Social Externalism and the Knowledge Argument

According to social externalism, it is possible to possess a concept not solely in virtue of one’s intrinsic properties but also in virtue of relations to one’s linguistic community. Derek Ball (2009) argues, in effect, that (i) social externalism extends to our concepts of colour experience and (ii) this fact undermines both the knowledge argument against physicalism and the most popular physicalist response to it, known as the phenomenal concept strategy. I argue that Ball is mistaken about (ii) even granting (i). The knowledge argument and the phenomenal concept strategy might have to be modified to make them consistent with social externalism but not in fundamental or detrimental ways.

You might possess the concept of arthritis even if your conception of that disease—roughly, your set of associated beliefs—is highly inaccurate or deeply impoverished. The concept is yours but, if you are like most people, you are willing to defer to experts regarding its extension. Such claims are associated with social externalism (Burge 1979, 1982, 1986, 1993, Putnam 1970, 1975a), which for present purposes may be stated as follows: it is possible to possess a concept not solely in virtue of one’s intrinsic properties but also in virtue of relations to one’s linguistic community.¹

Proponents of social externalism argue that it extends to a great many of our concepts. But they rarely discuss phenomenal concepts. Derek Ball (2009) adapts arguments for social externalism to show that no such concepts exist. That result, he argues, undermines both the knowledge argument against physicalism (Jackson 1982, 1986, 1995) and the most popular physicalist response to it, known as the phenomenal concept strategy (e.g. Loar 1997).²

I will defend an objection to Ball’s argument that he considers and rejects: the concept-mastery objection. The objection turns on formulating his opponents’ claims in terms of concept mastery instead of concept possession. If my arguments are sound, then the knowledge argument and the phenomenal concept strategy might have to be modified to make them consistent with social externalism but not in fundamental or detrimental ways.

1. The knowledge argument and the phenomenal concept strategy

The knowledge argument is directed against physicalism, which is roughly the view that the world is completely physical. In Frank Jackson’s (1982, 1986, 1995) classic version, the argument begins with the case of Mary, a scientist who is raised in a black-and-white room. She has a perfect reasoning capacity and learns the complete physical truth by watching science lectures on black-and-white television. Then she leaves the room and sees colours for the first time. For example, she sees a red rose. Intuitively, when that happens she learns something, including truths about what it is like to see red. The rest of

¹ Ball does not use the term ‘social externalism’. But it seems apt for relevant aspects of the views of Putnam and Burge to which he appeals.
the argument tends to proceed in one of two ways. On one formulation, the epistemic progress Mary makes upon leaving the room is used to establish that there are non-physical truths about human colour vision. It is then argued that physicalism cannot accommodate the existence of such truths. On the other formulation, Mary’s progress is used to establish non-deducibility, the claim that there are truths about consciousness that cannot be a priori deduced from the complete physical truth. Non-deducibility is then used to establish non-necessitation, the claim that there are truths about consciousness that cannot be a priori deduced from the complete physical truth, which in turn is used to establish physicalism’s falsity. Ball focuses on the first formulation. I mention the second mostly because some of my claims will concern how concept possession and concept mastery relate to a priori deducibility and necessitation (see Sect. 3 below). But my main arguments apply to both formulations.3

On the phenomenal concept strategy, Mary’s post-release epistemic progress can be explained in a way that is compatible with physicalism, in terms of special features of phenomenal concepts. The idea, as Ball understands it, could be put roughly as follows. Mary acquires knowledge because she acquires phenomenal concepts. For example, she learns what it is like to see red because she acquires PHENOMENAL REDNESS. So, her progress shows that phenomenal concepts have distinctive possession conditions. But that is consistent with the physicalist’s claim that the properties phenomenal concepts pick out are wholly physical. So construed, the strategy depends on the new-concepts explanation: the claim that Mary makes epistemic progress when she leaves the room because she acquires concepts of colour experience that she did not previously possess.

