

Phenomenal Concepts as Complex Demonstratives

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Abstract: There's a long but relatively neglected tradition of attempting to explain why many researchers working on the nature of phenomenal consciousness think that it's hard to explain. David Chalmers argues that this "meta-problem of consciousness" merits more attention than it has received. He also argues against several existing explanations of why we find consciousness hard to explain. Like Chalmers, we agree that the meta-problem is worthy of more attention. Contra Chalmers, however, we argue that there's an existing explanation that is more promising than his objections suggest. We argue that researchers find phenomenal consciousness hard to explain because phenomenal concepts are complex demonstratives that encode the impossibility of explaining consciousness as one of their application conditions.

1. Introduction

In the mid 1990s, Chalmers (1995, 1996) foregrounded a range of questions concerning the nature of phenomenal consciousness, the phenomenon of what it's like to feel or consciously experience something. Chalmers popularized questions concerning the relationship between physical and phenomenal entities in particular, including, especially, the question of whether and how phenomenal properties (such as what it is like to be in a state of pain) can be explicated fully in terms of physical properties (such as, taking a well-worn toy example, the property of neural c-fibers firing). He calls the challenge of providing an answer to these kinds of questions the "hard problem of consciousness" ("*hard problem*"). Hundreds of articles and dozens of books have been published in the wake of his work, confirming Chalmers's titular presumption that the problem is a hard one.

Now, 23 years or so years later, in his article "The Meta-Problem of Consciousness," Chalmers (2018) attempts to popularize a new but related range of questions about consciousness. The central question is why we *think* that the hard problem of consciousness is such a hard problem, as it seems we do given the sheer volume of publications on the

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problem. Aptly, Chalmers calls the challenge of explaining why we think the hard problem is hard the “meta-problem of consciousness” (“*meta-problem*”).²

Chalmers doesn’t aim to introduce the meta-problem. As he notes, that ship arguably sailed in the 17th century with Hobbes and Hume at the helm, among others. Nor is his goal to even defend a particular solution to the problem, though one of the major contributions of his article is an extensive, opinionated guide as to which solutions might be more promising than others. Rather, Chalmers’s main goal is to organize much of the discussion on the topic and chart some paths for future inquiry, such that other researchers might end up in a position to work on the many issues that the meta-problem brings out even more profitably. We find ourselves, the authors of this reply, in that very position. Thus, Chalmers’s intervention in the debate is already something of a success.

Nevertheless, we find Chalmers’s discussion of one such solution to the meta-problem wanting. Our main goal in this reply is to defend a version of this solution. The rest of the paper’s first half adds to Chalmers’s case that the meta-problem is worthy of attention. In the second half, we defend a version of what Chalmers calls, following many others, the “phenomenal concept strategy”. According to it, a special feature of the *concepts* involved in thinking about consciousness explains why we think that the hard problem is hard. The version we develop takes inspiration from Nagel (2000) and Levin’s (2007) twist on an influential version of the strategy, found in Loar (1997), among others.³ Our defense has two prongs. The first involves developing a worry for our preferred view that is inspired by Chalmers, but ultimately showing that there are responses to it available. The second involves illustrating how the version of the phenomenal concept strategy that we float explains much that needs explaining.

2. The Meta-Problem, What

Try to suppose that the experience of being in pain can be understood entirely in terms of c-fibers firing in the brain. You might have a hard go of it. But, if so, you also wouldn’t be alone. Phenomenal properties appear to many researchers to escape full explication in terms of non-phenomenal properties, including, especially, physical properties. It appears to

² Laskowski (2019, 2020) draws attention to a seemingly analogous meta-problem in metaethics concerning why researchers find it so hard to believe that normative properties could be explained in terms of natural properties.

³ See Diaz-Leon (2016), Elpidorou (2017), Schroer (2010) and Veillet (2015) for related ideas developed more recently. While these philosopher’s views of phenomenal concepts resemble our own in some ways, there have not yet been any explicit and sustained attempts to show that such views can solve the meta-problem. Diaz-Leon (2020) comes closest, but appears in the end to offer a different kind of solution than our own.

many researchers that the experience of being in pain cannot be identified with or, more generally, metaphysically “reduced” to the physical property of being c-fibers firing in the brain. That so many researchers doubt the reduction calls out for explanation. Chalmers calls the judgment that phenomenal properties are irreducible in this sense the “explanatory” or “metaphysical” intuition.⁴ He says that explaining such a “problem intuition” is part of the meta-problem. One of our main goals is to explain why we have the explanatory or metaphysical intuition.

