suggest that because there is not much to the essence of a brain state, a posteriori physicalism is compatible with revelation after all. Regardless, I have argued that applying a recognitional phenomenal concept constitutively involves full awareness of the referent if we take into account the logical relationship between the brain state one enters in applying the concept and the property of that state to which the phenomenal concept refers.

That recognitional concepts entail transparency is corroborated by David Chalmers' discussion of recognitional phenomenal concepts, in which he distinguishes between two categories of recognitional phenomenal concepts. The first category consists of accounts that understand those concepts in a "**bottom-up way.**" On the accounts that belong to it, referents of recognitional phenomenal concepts are fixed by "recognitional processes triggered by neural states"<sup>26</sup> rather than phenomenal ones. For this reason, the concepts thus understood are supposed to afford only indexical knowledge of the intrinsic character of phenomenal properties to which they refer.<sup>27</sup>

On those accounts belonging to the second category Chalmers discusses, recognitional phenomenal concepts are understood in what he calls the "**top-down way.**" Concepts thus understood involve recognitional properties that are triggered by states that are explicitly phenomenal. Because phenomenal states are involved in fixing phenomenal properties as the

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<sup>26</sup> Chalmers 2010 (p. 336).

<sup>27</sup> *ibid.*

referents of recognitional concepts on these types of accounts of recognitional phenomenal concepts, knowledge of the complete natures of the properties referred to follows.<sup>28</sup>

Tye, Carruthers, and Loar are often cited as theorists who adopt recognitional accounts of phenomenal concepts.<sup>29</sup> Chalmers identifies their theories in particular as examples of accounts on which recognitional phenomenal concepts are understood in the bottom-up way.<sup>30</sup> I now argue that each entails transparency if Fregeanism in the relevant sense is assumed because all explicitly involve some form of “direct reference.” Since all three theorists are physicalists who claim to account for the cognitive difference between physical and phenomenal conceptions of properties of brain states via special features of phenomenal concepts, it is an implication of my argument that all three should reconsider the compatibility of their accounts with the background assumption of the phenomenal concepts debate that contents of thoughts are propositions individuated by Frege’s criterion.

First, Tye appears to be committed to the transparency of phenomenal concepts by way of his commitment to their “direct reference.” He writes that phenomenal concepts are “direct recognitional concepts” and that no reference-fixing intermediaries are involved in recognizing a phenomenal property by way of a phenomenal concept. If he would accept a Fregean view of propositional contents, then Tye’s statement that recognitional phenomenal concepts refer directly means that they “refer directly” and entails that they are transparent. Notably, Tye is an a posteriori physicalist.

Second, Carruthers characterizes purely recognitional concepts of mental states as “bare recognitional capacities” and suggests that “direct recognition” is involved in applying phenomenal concepts in citing Goldman as a proponent of a similar view.<sup>31</sup> This account therefore also builds in an assumption about the “direct reference” of phenomenal concepts if Fregeanism is true. Carruthers’ own favored account is that mental state concepts are theoretical concepts that are in part recognitionally applied, though they get part of their sense from “their position in a substantive theory of the causal structure and functioning of the mind.”<sup>32</sup> If some concept’s being recognitionally applied involves “direct reference” and one is a physicalist, this view faces the same challenge with regard to the entailment from “direct reference” to

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<sup>28</sup> Chalmers 2010 (p. 335-336).

<sup>29</sup> Carruthers and Veillet 2007 (p. 214), Chalmers 2010 (p. 335).

<sup>30</sup> Chalmers 2010 (p. 335).

<sup>31</sup> Carruthers 2000 (p. 5).

<sup>32</sup> Carruthers 2000 (p. 7-8).

transparency on a Fregean view of the contents of thoughts.<sup>33</sup> Although Carruthers states elsewhere that a physicalist account of our mental state concepts need not be one on which these reveal the essential natures of their referents,<sup>34</sup> an implication of my thesis in this paper is that he seems committed to this as a deductive consequence of his commitment to the “direct reference” of his phenomenal concepts if he adopts Fregeanism about the contents of thoughts.