Ball argues the knowledge argument too depends on (what I call) the new-concepts explanation. He reasons roughly as follows. According to the knowledge argument, there is some content Q that pre-release Mary does not know. If there is such a content, then while she is still in the room either (i) she can entertain and even believe Q but her belief does not constitute knowledge or (ii) she cannot even entertain Q. Ball illustrates type (i) situations with Martine Nida-Rümelin’s (1995) Marianna case. The latter is just like the Mary case except instead of leaving the black-and-white room Marianna is led into an empty room with differently coloured, unlabelled splashes of paint on the walls. She can entertain but does not know Q. But that is only because she lacks physical information, such as information about the chemical composition of the paint. If she had such physical information, then she could know Q. More generally, Ball writes,

… it does not seem possible to develop a type (i) situation in which the protagonist knows all of the physical facts about colour vision and all of the physical facts about her environment. A protagonist who knew these facts could deduce the relevant phenomenal truths. (Ball 2009, p. 942)

Therefore, ‘no knowledge argument can be developed on the basis of a type (i) situation’ (Ball 2009, p. 942). So, Mary’s pre-release situation must instead be of type (ii): she cannot even entertain Q before leaving the room. That, Ball reasons, must be because Q

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3 Both formulations are firmly rooted in Jackson’s work (1982, 1986, 1995), but the second has been developed in more detail by Chalmers (2004, 2010a).
contains some concept that she does not possess until she leaves the room. That in turn suggests the new-concepts explanation.  

2. Ball’s main argument

Ball’s main argument can be stated initially as follows. Phenomenal concepts have strong possession conditions. Social externalist arguments show that none of our concepts of experience satisfy those conditions. Therefore, there are no phenomenal concepts and so the new-concepts explanation is false. The knowledge argument and the phenomenal concept strategy both depend on the new-concepts explanation. Thus, both fail.

We saw in the preceding section why Ball thinks that the knowledge argument and the phenomenal concept strategy depend on (what I call) the new-concepts explanation. Let us now examine the rest of his main argument, beginning with the idea that phenomenal concepts have strong possession conditions. He proposes what he calls The Phenomenal Concepts Criterion (PCC). It says that if there is a phenomenal concept C then:

1. There is some phenomenal experience type e, and some property p, such that experience tokens fall under e in virtue of their relation to p
2. C refers to p
3. Under normal circumstances, a human being can possess C only if she has had an experience of type e (Ball 2009, p. 938)

Ball adduces three considerations in favor of PCC. First, many phenomenal concept theorists—proponents of either the knowledge argument or the phenomenal concept strategy—endorse PCC or a similar criterion. Second, most popular theories of phenomenal concepts commit their adherents to it. For example, on the quotational theory (Papineau 2002, 2007, Block 2006) phenomenal concepts refer by sampling a phenomenal property, and ‘in normal cases such a sample could do its job only by being experienced’ (Ball 2009, p. 939). Third, (what I call) the new-concepts explanation depends on PCC.

Let us now turn to social externalism. On this view, one could acquire arthritis without knowing much about arthritis, simply by acquiring a word that expresses that concept in one’s linguistic community. In Tyler Burge’s (1979) well-known example, a man believes he has developed arthritis in his thigh. When his doctor explains that arthritis is a disease of the joints and so cannot occur in the thigh, he will presumably concede that his earlier belief was false. Even before she enlightens him about the nature of arthritis, the doctor and her patient can agree that he has arthritis in his ankles. As Ball emphasizes, the possibility of such agreement seems to require that the two share a single arthritis concept. It is no mystery how that came about. Presumably, both picked up a public-language term that expresses the concept—a term such as ‘arthritis’.

Ball considers and rightly rejects two other possible explanations of why pre-release Mary cannot entertain Q. One is that although she possesses the concepts in Q she cannot combine them appropriately. That cannot be correct because it would entail a limitation on her reasoning ability. The other is that Q contains indexical concepts and ‘Every context in which Mary could use these concepts in her room is such that these concepts do not express [Q]’ (Ball 2009, p. 942). Knowledge argument proponents cannot appeal to this explanation either because ‘there is no obvious reason that the indexical concepts in question should not refer to physical entities’ (Ball 2009, p. 943).
Ball argues that similar reasoning applies to our concepts of experience. While still in the black-and-white room, Mary might share various beliefs about colour experiences with colour-sighted interlocutors outside the room. For example, she might agree, perhaps based on their testimony, that seeing red is phenomenally more similar to seeing black than to hearing a trumpet play middle C. Because she has such beliefs, she must be able to entertain their contents. This in turn implies that she possesses all the concepts those contents contain, despite her impoverished conception of what it is like to see red. And as in the ARTHRITIS case, there is no mystery about how she acquires concepts of colour experience: she acquires words that express them. Such words might occur in the science lectures she watches or in conversations with outside interlocutors.