While explaining the explanatory or metaphysical intuition seems part of the meta-problem, Chalmers also says it’s not the only part. Another set of “problem intuitions”, which Chalmers calls our “modal intuitions”, include judgments about the conceivability of various scenarios involving consciousness. We’ll now present an account of phenomenal concepts that explains some of our modal intuitions, which we will subsequently use to mount an account of the explanatory or metaphysical intuition.

3. Explaining Modal Intuitions

Distinguish *positive* modal intuitions from *negative* modal intuitions. The former are positive because they involve meta-problematically *conceivable* possibilities, such as “zombie worlds”, worlds physically indiscernible from our own but where no phenomenal properties are instantiated. The latter are negative because they involve meta-problematically *inconceivable* possibilities, like the *a priori* knowable fact that, necessarily, kicking a rock doesn’t cause it pain.⁵ How can we explain such intuitions?

Proponents of the influential *phenomenal concept strategy* do so using claims about the concepts through which we conceive of scenarios involving phenomenal properties (“phenomenal concepts”). Their distinctive claim is that our modal intuitions arise from features of the concepts involved in phenomenal thought, not from features of the phenomenal properties to which the question of reduction applies. For example, phenomenal concept strategists like Loar (1997) suggest that the alleged *demonstrativity* of phenomenal concepts like PAIN explains our positive modal intuitions, like the conceivability of zombie worlds.⁶ That is, using PAIN to think about the painfulness of stubbing one’s toe is thinking of pain through the demonstrative concept THAT_(MENTALLY OSTENDING INWARDS). Loar appeals to demonstratives like THAT and THIS because they

⁴ We don’t think there’s much daylight between “explanatory” and “metaphysical” intuitions, nor does Chalmers, it seems, as he characterizes the two as “related”. Chalmers (2018, 12) Also, all citations of Chalmers are to be understood as references to his symposium contribution unless otherwise noted.

⁵ See Yablo (2008) Chapter 5

⁶ Words in capital letters denote concepts.

have few if any analytic or otherwise *a priori* connections to other concepts. After all, demonstratives' meanings are flexible enough to denote any object whatsoever, or very nearly so. In particular, demonstrative concepts lack *a priori* connections to physical concepts; nothing about the physical follows *a priori* from thoughts involving demonstrative concepts like THAT or THIS. We'll coin a term for this feature: demonstrative concepts like THAT and THIS lack "physical-descriptive content".

Since demonstrative concepts like THAT lack physical-descriptive content, we can, without any rational failing, use our physical concepts to conceive of a world that is physically identical to ours (e.g., where a toe is stubbed and c-fibers fire) without thereby deploying the corresponding demonstrative-phenomenal concepts to conceive of the phenomenal upshots of that physical conception (e.g. where pain is experienced upon such stubbing). Because this account proposes to explain a modal intuition using features of *concepts* like PAIN, such as their alleged demonstrativity, rather than features of *properties* like pain, it is a version of the phenomenal concept strategy.

Chalmers discusses this strategy as a potential solution to the meta-problem, under the heading of "phenomenal concepts" (21). In particular, he also discusses the version of the phenomenal concept strategy that we used above, calling it an "indexical" view.⁷ According to Chalmers, such views are "too 'thin'" to explain the problem intuitions constitutive of the meta-problem (22). In particular, he says, "when we pick out a state indexically as 'this state', we are silent on its nature and there is no obvious reason why it should generate problem intuitions." Chalmers doesn't say why he thinks that such a view fails to explain our problem intuitions.⁸ His discussion is unfortunately brief, though understandably so given his overarching goals. Nevertheless, we think there's an interesting way to sharpen Chalmers's "thinness" complaint about explaining modal intuitions using demonstrative, phenomenal concepts.