Finally, Loar’s account of recognitional concepts also makes these “directly referential” if Fregeanism is true.<sup>35</sup> He says that one’s possession of a recognitional disposition to classify certain items together is sufficient for one’s possession of the recognitional concept that refers to the property shared by the items the disposition disposes one to class together. “[T]he concept directly refers to the property,” he writes.<sup>36</sup> If he is working within a Fregean view of thought contents, then he means that the concept “directly refers” to the property. Since “direct reference” entails transparency, the “direct reference” of a recognitional phenomenal concept on Loar’s account implies that the informational value of the phenomenal concept to the concept user includes all of the essential aspects of the phenomenal property. Loar also explicitly states that the semantic value of a recognitional phenomenal concept is equivalent to the property that triggers it, rather than to something else supplied by the manifestation of the recognitional disposition. This supports the claim that transparency is a deductive consequence of his account of recognitional phenomenal concepts and suggests that his view is compatible with Fregeanism as I have described it.

## **VI. The proposal that phenomenal concepts are quotational.**

This section argues that a posteriori physicalists should not make phenomenal concepts quotational if they wish to avoid the transparency of phenomenal concepts in offering an account of these. It then considers the implications of this point for two quotational accounts of phenomenal concepts that have been actually proposed as accounts that are consistent with a posteriori physicalism.

Quotational accounts of phenomenal concepts are those on which phenomenal properties are constituents of phenomenal concepts themselves. In this way, the phenomenal state to which a phenomenal concept refers is “quoted” in one’s deployment of the quotational concept. Like those of the recognitional type, accounts of phenomenal concepts on which these have a quotational structure have been thought to remain true to the insight that deploying a phenomenal

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<sup>33</sup> Notably, that Carruthers takes mental state concepts to be only partly recognitionally applied suggests that he may not take the contents of thoughts to be Fregean propositions on the understanding of these as propositions individuated by Frege’s criterion.

<sup>34</sup> Carruthers 2000 (p. 5).

<sup>35</sup> Loar 1990 (p. 87).

<sup>36</sup> Loar 1990 (p. 87).

concept involves instantiating the conscious state referred to by the concept.<sup>37</sup> Quotational concepts may be unlike those of the recognitional type in the concept user's need, in deploying a quotational concept, to normatively specify a descriptive type via an operator that takes as its input an exemplar of the type of experience referred to by the concept. Although recognitional concepts involve a disposition to classify certain items that share the property referred to as belonging to a type, the relevant type need not itself be normatively specified by the concept user via an exemplar in applying the concept.

Whereas the reference-fixing mechanism on recognitional accounts is typically a non-descriptive role, quotational accounts often involve a descriptive operator that is filled by the quoted state that corresponds to a particular experience. This is not to say that the manner in which quotational concepts refer is not "direct." Papineau suggests that "quotation is a special case of indexicality" and that both quotational concepts and indexicals "specify a certain descriptive type with a directional indicator."<sup>38</sup> On a Fregean view of contents, this amounts to their "direct reference." However, Papineau suggests quotational phenomenal concepts are distinguished from other indexicals in that the exemplars involved in their formation must be formed from the thinker's own mind.<sup>39</sup>

I now make the general argument that quotational phenomenal concepts are transparent. In short, the transparency of quotational phenomenal concepts follows from the actual incorporation of the phenomenal state referred to into the reference-fixing mechanism of the quotational concept. A quotational concept is explicitly such that the experience it refers to is "literally part of the term the thinker uses to refer to that experience."<sup>40</sup> If the concept used to refer to a phenomenal property literally contains its referent as part of its reference-fixing mechanism, then it also contains as part of its reference-fixing mechanism all of the essential aspects of its referent. On a Fregean view of contents,<sup>41</sup> this implies that the informational value of all of the essential aspects of the referent of the concept belongs to the informational value of the concept.

Chalmers similarly distinguishes between a "**bottom-up way**" and a "**top-down way**" of spelling out quotational accounts. On the **bottom-up way**, the account may be understood as thin because the neural state quoted is not specified to be a phenomenal state. However, the general argument about transparency applies if the referent of the concept is just a property of the same neural state. If it is not, but rather a property that is explicitly phenomenal in a way that makes it

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<sup>37</sup> Papineau 2002 (p. 106).

<sup>38</sup> Papineau 2002 (p. 123).

<sup>39</sup> Papineau 2002 (p. 125).

<sup>40</sup> Papineau 2002 (p. 106).

<sup>41</sup> Papineau 2002 (p. 105) explicitly states that his view assumes a Fregean view of thought contents.

something over and above a property of the quoted neural state, then the concept would not be transparent, but the account also would not be “quotational” in making the same state of which the referent is a property constitutive of the concept in belonging to its reference-fixing mechanism. On the **top-down way**, the concept incorporates as a constituent a state that is explicitly a phenomenal state<sup>42</sup> and there is no question about the transparency of the phenomenal concept.