We are now in a position to summarize Ball’s main argument in more detail than we did at the beginning of this section, as follows:

1. PCC.
2. Our concepts of experience all conform to social externalism (specifically, they can be acquired by acquiring words others use to express them).
3. If (i) PCC and (ii) our concepts of experience all conform to social externalism, then there are no phenomenal concepts.
4. If there are no phenomenal concepts, then the new-concepts explanation is false.
5. If the new-concepts explanation is false, then the knowledge argument and the phenomenal concept strategy fail.
6. Therefore, the knowledge argument and the phenomenal concept strategy fail.

3. The concept-mastery objection
For the sake of argument, I grant premises 2-4. The concept-mastery objection challenges premises 1 and 5. It can be stated as follows. Phenomenal concept theorists can reject PCC, (i.e. premiss 1) by arguing that it is mastery, not mere possession, of

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5 One might think that Burgean arguments are not needed to establish that Mary can acquire concepts of colour experience before leaving the room, reasoning as follows: ‘Anything can cause anything. So, why couldn’t watching black-and-white lectures cause Mary to have a vivid red after-image, thus supplying her with a concept of colour experience?’ However, Mary’s having a vivid red after-image while in the room, whatever the cause, would plainly violate the presuppositions of the thought experiment. The point of putting her in a black-and-white room is, after all, to prevent her from having colour experiences. By contrast, social externalism seems to provide a way for pre-release Mary to acquire concepts of colour experience that does not entail her having colour experiences.

6 However, I will mention one objection to premiss 4. The science lectures Mary watches are presented in the language of completed science, and it is far from clear that this language would include terms that express concepts of colour experience. Further, the addition of such terms to that language can hardly be regarded as innocent in light of social externalism. In the dialectical context of the knowledge argument, we cannot at the outset rule out the possibility that the concepts those terms express encode non-physical information. So, given social externalism, adding such terms might inadvertently supply Mary with relevant non-physical information. Based on those considerations, one might argue as follows: ‘If pre-release Mary lacks access to terms that express concepts of colour experience, then she does not acquire such concepts until she leaves the room. That gives rise to the possibility that the new-concepts explanation is true even though, because no concepts satisfy PCC, there are no phenomenal concepts.’ There may be something to that objection. But it depends on controversial assumptions about the commitments of physicalism that I cannot pursue here, such as whether all physical truths can be expressed in a fully objective language (Alter 1998, Chalmers and Jackson 2001, and Howell forthcoming). For an important challenge to social externalism, and thus to premiss 2, see Pereboom 1995.
phenomenal concepts that normally requires having relevant experiences. As Ball puts the point, phenomenal concept theorists could reject PCC in favor of PCC*, a criterion that replaces clause 3 of PCC with the following: ‘Under normal circumstances, a human being can non-diffentially or fully possess C only if she has had an experience of type e’ (Ball 2009, p. 955). Social externalism is perfectly consistent with the existence of phenomenal concepts in the sense of PCC*. Phenomenal concept theorists can also reject premise 5. They invoke phenomenal concepts in order to explain the epistemic progress Mary makes when she leaves room. But they need not claim that she then acquires such concepts. They can reject the new-concepts explanation in favor of the concept-mastery explanation: the claim that Mary makes epistemic progress when she leaves the room because she comes to master phenomenal colour concepts.\(^7\)

The concept-mastery objection relies on a distinction between (a) knowledge under concepts that the knower possesses with mastery and (b) knowledge under concepts that the knower possesses with or without mastery. Let us refer to (a) and (b) respectively as knowledge\(_m\) and knowledge\(_p\) (‘m’ for ‘mastery’ and ‘p’ for possession). The distinction is not specific to phenomenal knowledge; it is perfectly general. Consider Joe and Josie. Joe knows practically nothing about chemistry. For example, although he has heard of atoms and molecules, he could not begin to explain what they are, how the two are related, or how chemical bonding works. By contrast, Josie is an expert chemist. Now take the truth that water is H\(_2\)O. Josie knows\(_m\) that truth. Joe might know it too, despite his poor grasp of chemistry. After all, he might possess the H\(_2\)O concept by acquiring a term for it. But if he knows that water is H\(_2\)O, he knows it only in the sense of knowledge\(_p\). Unlike Josie, he does not know\(_m\) that water is H\(_2\)O.\(^8\)