Concepts like THIS generally lack descriptive content, and so lack physical-descriptive content in particular. This feature allows phenomenal concept strategists to explain positive modal intuitions like the conceivability of zombies. However, it also appears to prevent such concepts from being able to explain other facets of the problem, like *negative* modal intuitions. Just as zombie worlds are conceivable, worlds where rocks physically identical to our own feel pain when kicked by Johnson in apocryphal refutations of Berkeley are inconceivable. But if PAIN wholly lacks physical-descriptive content, then agonized rocks

⁷ Chalmers uses "indexical" as a label for views on which phenomenal concepts are demonstratives. But he doesn't use this label for Loar's view, which is one on which phenomenal concepts are also a kind of demonstrative concept. Chalmers is following the literature in this regard, but it's worth noting that the literature is in this and various others ways misleading.

⁸ To be fair, Chalmers appeals to earlier work of his as providing further evidence against the view.

should be conceivable. After all, we're supposing that PAIN lacks physical-descriptive content - that's Chalmers's "thinness" complaint. If it lacks such content, we should be able to conceive of objects in pain whatever their physical makeup. But we cannot conceive of agonized rocks, plausibly owing to their physical makeup. So, PAIN has more physical-descriptive content than THAT.⁹

Framing this Chalmers-inspired, "thinness" complaint in these terms foregrounds the response on behalf of the phenomenal concept strategy that we wish to develop. The complaint is that concepts like THAT lack enough physical-descriptive content to mount a promising explanation of *all* of our modal intuitions. We agree. But THAT is a *simple* demonstrative and its lack of physical-descriptive content originates in its simplicity not its demonstrativity, whereas what's essential to the phenomenal concept strategy described above is essentially demonstrative, not essentially simple.

Consider, then, another version of the phenomenal concept strategy—one that appeals to *complex* demonstrative expressions (e.g., "that *biological state*"). Such an expression plausibly has physical-descriptive content, such as BIOLOGICAL.¹⁰ Were PAIN to consist in THAT BIOLOGICAL STATE, a simple explanation is possible of why painless-zombie duplicates of ourselves are conceivable and agonized duplicates of rocks are not: rocks do not instantiate biological states. Chalmers's complaint reveals that phenomenal concept strategists must attribute a "Goldilocks" level of physical-descriptive content to phenomenal concepts: not too little, so that agonized rocks are inconceivable, and not too much, so that zombies are conceivable.

Complex demonstratives suggest a model for how this additional content is encoded at the level of phenomenal concepts. Because complex demonstratives are demonstrative, they encode comparatively little information. However, because they are complex, they encode at least some. A version of the phenomenal concept strategy on which phenomenal concepts are complex demonstrative concepts, rather than simple demonstrative concepts, looks like it can explain our modal intuitions. Such a view promises to explain part of the meta-problem.

It seems to us, then, that the phenomenal concept strategy has more going for it than Chalmers's discussion suggests, at least with respect to explaining some aspects of the meta-

⁹ Anecdotally, while many people with whom we have discussed these ideas agree with us that rocks experiencing agony is inconceivable, some have said otherwise, pointing to cartoons in which (say) rocks wince and cry out as evidence against our claim. We're skeptical that such depictions constitute evidence for the conceivability of rocks experiencing anything, but we see little to be gained from intuition mongering. Nevertheless, we think a conditionalized statement of our conclusion would still be of interest.

¹⁰ This kind of view is suggested in Nagel (2000) and Levin (2007).

problem.¹¹ This isn't to say that "going complex-demonstrative" is a panacea for problems with the phenomenal concept strategy. Proponents of such a view must confront a host of tricky issues. For example, both "spiky-haired boy" and "skateboards" denote attributes of Bart Simpson. But the adjectives behave differently in the sentence "that spiky-haired boy skateboards". If Bart Simpson failed to skateboard, the sentence would be false. But if he failed to have spiky hair or were he a girl, things are much less clear. Would the sentence fail to refer or fail to meet a presupposition, and so lack a truth-condition, Strawson-style? Is the role of "spiky-haired boy" simply heuristic, helping us to identify the intended referent of "that", and so makes no difference to the sentence's truth-conditions?

If the latter, then "that spiky-haired boy skateboards" and "that skateboards" express precisely the same content under appropriate conditions, which is bad news for complex phenomenal concept strategists hoping to answer Chalmers's complaint. For if the contribution of "spiky-haired boy" isn't manifest in the content expressed by "that spiky-haired boy skateboards", then complex demonstratives' complexity isn't manifest in thought, particularly in thought employing phenomenal concepts.¹² And if demonstrative concepts don't manifest complexity, then "going complex demonstrative" won't help with worries about their "thinness". We raise this worry not to suggest that it can't be met, but rather to illustrate that the benefits of explaining our modal intuitions using a complex demonstrative version of the phenomenal concept strategy don't come for free.

