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# Realism, Objectivity and Evaluation

I discuss Benacerraf's epistemological challenge for realism about areas like mathematics, metalogic, and modality, and describe the pluralist response to it. I explain why normative pluralism is peculiarly unsatisfactory, and use this explanation to formulate a radicalization of Moore's Open Question Argument. According to the argument, the facts -- even the normative facts -- fail to settle the practical questions at the center of our normative lives. One lesson is that the concepts of realism and objectivity, which are widely identified, are actually in tension.

## Benacerraf's Challenge

In his [1973] Benacerraf articulated an epistemological challenge for mathematical realism -- roughly, the view that there are (non-vacuous) mind-independent mathematical facts. The challenge can be interpreted in different ways. But it is widely agreed that the most pressing challenge in the vicinity is to explain the *reliability* of our mathematical beliefs. Field writes,

> The way to understand Benacerraf's challenge…is...as a challenge to…*explain the reliability* of [our mathematical] beliefs. We start out by assuming the existence of mathematical entities that obey the standard mathematical theories; we grant also that

> there may be positive reasons for believing in those entities…..But Benacerraf's challenge…is to…explain how our beliefs about these remote entities can so well reflect the facts about them...*[I]f it appears in principle impossible to explain this*, then that tends to *undermine* the belief in mathematical entities, *despite* whatever reason we might have for believing in them." [1989: 26, italics in original]

Note that Field's interpretation of Benacerraf's challenge is not a "convince the skeptic" challenge. Field allows the realist to assume both the (actual) truth and (defeasible) justification of her mathematical beliefs when explaining their reliability. If he did not allow this, then his challenge would overgeneralize. Consider the evolutionary and psychophysical explanations of the reliability of our observational beliefs. These would do nothing to convince someone who was worried that we were brains in vats. The evidence for them is observational. But these explanations still seem to afford our observational beliefs a kind of intellectual security. The challenge pressed by Field is to show that our mathematical beliefs can be secured similarly.

## The Pluralist Solution

The challenge to explain the reliability of our mathematical beliefs, assuming mathematical realism, can appear insuperable. There do not seem to be any causal or other physical relations between us and mathematical reality which might illuminate the correlation between our beliefs and the truths. But there is a version of realism -- what I will call mathematical *pluralism* -- that even Field concedes affords an answer to the challenge (Field 2005, 78). Pluralism says that there are a rich plurality of mathematical concepts, and all of them are independently satisfied.

Such a view is largely uncontroversial for areas like (pure) geometry. Even realists concede that a plurality of geometrical concepts -- e.g., Euclidean and hyperbolic concepts -- are independently satisfied. They are simply satisfied by different subjects. What makes mathematical pluralism radical is its generalization of this point to foundational areas, like set theory. Insofar as set theory constitutes the ultimate court of appeal for mathematical questions, mathematical pluralism says that there can fail to be a unique answers to those questions. Consider, for instance, the question of whether every vector space has a basis (which is equivalent in ZF to the question of whether the Axiom of Choice is true). The pluralist says that this question is analogous to the question of whether two lines making less than a 180° angle with another must intersect -- i.e., to that of whether the Parallel Postulate is true. In some universes, the answer is "yes". But in others, it is "no". There is no deeper answer. And while we could always ask which universe *we* happen to be talking about (or what is packed into the concepts we happen to have), this question is of no mathematical interest. It puts no constraints on what mathematical entities there are. So, while mathematical pluralism is a realist view, since it allows that there are independent mathematical facts, there is a palpable sense in which it gives up on the *objectivity* of mathematics. It says that in a debate over axioms, neither party need be wrong. While the pluralist denies that we can generate truths by making stipulations, she agrees with the conventionalist that "the conflict between divergent points of view… disappears… [B]efore us lies the boundless ocean of unlimited possibilities" (Carnap 1937/2001, XV).[1]

[1] The word "objective" can mean a dizzying variety of things, including mind-and-language independent, intersubjective, or having objects. Again, I do not mean to suggest that pluralism is anti-objectivist in any of these senses. It is anti-objectivist in roughly the sense that the theory of relativity is anti-objectivist about simultaneity. There is an independent fact about what is simultaneous with what relative to a given reference frame, R. But there are myriad reference frames, and one gets different answers to the simultaneity question by plugging them in for R.