At this point, I turn to two accounts of quotational phenomenal concepts that have been introduced as being compatible with the a posteriori physicalist project and demonstrate that these make phenomenal concepts transparent. These are the quotational accounts of Papineau and Balog.<sup>43</sup> One implication of the transparency of phenomenal concepts on these accounts is that reconsideration of the viability of quotational accounts of phenomenal concepts for a posteriori physicalists is needed.

First, for Papineau, “phenomenal concepts are compound terms, formed by entering some state of perceptual classification or re-creation into the frame provided by a general experience operator ‘the experience: - - -’.”<sup>44</sup> He also notes that both the quoted experience and the operator itself should be expected to make a contribution to the semantic value of the concept.<sup>45</sup> It follows from this general framework that deployment of a phenomenal concept constitutively involves a recreation of the same experience of which the referent is a part.<sup>46</sup> If a concept user is capable of imagining or recreating the state quoted in a phenomenal concept of this kind by normatively filling in the experience operator, then if the referent is conceived as nothing more than a property of the quoted state, application of the quotational concept presupposes an awareness of the complete nature of the referent. This amounts to the transparency claim. Because one of the defining features of a quotational account of phenomenal concepts is that the referent is just a property of the state quoted in the deployment of the concept and not some other state than that, the conclusion about transparency follows.

Balog offers a similar quotational account of direct phenomenal concepts, or those whose deployment can only occur when one is directly introspectively aware of an occurrent phenomenal state.<sup>47</sup> She claims that her account is neutral between different accounts of the metaphysics of mind.<sup>48</sup> On her quotational account, “a current phenomenal experience is *part of*

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<sup>42</sup> Chalmers 2010 (p. 335).

<sup>43</sup> Chalmers 2010 (p. 334) cites Papineau and Block as proponents of quotational accounts. However, the cited Block reference on this topic could not be found.

<sup>44</sup> Papineau 2002 (p. 117).

<sup>45</sup> Papineau 2002 (p. 117).

<sup>46</sup> This interpretation is supported by Morris 2020 (p. 7).

<sup>47</sup> Balog 2012 (p. 16).

<sup>48</sup> Balog 2012 (p. 17).



the token concept currently applied to it,” which she explains in the following way.<sup>49</sup> First, she explicitly states that concepts are constituents of thoughts,<sup>50</sup> understood to be representational, and that token concepts possess realization properties, which are those properties of a neural state that realize the tokening of an instance of a concept type that are relevant to the token’s belonging to that type.<sup>51</sup> To say that a phenomenal experience is part of the tokening of a concept on this account is to say that the neural properties that physically realize the experience referred to by the concept are among the realization properties of the token of the concept. Because “the experience [referred to] serves as its own mode of presentation” in the deployment of a phenomenal concept,<sup>52</sup> concept users’ awareness of the natures of the referents of quotational phenomenal concepts are constitutively involved in deploying those concepts.

I have argued that both of the aforementioned quotational accounts of phenomenal concepts involve a commitment to the transparency of phenomenal concepts. If it is right that non-transparency is a desideratum on a plausible a posteriori physicalist account of phenomenal concepts, then the transparency of these on quotational accounts is a barrier to the capacity of such accounts to refute anti-physicalism via the phenomenal concept strategy.

## **VII. The proposal that phenomenal concepts are indexical.**

This section examines the proposal that phenomenal concepts are indexical concepts, which are understood outside of any particular theory as concepts whose referents shift depending on the context of utterance.<sup>53</sup> A number of a posteriori physicalists have proposed accounts of phenomenal concepts on which these are indexicals, including demonstrative indexicals.<sup>54</sup> However, I argue that these accounts cannot avoid the transparency of phenomenal concepts if Fregeanism is true due to the fact that most accounts of indexicals are committed to the “direct reference” of indexical concepts on a Fregean view of contents. I have already made the general case that the “direct reference” of concepts entails their transparency on a view of concepts on which these are constituents of thoughts whose contents are Fregean propositions.

For background, phenomenal concept theorists who are a posteriori physicalists have posited accounts of phenomenal concepts on which these are indexicals (and demonstrative indexicals) as a way to account for what one learns when one deploys a phenomenal concept for the first time in terms of indexical knowledge one acquires. One standard example used is that of Frank Jackson’s Mary, who lives in a black and white room and has complete propositional

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<sup>49</sup> Balog 2012 (p. 25).

<sup>50</sup> Balog 2012 (p. 22).