Concept mastery is not an all-or-nothing matter. Also, there are borderline cases, in which it is indeterminate whether knowledge qualifies as knowledge\(_m\). But this does not create problems for applying the distinction to the Mary case. Mary’s pre- and post-release epistemic states are not borderline. After leaving the room, her mastery of phenomenal colour concepts reaches a high level comparable to that of ordinary colour-sighted folk. Before leaving, she does not have anything close to that level of mastery. For simplicity, I refer to her as having mastery of phenomenal colour concepts only after she leaves. In other words, by ‘mastery’ I mean ‘substantial mastery’.\(^9\) It is also important to note that possessing a concept with mastery does not exclude the possibility of misapplying that concept. Josie possesses chemical concepts with mastery, but she might none the less misapply them at least in unusual cases. There might also be cases in which she does not know whether a chemical concept C applies to a sample. In such cases she

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\(^7\) The idea that phenomenal concept theorists are committed to the new-concepts explanation might have seemed suspicious from the start. These theorists often focus less on concept possession than on the inferential relationship between physical concepts and phenomenal concepts. For example, Hill (1997) develops his version of the phenomenal concept strategy by arguing roughly that physical and phenomenal concepts play distinct functional roles in relevant cognitive systems and that the knowledge argument confuses distinct roles for distinct properties playing those roles.

\(^8\) In distinguishing between knowledge\(_m\) and knowledge\(_p\), I am not proposing that the term ‘knowledge’ is ambiguous. That is one possibility, but it seems more natural to say that knowledge claims are context dependent. They refer to knowledge\(_m\) in some contexts and to knowledge\(_p\) in others. However, the semantics of ‘knowledge’ raises complex issues that I cannot settle here.

\(^9\) Even if Mary’s pre- and post-release epistemic states were borderline, it would still be plausible that when she leaves the room she moves towards greater understanding of the relevant truths. Arguably, that change would constitute epistemic progress in the sense relevant to the knowledge argument (Howell 2011).
might defer to another expert or to an authoritative publication. She may nevertheless possess C with mastery. Mastery of a concept does not require omniscience concerning its extension. The same points apply to mastery of phenomenal concepts.\(^\text{10}\)

We could express the concept-mastery objection by saying that the knowledge argument and the phenomenal concept strategy should be formulated in terms of knowledge\(_M\) and related epistemic notions. For example, to learn\(_M\) is to acquire knowledge\(_M\).\(^\text{11}\) On the objection, the claim about Mary that demands explanation is not merely that, when she leaves the room, she comes to know relevant phenomenal truths in some sense or other. After all, she can know\(_P\) those truths before leaving the room (assuming she then possesses phenomenal colour concepts). Rather, the explanandum is that she comes to know\(_M\) them: to know them in a way that involves mastery of concepts they contain. Suppose Mary’s epistemic progress were construed in terms of her gaining mere knowledge\(_P\), that is, in terms of her acquiring rather than mastering phenomenal colour concepts. In that case, her progress would fail to provide even prima facie grounds for inferring non-deducibility—or any epistemic claim that might plausibly entail strong metaphysical conclusions such as non-necessitation. Instead, it would be clear that a psychological explanation is called for. The inference from epistemic to metaphysical claims that the knowledge argument involves is complex and controversial, but it is not a non-starter. Yet it would be a non-starter if we construed Mary’s progress in terms of her gaining mere knowledge\(_P\) instead of knowledge\(_M\).\(^\text{12}\)

To see this, consider someone who has heard talk of prime numbers and so possesses the prime number concept without mastery, in the way someone who has heard talk of arthritis might possess the arthritis concept without mastery. Such a person will not be in a position to deduce that there are infinitely many prime numbers, even if her reasoning capacity were in all other respects ideal. It does not follow that it is not a priori that there are infinitely many prime numbers. Now consider someone who has mastered the prime number concept, and assume her reasoning capacity is ideal. If she could not deduce that there are infinitely many prime numbers, this would be strong evidence that it is not a priori that there are infinitely many prime numbers. This brings out the general point that concept mastery is tied to apriority in a way that concept possession is not. It seems that the knowledge argument must be construed in terms of knowledge\(_M\), or else it would not even get off the ground (at least, this seems true of the

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\(^{10}\) For these reasons, Ball’s formulation of clause 3 of PCC\(^*\) is potentially misleading. On the concept-mastery objection, Mary’s epistemic progress involves her acquiring mastery of phenomenal colour concepts. This requires neither that she comes to possess them ‘non-deferentially’, if this implies that she never defers regarding their application, nor that she comes to possess them ‘fully’, if this implies anything more than that her mastery is comparable to that of ordinary colour-sighted folk.