Nevertheless, we think that the complex view is promising enough to make addressing these difficulties worthwhile. For in addition to explaining our modal intuitions, the complex phenomenal concept strategy can explain another "problem intuition" constitutive of the meta-problem, namely, the explanatory or metaphysical intuition - the pervasive judgment that it is simply not possible to explain phenomenal properties in terms of other kind of properties, including, especially, physical properties. Or so we'll now argue.

4. Explaining the Explanatory or Metaphysical Intuition

We've suggested that phenomenal concepts like PAIN could be complex demonstratives like THAT BIOLOGICAL STATE. Our motivation for including the concept BIOLOGICAL was to illustrate how complex phenomenal concepts could help explain certain modal intuitions. However, that discussion used BIOLOGICAL as a kind of

¹¹ Though we suspect that Chalmers would be open to admitting as much. As he writes, "It may be that some other feature of phenomenal concepts can both explain our problem intuitions and be explained in physical terms, but if so it is this feature that will be doing the explanatory work" (22). On the view we're floating, the "physical-descriptive content" we suggest is encoded by complex demonstratives is that "other" feature doing the work.

¹² See Lepore and Johnson (2003).

placeholder for whatever concept would allow a proponent of such a view to explain everything that needs explaining. This approach shows only that Chalmers's complaint that "indexical" strategies are too thin does not apply to every version of the phenomenal concept strategy. We can "fatten up" phenomenal demonstrative concepts by making them complex.

But modal intuitions aren't the only intuitions that need explaining. The widespread metaphysical intuition that phenomenal properties can't be explained in terms of physical properties also needs explaining. This suggests that one candidate concept to consider slotting into complex phenomenal concepts is something like NON-PHYSICAL. Perhaps the phenomenal concept PAIN is something like the complex demonstrative concept THAT NON-PHYSICAL STATE.¹³

If so, reflecting on a reductive thesis like that the experience of pain is the experience of one's c-fibers firing involves using the phenomenal concept THAT NON-PHYSICAL STATE and the physical concept C-FIBERS FIRING. Because the former concept is constituted such that it cannot easily be applied to the same kind of entity as the latter concept, researchers reflecting on such a thesis are led to think that it can't be true. Thus, the view that phenomenal concepts are complex demonstrative concepts promises to

¹³ This idea is inspired by a similar suggestion that we develop in metaethics with respect to normative concepts. See Howard and Laskowski (forthcoming).

explain not only the explanatory or metaphysical intuition but also another, central part of the meta-problem.¹⁴

We suspect that the proposed solution will strike many as *ad hoc*. But it's harder to make this complaint stick than one might expect. What exactly is supposed to be *ad hoc* about the suggestion that phenomenal concepts are complex demonstrative concepts of the form THAT NON-PHYSICAL STATE? That ordinary thinkers possess complex demonstrative concepts cannot be doubted: both authors are now currently ostending mentally with the complex-demonstrative concept THAT GREY LAPTOP. Nor can it be doubted that we possess complex-demonstrative concepts containing contents that are as theory-laden as NON-PHYSICAL. We possess all sorts of concepts that are theory-laden, like the folk-physical concept ATOM, which for many, seems to encode something like the theory-laden (and mistaken) concept INDIVISIBLE.

Nevertheless, we can see why someone might think that there must be *something ad hoc* about including NON-PHYSICAL, in particular, as a constituent of a phenomenal concept. In the context of a debate about the nature of phenomenal consciousness, it's easy to imagine the possible metaphysical implications of building NON-PHYSICAL into

¹⁴ We billed our explanation of the intuition that phenomenal properties can't be explained in terms of physical properties as a version of the phenomenal concept strategy. Crucial to this strategy is the claim that phenomenal properties are identical to physical properties. However, if the concept PAIN is the concept THAT NON-PHYSICAL STATE, it seems to follow that it is a priori false that what it is like to experience being in a state of pain is just being in a state in which one's c-fibers are firing. Consequently, it might seem that our solution to the meta-problem of consciousness conflicts with the core metaphysical pillar of the phenomenal concept strategy.