<sup>51</sup> Balog 2012 (p. 23).

<sup>52</sup> Balog 2012 (p. 26).

<sup>53</sup> Kaplan 1977 (p. 513).

<sup>54</sup> Loar 1990 (p. 87), Levin 2007 (p. 90-91), Schroer 2010.

knowledge of redness, but allegedly learns something new when she steps outside one day and sees a red object. Mary's acquisition and deployment of a new phenomenal concept is supposed to explain how she gains what many regard as cognitively significant knowledge in having an experience of phenomenal red for the first time.<sup>55</sup>

Whereas pure indexicals are words like "I" and "here," demonstrative indexicals are words like "this" and "that" whose referents are fixed by acts or processes of demonstration. These acts or processes of demonstration pick out a referent either by ostension or as the result of some other process that yields knowledge similar to that ostension might.<sup>56</sup>

Pure and demonstrative indexicals are supposed to afford us a different kind of grasp of their referents than do non-indexicals. For this reason, the a posteriori physicalist's hope in advancing an indexical account of phenomenal concepts is that the difference between phenomenal and physical concepts, construed as one between indexical and non-indexical concepts, can account for why there is no *a priori* entailment from physical facts to facts about phenomenal experiences. They hold that this is analogous to there being no *a priori* entailment from the fact that the pants of the person in the mirror are on fire to the fact that my pants are on fire even if it just so happens that I am the person in the mirror. The a posteriori physicalist wants to say that the explanatory gap, in this case, is explicable solely in terms of the semantic differences between indexical and non-indexical concepts, as is the explanatory gap between physical facts and facts about phenomenal experiences.

Kaplan has been widely credited with the most popular contemporary theory of indexicals.<sup>57</sup> On this theory, sentences are evaluated relative to contexts and circumstances of evaluation, where a context is a quadruple of a time, world state, agent, and location, and a circumstance is a time and a world state pair.<sup>58</sup> There are two features of Kaplan's account that are potentially identifiable with the meaning of an expression, in addition to its referent.<sup>59</sup> The first is content. "Setting S in [a context] C gives us a content—*what S says* in C—about which we can ask whether it would have been true, when, or if, other circumstances obtain,"<sup>60</sup> Soames writes. The content of a sentence is alternatively describable as the truth evaluable aspect of a sentence; the content of a singular term is a function from worlds to objects.<sup>61</sup> There is a further feature of Kaplan's theory called character, which is what determines a content of a sentence in a

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<sup>55</sup> Schroer 2010 (p. 508).

<sup>56</sup> Hawthorne 2002 (p. 32).

<sup>57</sup> Devitt 1989 (p. 209), Kaplan 1977, Soames 2010 (p. 77).

<sup>58</sup> Soames 2010 (p. 96).

<sup>59</sup> Devitt 1989 (p. 215).

<sup>60</sup> Soames 2010 (p. 96).

<sup>61</sup> Devitt 1989 (p. 214).

context.<sup>62</sup> That the interpretations of terms may vary based on their context is the feature of Kaplan's account that accommodates the point that the referents of indexical terms vary depending on their context of utterance.<sup>63</sup>

Indexicals on Kaplan's theory are directly referential and would be presented under their referents as their modes of presentation, or "directly referential," if a Fregean theory of propositional contents were presupposed. This is the case because according to Kaplan, the meaning of an indexical term is identifiable with its referent. Considering that the content and character of an indexical on Kaplan's semantics are identified with its referent can help us see why.<sup>64</sup> Since content, character, and the referent of a term are the only candidates for its meaning,<sup>65</sup> if all three are equivalent to the referent itself in the case of an indexical term,<sup>66</sup> the informational values of indexical terms must be identified with their referents. If a Fregean theory would equate the informational value of a term with its mode of presentation, it follows that the Fregean sense of an indexical concept on Kaplan's account would be its referent.

There are very few widely endorsed theories of indexicals on which these have a descriptive content whose informational value is not identical to that of its referent in the contemporary literature. Historical views of indexicals on which these are construed as having descriptive contents include those of Russell and Reichenbach. Francesco Orilia also attempts a contemporary defense of descriptivism. However, as Orilia notes in introducing his view:

"[T]he current scene in the philosophy of language is hostile to [descriptivism]. Since at least the seventies of the last century, in the light of important works by Donnellan, Kripke, and Kaplan, *Referentialism* about proper names and indexicals has become dominant. According to this view, these singular terms are *directly referential*, that is, their meanings are not descriptive contents, but simply their referents."