\(^{11}\) We could likewise define a notion of deduction\(_o\) as follows: to deduce\(_o\) is to deduce from propositions entertained under mastery of the concepts contained therein to propositions so entertained. But it is worth noting that the concept-mastery objection does not require doing so. For example, proponents of the objection could formulate the key claim about the Mary case using the familiar, unqualified notion of deduction, as follows: Mary cannot arrive at the phenomenal knowledge\(_o\) of what it is like to see in colour by deducing truths from both her knowledge\(_o\) of the complete physical truth and her knowledge\(_o\) of phenomenal truths about what is like to see in colour.

\(^{12}\) For a forceful defense of the inference, see Chalmers 2010a.
non-deducibility/non-necessitation formulation). And if it and the phenomenal concept strategy are so construed, then they face no threat from Ball’s arguments.  

In response to the concept-mastery objection, Ball writes that it could result in two different versions of the knowledge argument: one based on a type (i) situation, in which pre-release Mary can entertain but does not know certain contents, and another based on a type (ii) situation, in which she cannot even entertain those contents. However, he argues, both versions fail. The version based on a type (i) situation fits best with the concept-mastery objection as I have developed it, and so I will focus on it. On that version, ‘Mary can entertain the relevant contents; but since she can only possess the relevant concepts deferentially or partially … she cannot entertain these contents in a way that would enable her to know them’ (Ball 2009, p. 956). Against that reasoning, Ball argues as follows:

The putative phenomenon that this argument appeals to is unprecedented in the sort of cases typically appealed to in discussions of ‘deference’ and ‘partial understanding’. For example, although Burge’s Arthritis-man fails to believe that arthritis is a disease of the joints, there is nothing that prevents him from coming to know this fact. He is perfectly capable of learning that arthritis is a disease of the joints by testimony. The proponent of this version of the knowledge argument would have to hold that some feature of Mary’s grasp of the relevant contents prevents her from gaining knowledge by testimony, even though she grasps the content expressed by the relevant sentences, knows the source to be reliable, and so forth. … This would involve an ad hoc denial of widely accepted closure principles for knowledge … These positions are coherent but highly unattractive. (Ball 2009, pp. 956-57)

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13 The prime number case illustrates the point that apriority is more closely tied to concept mastery than to concept possession, but it is not intended as a perfect analogy to the Mary case. One disanalogy is that Mary does not have mastery of phenomenal colour concepts inside the room. This raises the possibility of what we might call the missing-mastery reply to the knowledge argument (a variation of the missing-concept reply due to Kirk 2005, Tye 2000, and others): phenomenal truths are deducible in principle from physical truths, but Mary cannot deduce certain phenomenal truths because she has not mastered relevant phenomenal concepts (for a related reply, see Rabin 2011). This reply may be a version of the phenomenal concept strategy, and if it is then it is doubtful that Ball could endorse it. In any case, it can plausibly be answered in the way that the missing-concept reply has been answered. For example, following Chalmers (2004), one can argue that even once Mary masters the relevant phenomenal concepts, she will not automatically know whether or not other creatures (bats or Martians, say) are having experiences of the relevant sorts, even given a complete physical description of them. See also Stoljar 2005.