How do pluralists solve the Benacerraf problem? They do so "by articulating views on which though mathematical objects are mind-independent, any view we had had of them would have been correct" (Field 2005, 78). As Beall puts it, "[i]f you're having trouble hitting the target, then just make your target bigger" (Beall 1999, 323)! Strictly speaking, the pluralist can only secure this result if she supplements her plentiful metaphysics with a cooperative metasemantics (Clarke-Doane, Forthcoming A, Sec. 2). It must be added that had we accepted different mathematical sentences, then we would have *changed the subject*. If the Axiom of Choice, semantically individuated, is true "in" one mathematical universe, then it is not false in another. But it could be that along with sets, there are shmets. Shmets, we might say, are like sets except that they fail to satisfy Choice. So, neither the advocate of Choice nor the advocate of ~Choice needs to have false beliefs. There is enough *mind-independent* mathematical truth to go around.[2]

Metaphysical Pluralism

Although Benacerraf's and Field's focus was mathematics, the challenge to explain the reliability of our beliefs readily arises for realism about many other areas too. Stalnaker writes,

[2] The foundations of mathematical pluralism -- and, indeed, pluralism about other areas (see below) -- are more involved than I am letting on. The question of how inclusive the "pluriverse" should be is vexed. It is natural to hold that any (first-order) consistent theory is witnessed somewhere in it. But, by Godel's Second Incompleteness Theorem, such a position engenders pluralism about (classical) consistency itself (since this says that it is consistent to say false things about consistency, if weak theories of arithmetic are consistent). And *this* engenders pluralism about pluralism! Moreover, the pluralist must explain our knowledge of consistency, or the surrogate of consistency to which she appeals. Such knowledge will be tantamount to mathematical knowledge (e.g., of a $\Pi_1$ arithmetic sentence). For pertinent discussion, see (Clarke-Doane Forthcoming B, Chapter 6) and (Field 1998).

> It is a familiar objection to...modal realism that if it were true, then it would not be possible to know any of the facts about what is...possible….This epistemological objection...may...parallel...Benacerraf's dilemma about mathematical...knowledge. (Stalnaker 1996, 39–40).

And Schechter remarks,

> We are reliable about logic….This is a striking fact about us, one that stands in need of explanation. But it is not at all clear how to explain it….This puzzle is akin to the well-known Benacerraf-Field problem…(Schechter 2013, 1).

How should modal, (meta)logical, and other realists address the Benacerraf problem? Just like mathematical pluralists! The modal realist should say that there are a plurality of possibility-like concepts, all independently satisfied, giving intuitively opposite verdicts on modal questions (Clarke-Doane 2019). And the logical realist should say that same about consequence-like concepts (Beall and Restall 2006).[3] The question of whether you could have had different parents, or whether anything follows from a contradiction, is like the Parallel Postulate question.

In general, the realist about an area, F, for which the Benacerraf problem is pressing should be an *F-pluralist*. What are those areas? *Prima facie*, they are those areas whose truths would be causally inert. These include both ontologically committed and ontologically innocent areas.

[3] By "logic" I mean the non-normative theory of what follows from what. I will come back to normative questions like what we ought to infer from what below.

For instance, if modal operators are taken as primitive, like negation, then modal truths are not *about* novel entities, like worlds. But they would still seem to be causally inert. So, the realist about modality should be a modal pluralist, whether or not she believes in possible worlds.