There are several replies to this objection. First, it is available to us to follow Boghossian (1996) in distinguishing *metaphysical* from *epistemic analyticity*, or, roughly, the metaphysical idea of truth in virtue of meaning and the rather different idea of being disposed to accept a sentence in virtue of one's semantic competence and pro tanto justified in doing so. If we reject the former and accept the latter, as some have suggested, then the truth or falsity of 'pain is c-fibers firing' does not depend on its constituent concepts, i.e., it does not depend on our proposed constituent, THAT NON-PHYSICAL STATE. Thus, it would not be a priori false (because not metaphysically analytically false) that pain is c-fibers firing. Moreover, on the epistemic reading, being semantically competent with PAIN would consist in being disposed to accept that pain is non-physical and hence reject that pain can be explained physically, which is precisely the phenomenon of the 'meta-problem'.

Second, there are several ways (see, *inter alia*, Del Pinal (2018)) of making the claim that while THAT NON-PHYSICAL STATE is semantically associated with the concept PAIN, it doesn't play a role in fixing reference. For example, Recanati (2010) argues that 'lion' means the same thing in an utterance of "There is a lion on the savannah" as it does in an utterance of "There is a lion in the piazza", even if the latter refers to and is made true by a lion *statue*. If that is true, and it's also true, as it seems to us, that "lions are mammals" is analytic, then that analytic content does not constrain the reference of "lion", since it can refer to a statue. Thus, it could still be true that pain is c-fibers firing yet THAT NON-PHYSICAL STATE is semantically associated with PAIN. While other paths are also available, our point is just that there is much more required to establish that our solution to the meta-problem is inconsistent with the phenomenal concept strategy. Thanks to an anonymous reviewer for inviting us to consider this challenge, which we hope to explore further in the space allowed by future work.

phenomenal concepts. Recall, however, that we're following Chalmers in maintaining that the debate with which we're engaged concerning the meta-problem is principally a debate about our psychology, not about metaphysics. So, metaphysical implications are only indirectly relevant. Finally, we'll add that including NON-PHYSICAL in some phenomenal concepts is justified by its clear theoretical payoffs.

Consider a second objection. In the context of explaining our modal intuitions, we suggested, following Levin, that phenomenal concepts like PAIN might be complex demonstrative concepts of the form THAT BIOLOGICAL STATE. Doing so seemed to limit the content of the concept enough to allow zombie worlds, but not limit it so much that we could also conceive of agonized rocks. Because the inclusion of BIOLOGICAL helped explain the latter bit, swapping in NON-PHYSICAL for BIOLOGICAL might allow us to explain the explanatory or metaphysical intuition, but only at the cost of no longer allowing us to explain the full range of our modal intuitions. This is one step forward, one step right back.

We agree with the spirit of this complaint. The name of the game is, as we've said, to find a "Goldilocks" complex demonstrative concept that helps explain everything about the meta-problem of consciousness that needs explaining. While THAT NON-PHYSICAL STATE might not do the trick, something like THAT NON-PHYSICAL STATE OF A NEUROLOGICALLY COMPLEX BEING might. In any case, we don't mean to defend a particular version of the complex-demonstrative, phenomenal concept strategy. Our aim is much less ambitious; it is simply to show how this style of explanation *might* explain the meta-problem. We take ourselves to have succeeded in this modest regard.

5. Conclusion

At a very high level of abstraction, we think the problem facing phenomenal concept strategists is a very old one. The most general form of the problem is the question of how to characterize the *criterion of application* for certain singular referring terms like, plausibly, some names and demonstratives. This problem has a distinguished pedigree. On the way to formulating the ill-fated Axiom V, Frege offered and rejected 'Hume's Principle' as a definition of number. According to it, roughly, the number of the members of F is the same as the number of members of G just in case there is a bijection between the members of F and the members of G . Hume's principle offers what has come to be called a *criterion of identity* for numbers: the number of two concepts is identical just in case there is a bijection between them. But Hume's Principle doesn't tell us something essential to the concept of number: it doesn't tell us what entity the concept denotes; it doesn't offer us

what has come to be called a *criterion of application* for the concept. As a particular example Frege raises in section 56 of the *Grundlagen*, because the Principle doesn't offer a criterion on what the concept of number denotes, it leaves open a question the answer to which everyone who grasps the concept of number knows, namely, that Julius Caesar is not a number. Because Frege wanted to reduce arithmetical knowledge to logical knowledge, and because everyone knows that Julius Caesar is not a number, then Hume's Principle's lack of a criterion of application made it an insufficiently rich logical basis by which to explain arithmetical knowledge. Frege's conception of zero does not explain why, say, Julius Caesar is not the number zero.