14 However, I will mention one issue that arises in connection with the other version. In the process of criticizing that version, Ball imagines Lonely Mary, who is just like Mary except she lacks a linguistic community. He argues that Lonely Mary would be able to acquire the concepts relevant to knowing what it is like to see in colour by stipulatively introducing them. He writes, ‘we can imagine Lonely Mary working to develop a detailed theory of the neural correlates of consciousness. She knows that brain state R would correlate to some phenomenal state, even though she has never been in brain state R. Burge-style arguments of the sort I developed above suggest that she could introduce the putatively phenomenal concept Q by stipulating that Q is to refer to what it is like to be in R’ (Ball 2009, p. 956). But it is unclear that Q is one of the concepts that is relevant to knowing what it is like to see in colour. Granted, Q co-refers with one such concept. But so might the concept JOHN’S FAVORITE PHENOMENAL QUALITY. Yet the latter is not a phenomenal concept in the relevant sense.
But on the concept-mastery objection, phenomenal concept theorists can agree that pre-release Mary can acquire knowledge of the relevant contents through testimony: she can acquire knowledge of those contents. These theorists need deny only that she thereby gains knowledge of them. The latter denial is motivated by a strong intuition—arguably the same intuition that phenomenal concept theorists had in mind all along. What prevents her from gaining knowledge of the relevant through testimony is her lack of mastery of concepts that those contents contain. Nor must phenomenal concept theorists deny any plausible closure principles. Consider, for example, a closure-under-testimony principle such as this: ‘If proposition P is true and subject S is told that P by someone she knows to be highly reliable, then S can thereby come to know that P—even if S possesses some of the concepts P contains without mastery.’ That principle is plausible if it is construed in terms of knowledge, but it is implausible if it is construed in terms of knowledge. Phenomenal concept theorists need reject only the knowledge version. So, there is no problem for them here.

The foregoing points about closure apply no less to Arthritis-man than to Mary. However, those cases differ in at least one notable way with respect to the possibility of acquiring knowledge through testimony. The Mary case seems to show that there are phenomenal truths that cannot be learned through testimony. By contrast, there might be no non-phenomenal truths about arthritis that cannot be learned through testimony (though there might well be phenomenal truths about experiences associated with arthritis that cannot be so learned). But it is surely no objection to the knowledge argument if it exploits an epistemic phenomenon that is unique to phenomenal truths. That phenomenal truths appear to have unique epistemic features is, after all, part of what makes the knowledge argument seem so compelling and significant in the first place.

Michael Tye (2009) presents an argument that is nearly the same as Ball’s main argument. He too anticipates the concept-mastery objection, and he offers a different response. In his view, the objection has a consequence that its proponents cannot accept: that Mary makes no discovery when she leaves the room. That is because the truths she knows before leaving the room are the same as those she knows after she leaves. He writes,

The trouble with this suggestion is that it entails that what Mary knows later is just the same as what she knew before, for there is no change in the fine-grained facts she knows. So there is no new propositional knowledge. Here is a parallel: Consider my remarking, to a friend of mine who is the world’s leading authority on elm trees, “That’s an elm over there.” I can know that this is the case…but my grasp of the concept is deferential. My friend also knows that that is an elm over there, but his grasp of the concept is non-deferential. What he knows is the same as what I know. There is no difference in the fact we know here … but the way we grasp what we know is different. If later I become the world’s leading authority on elm trees, and I repeat my earlier remark in the same situation, what I know is what I knew earlier. I make no discovery. So this strategy seems to me to offer no real progress. (Tye 2009, p. 129)

But on the concept-mastery objection, phenomenal concept theorists can agree that as in Tye’s elm case (i) there is no difference in the facts Mary knows before and
after leaving the room and (ii) it is the way she grasps what she knows that changes. This does not clearly imply that she makes no discovery. On the concept-mastery objection, her discovery consists in her acquiring knowledge_{M}. Perhaps Tye would not count her acquiring knowledge_{M} as a discovery. But that judgement seems unwarranted. Consider Thomas Nagel’s (1974) thought experiment about a pre-Socratic philosopher being told that matter is energy. At first the source does not explain any of the physics that underlies that important truth. But let us suppose that the pre-Socratic philosopher knows her to be reliable and authoritative. So, we might conclude, he thereby comes to know_{p} that matter is energy. Suppose that later she explains the underlying physics in detail, so that he comes to master the relevant concepts. He thus comes to know_{M} the same truth that he already knew_{p}. It seems plausible to describe his gain in knowledge_{M} as a discovery. If so, then there would seem to be no reason not to describe Mary’s post-release gain in knowledge_{M} as a discovery too.\(^{15}\)