Normative Pluralism

As a methodologically Carnapian view, pluralism is *pragmatist*. It says that the only non-verbal question in the neighborhood of typical foundational questions, like whether the Axiom of Choice is true, is whether we ought to use a notion of set that satisfies that axiom. (Depending on how the pluralism is formulated, it will not say this about select "meta" questions, such as whether a theory is consistent. See, again, fn. 1.) Similarly, it says that the only non-verbal question in the neighborhood of whether Hesperus could have failed to be identical to Phosphorus, or whether Disjunctive Syllogism is valid, is whether we ought to assume the Necessity of Identity, or whether we ought to infer P from (P v Q) and ~Q. Any other question is really just about us. It is just about what language we speak, or what is "packed into" the concepts we happen to be using, as opposed to being about what the independent world is like.

However, the question of what notions we ought to use is a *normative* question. Notoriously, the Benacerraf problem arises for normative realism *a fortiori* ((Mackie (1977, 28), (Huemer 2005, 99), (Enoch 2011)). Should realists be a pluralist about normative questions as well?

There *are* (realist) pluralists about normative areas, however unwitting. That is, there are realists who postulate a plurality of normative-like concepts, all independently satisfied. For example,

Jackson advocates a view according to which "[t]he term 'fair' picks out a descriptive property...by virtue of the place that that property occupies in folk moral theory, and in a manner that requires other moral terms simultaneously to pick out complementary descriptive properties" (Jackson and Pettit 1995, 25). Since such descriptive properties are mind-and-language independent, but also plentiful, Jackson's view is pluralist. In a "dispute" over fairness, neither party need be wrong. One party can be right of fairness$_1$, and the other can be right of fairness$_2$.[4]

But there is something peculiarly unsatisfactory about normative pluralism. Indeed, the problem is in the background of Horgans' and Timmons' "Moral Twin Earth" objection to (Jackson 1992, 460), as well as to recent discussion of "alternative normative concepts" (Eklund 2017).[5] At first pass: normative theory is supposed to tell us what to do. But while we can *believe* whatever theories we like, we can only *do* one thing. Knowledge that we ought$_1$ kill the one to save the five (in some situation) but ought$_2$ would leave the *practical* question open -- whether to.

Moore's Open Question Revisited

[4] Similarly, Boyd writes of his realism, that, while it is *pluralist* in the present sense, it "is only in a relatively uninteresting sense non-realistic. The dependence of the truth of moral propositions upon moral beliefs envisioned [in a scenario where different properties causally regulate "good" in different communities] would be…an ordinary case of causal dependence and not the sort of logical dependence required by a constructivist conception of morals analogous to a Kuhnian neo-Kantian conception of the dependence of scientific truth on the adoption of theories or paradigms. The subject matter of moral inquiry in each of the relevant communities would be theory-and-belief-independent in the sense relevant to the dispute between realists and social constructionists" (Boyd 1988, 225f). While Jackson and Boyd are "naturalists", normative pluralists need not be (just as mathematical, modal, and logical pluralists need not be). Scanlon, a non-naturalist, advocates a view according to which "as long as some way of talking [is] well defined, internally coherent, and *[does] not have any presuppositions or implications that might conflict with those of other domains*, such as science" such talk is true (Scanlon 2014, 27, emphasis in original).

[5] See also Enoch's objection to Scanlon in (Enoch 2011, 121).

It is widely assumed that such reasoning just shows that, unlike realists about "descriptive" subjects, like mathematics, modality, or (non-normative) logic, normative realists must be non-pluralists -- or, what I will call, *objectivists*. This would be significant. It would mean that the realism about descriptive areas is on better epistemological footing than realism about normative ones ((Berry 2019) and (Jonas Forthcoming)). Unlike normative realists, descriptive realists can answer Benacerraf's challenge.