What's striking about Frege's own objection to the use of Hume's Principle in his logicist project is what Frege presupposes about our grasp of the concept of a number. Frege takes it for granted that ZERO is at least partially constrained such that, analytically, it does not apply to Julius Caesar. That is, far from regarding it as controversial that ZERO implied such a constraint on its extension, Frege took it as a *basic explanandum* to be explained by any eligible account of arithmetical knowledge. But, presumably, the content associated with ZERO that underlies *a priori* knowledge that Julius Caesar is not the number zero only partially constrains ZERO's reference. Phenomenal concept strategists face the same problem of explaining how we can know that rocks don't feel pain in a way that leaves open certain possibilities we know to be open, such as the possibility of zombie worlds. We take complex demonstratives to offer a way forward here, at least as regards phenomenal concepts like PAIN.¹⁵

References

- Paul Boghossian. 1996. "Analyticity Reconsidered", *Noûs* 30: 360–91.
- David Chalmers. 1995. "Facing Up to the Problem of Consciousness". *Journal of Consciousness Studies* 2 (3): 200–19.
- David Chalmers. 1996. *The Conscious Mind: In Search of a Fundamental Theory*. New York: Oxford University Press.
- David Chalmers. 2018. "The Meta-Problem of Consciousness". *Journal of Consciousness Studies* 25 (9-10): 6–61

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- Guillermo Del Pinal. 2018. "Meaning, modulation, and context: a multidimensional semantics for truth-conditional pragmatics". *Linguistics and Philosophy* 41: 165–207.
- Esa Diaz-Leon. 2016. "Phenomenal concepts: Neither circular nor opaque". *Philosophical Psychology* 29 (8): 1186–1199.
- Esa Diaz-Leon. 2020. "The Meta-Problem of Consciousness and the Phenomenal Concept Strategy". *Journal of Consciousness Studies* 27 (5–6) 62–73.
- Andreas Elpidorou. 2017. "A Posteriori Physicalism and Introspection". *Pacific Philosophical Quarterly* 98 (1): 474–500.
- Nathan Robert Howard and N. G. Laskowski. Forthcoming. "The World is Not Enough". *Noûs*.
- Kent Johnson and Ernie Lepore. 2002. "Does Syntax Reveal Semantics? A Case Study of Complex Demonstratives". *Noûs* 36 (16): 17–41.
- N. G. Laskowski. 2019. "The sense of incredibility in ethics". *Philosophical Studies* 176 (1): 93–115.
- N. G. Laskowski. 2020. "Resisting Reductive Realism". In *Oxford Studies in Metaethics Volume 15*, edited by Russ Shafer-Landau, 96–117. Oxford: Oxford University Press.
- Janet Levin. 2007. "Nagel vs. Nagel on the Nature of Phenomenal Concepts". *Ratio* 20 (3): 293–307.
- Brian Loar. 1997. "Phenomenal States". In *The Nature of Consciousness: Philosophical Debates*, edited by Ned Block, Owen Flanagan, and Güven Güzeldere. 597–616. United States: MIT Press.
- Thomas Nagel. 2000. "The Psychophysical Nexus". In *New Essays on the A Priori*, edited by Paul Boghossian and Christopher Peacocke, 433–471. New York: Oxford University Press.
- Francois Recanati. 2010. *Truth-Conditional Pragmatics*. Oxford: Oxford University Press.
- Robert Schroer. 2010. "Where's the Beef? Phenomenal Concepts as Both Demonstrative and Substantial". *Australasian Journal of Philosophy* 88 (3): 505–22.
- Bénédicte Veillet. 2015. "The cognitive significance of phenomenal knowledge". *Philosophical Studies* 172 (11): 2955–2974.
- Stephen Yablo. 2008. *Thoughts: Papers on Mind, Meaning, and Modality*. Oxford: Oxford University Press.