But suppose I am wrong about that. Even so, Mary’s acquisition of knowledge_{M} would constitute epistemic progress of a sort suitable for the purposes of the knowledge argument. So, phenomenal concept theorists can agree with Tye that the (fine-grained) object of Mary’s knowledge is the same before and after she leaves the room, just as the object of knowledge is the same for the botanical novice and the elm expert. But phenomenal concept theorists could argue that she cannot arrive at the relevant phenomenal knowledge_{M} by deducing truths from her knowledge_{M} of the complete physical truth and her knowledge_{C} of phenomenal truths about what it is like to see in colour. That claim suffices for the purposes of the knowledge argument. Indeed, one moral of the concept-mastery objection is that, in trying to understand Mary’s epistemic progress, it is a mistake to focus solely on the propositional object of her knowledge and thereby ignore the way in which her grasp of that object changes when she leaves the room.\(^{16}\)

4. Conclusion
I have argued that phenomenal concept theorists can block Ball’s main argument by recasting their key claims in terms of concept mastery instead of concept possession. I have also argued that the concept-mastery objection does not fall prey to his or Tye’s counter-arguments.

The issues Ball raises about phenomenal concepts bear not only on the knowledge argument but also on related arguments such as the conceivability argument (e.g. Chalmers 2010a) and the explanatory gap argument (Levine 1983). Those arguments too employ epistemic notions that, I would argue, are best understood in a sense that requires mastery of relevant phenomenal concepts. Consider, for example, a premiss in a much-discussed version of the conceivability argument: that if zombies (creatures that lack

\(^{15}\) Consider again the prime number example. Suppose someone hears from a source she knows to be reliable, ‘There are infinitely many prime numbers’, but only later comes to master the concept PRIME NUMBER, thereby acquiring knowledge_{n} of that truth. It seems reasonable to classify her gain in knowledge_{n} as a discovery, or at least as significant epistemic progress.

\(^{16}\) To say that Mary’s epistemic state changes from having knowledge_{n} to having knowledge_{n} is in a certain sense to say she learns an old fact in a new way. But this does not undermine the knowledge argument, at least in the non-deducibility/non-necessitation formulation. The gap with respect to knowledge_{n} suggests that, as in the prime number example, the fact in question is not a priori deducible from (or necessitated by) microphysical facts.
consciousness but are physically identical to conscious human beings) are conceivable, then they are metaphysically possible. It is hard to see why the conceivability of zombies would even begin to indicate that they are metaphysically possible if it were not assumed that the conceiver had mastery of relevant concepts.\textsuperscript{17}

Thus, Ball’s main argument is significant if only because it prompts us to refine epistemic claims that are central to influential anti-physicalist arguments. But these refinements, though non-trivial, do not radically change the landscape of the debate. The anti-physicalist arguments in question are fundamentally about whether physicalism can be reconciled with the existence of phenomenal consciousness—and more generally about the metaphysical implications of the hard problem of consciousness. On the face of it, the issues that social externalism addresses, which concern possession conditions for concepts, enter into the debate about those enduring problems only tangentially. My arguments, if sound, add support to that judgement.\textsuperscript{18}

TORIN ALTER

Department of Philosophy
The University of Alabama
Tuscaloosa, AL 35487-0218

References


\textsuperscript{17}The notion of knowledge\textsubscript{p} may have relevance for epistemological matters that are far removed from the knowledge argument. I will mention one example. In discussing Putnamian transcendental arguments against external-world skepticism, Brueckner (1986, p. 165) writes, ‘[C]onsider a case in which a trustworthy set theorist tells me that the sentence “Omega is not a regular cardinal” expresses a true proposition. Knowing very little about set theory, I do not understand the technical terminology in the sentence. So, even though I can claim to know that the sentence expresses a true proposition, I do not know \textit{which} proposition. Hence I cannot claim to know \textit{that omega is not a regular cardinal}, given only my metalinguistic knowledge that the relevant sentence is true.’ Donnellan (1977) makes similar claims in criticizing Kripke’s (1972) views about contingent a priori knowledge. However, the sorts of Burgean considerations to which Ball appeals might be taken to indicate that, in such cases, the knower has not just metalinguistic knowledge but also knowledge of the relevant object-level truths. Brueckner and Donnellan might be able to respond by arguing that the knower does not know\textsubscript{p} the object-level truths, even if she knows them.

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—— 2010a: ‘The Two-Dimensional Argument Against Materialism’. In his 2010b, pp. 141-205.


—— 1998a: ‘Postscript on Qualia’. In his 1998b, pp. 76-79.