This passage both confirms that referentialist views of indexicals take "their meanings" to be "their referents" and highlights one reason why most accounts of phenomenal concepts propounded by a posteriori physicalists on which these are pure or demonstrative indexicals take phenomenal concepts to be directly referential, or "directly referential" if a Fregean view of contents is assumed. Chalmers seconds this point when he writes that "those who use these analyses [in terms of indexical concepts] to rebut anti-materialist arguments typically rely on

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<sup>62</sup> Soames 2010 (p. 97).

<sup>63</sup> Soames 2010 (p. 93).

<sup>64</sup> Devitt 1989 (p. 215).

<sup>65</sup> *ibid.*

<sup>66</sup> *ibid.*

analogies with the epistemic and referential behavior of ordinary (Kaplan-style) demonstratives.”<sup>67</sup> Hawthorne,<sup>68</sup> Loar,<sup>69</sup> and Levin<sup>70</sup> are among those who propose views on which phenomenal concepts are Kaplan-style indexicals. However, if my analysis concerning the incompatibility of a Fregean view of propositional contents with non-transparent, “directly referential” concepts is correct, views of phenomenal concepts on which these are indexicals with descriptive contents whose informational values are not identical to those of their referents are the only permissible views of indexical phenomenal concepts for those who would want to avoid claiming that phenomenal concepts are transparent.

### VIII. Conclusion.

In this paper, I have argued that a Fregean view of thought contents constrains a posteriori physicalists to accounts of phenomenal concepts on which these have descriptive contents that do not reveal the complete natures of their referents. I did this by showing that alternative proposals would make phenomenal concepts transparent. This consequence would be detrimental to the physicalist view due to the conflict it creates between two key physicalist commitments. The first is that physical-functional aspects of conscious states belong to the essences of those states. The second is the a posteriority of identities between brain states and the way they subjectively feel. If physical-functional aspects of conscious states belong to their essences, then if phenomenal concepts are transparent, it also follows that we are aware of those aspects of phenomenal properties in deploying phenomenal concepts. However (leaving aside the armchair intuition that deploying phenomenal concepts doesn’t seem to actually make us aware of those aspects of brain states), the deployment of a phenomenal concept cannot reveal all of these aspects of conscious states without making the identities between brain states and the way they subjectively feel *a priori*.

In making this point, I first argued that rejecting “direct reference” is necessary for non-transparency due to the widely shared assumption that phenomenal concepts are constituents of thoughts whose contents are Fregean propositions. Since Fregean senses are identified not only with reference-fixing conditions, but also with informational values associated with referents, trying to impose a direct reference view of concepts on a Fregean view of contents lends itself to the identification of the sense of a “directly referential” concept with the informational value of a complete description or non-descriptive specification of its referent. This amounts to the concept’s mode of presentation being identical to the referent itself if thought contents are individuated by Frege’s criterion, which guarantees the satisfaction of the condition on transparency: that the concept’s sense includes all of the essential features of its referent. Due to the proponent of non-transparency’s need to reject views of phenomenal concepts on which they

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<sup>67</sup> Chalmers 2010 (p. 260-261).

<sup>68</sup> Hawthorne 2002 (p. 32).

<sup>69</sup> Loar 1990 (p. 87).

<sup>70</sup> Levin 2007 (p. 90-91).

are “directly referential,” a posteriori physicalists who reject transparency may only adopt descriptivist indexical views, which are not very popular based on certain features of indexicals. They might plausibly also endorse views on which phenomenal concepts are simply like non-transparent descriptivist concepts of singular terms, although I did not discuss this type of view in detail in this essay as it has not been well-documented by others as being among the existing mainstream positions. In ruling out the positions that would make phenomenal concepts transparent, I went into detail about the implications of my thesis for actual accounts of phenomenal concepts adopting those positions that have been introduced as being compatible with a posteriori physicalism.

I take my main achievement in this paper to have been highlighting a tension between the way phenomenal concept theorists have described the view of propositional content underlying their project and the semantics of direct reference that many have employed in developing their own accounts of “directly referential” phenomenal concepts. Together, the Fregean theory of content that has been taken for granted by phenomenal concept theorists cannot be combined with the theory of meaning often associated with direct reference without the consequence of the transparency of phenomenal concepts. In summary, commitment to a Fregean theory of content makes structuring phenomenal concepts in such a way that they are “directly referential” unpalatable for a posteriori physicalists who wish to deny the transparency of phenomenal concepts.

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