The problem is deeper than that, however. The problem is that normative facts -- however sparse or plentiful -- fail to settle practical questions (Clarke-Doane 2015). To see this, let us recall Moore's Open Question Argument (Moore 1903, Section 13). A schematic way of thinking about it is that an agent may believe that A is F, for any *descriptive* property, F, while failing to "endorse" A in the sense that is characteristic of practical deliberation. She may grant that A is natural, or what she would desire to desire, or utility-maximizing, while still wondering what to do (and not merely in the sense that we all can be weak in will). But why should it matter that F is descriptive? As Simon Blackburn points out, "[e]ven if [a normative] belief were settled, there would still be issues of what importance to give it, what to do, and all the rest….For any fact, there is a question of what to do about it [1998, 70]." In other words, could not an agent know that A is F, for any property, descriptive *or normative*, F, while failing to "endorse" A too?

We can use normative pluralism to argue that one could. Let us *assume* that normative pluralism is true. We can either counterfactually conditionalize on it ("had it been the case that normative pluralism was true…"), or imagine that it turns out to be true, in the sense that it might turn out

to be true that water fails to be composed of $H_20$. (It could certainly turn out to be true! Boyd, Jackson, Scanlon and others *actually are*, by all appearances, normative pluralists. Perhaps we took a class in metaethics and came away convinced of Boyd's view, for instance.) Then, while the assumption of mathematical, modal, (meta)logical, etc. pluralism *deflates* mathematical, modal, (meta)logical etc. questions, the assumption of normative pluralism does not deflate *practical* ones. The question of what to do remains open even assuming normative pluralism.[6]

Consider, for example, the question of whether every non-empty set has a Choice function. This is analogous to the Parallel Postulate question under the assumption of pluralism. There is no non-semantic question at stake. But the question of whether to kill the one to save the five is not deflated in this way. Granted that we ought$_1$ to kill the one, ought$_2$ not, and so on, for any ought-like notions you like, the practical question of *whether to* kill the one remains open. The various ought-like notions "point" in different directions, leaving us with the practical question of which to follow. Even if we decide to bow to the contingencies of natural language semantics -- "following" the property that we happen to refer to with "ought" -- this is a separate conclusion, not one that can be "factored out" into the normative pluriverse. In other words, an omniscient semanticist could not resolve our question of whether to kill the one to save the five just by confirming that we mean ought$_1$ by "ought" (and we ought$_1$ kill the one). In summary,

[6] A different formulation of the argument uses the logical law of weakening (Clarke-Doane, Forthcoming). Suppose that, e.g., we ought to kill the one to save the five. Now stipulatively introduce to ought-like concept, ought*, according to which we ought* not kill the one to save the five. If knowledge that we ought to kill the one to save the five *settles* the question of whether to on its own, then it does so in tandem with knowledge that we ought* not. But it does not. So, knowledge that we ought to kill the one does not even settle the practical question on its own. (I borrow the star notation from (Eklund 2017).)

practical questions may remain open even when the facts, *including the normative facts*, are settled.

Objections and Replies

There are various ways in which one might try to resist this "New Open Question Argument". It might be objected, first, that the argument at most shows that we need to settle a question of metaphysics in order to, strictly speaking, settle our deliberation. We need to settle which of ought$_1$, ought$_2$, etc. is *metaphysically privileged* in something like the sense of (Sider 2011). Properties are cheap. When asking what we ought to do, we intend to be appealing to the "authoritative" (McPherson Forthcoming) or "robustly" (Werner 2017, 9) normative ones. When doubts are raised about our success, a further question arises. But either the question of whether the referents of our normative terms are metaphysically privileged is itself normative, or it is not. If it is not, then Moore's original Open Question Argument applies. Learning that ought$_1$, say, is metaphysically privileged would be like learning that it is brown. It would be neither here nor there from the standpoint of practical deliberation. But if the question *is* normative, then the argument can just be re-run for privilege. Even if ought$_1$ is not privileged, it is privileged*, for some alternative privileged-like concept (properties are cheap), and the *practical* question remains whether to theorize with privileged or privileged* concepts (Dasgupta 2019).

A more substantial worry is that the New Open Question Argument trades on a false contrast (Das Forthcoming). I said that mathematical, modal, logical, etc. pluralism deflates

mathematical, modal, logical, etc. questions. But in the normative case, I said that normative pluralism fails to deflate *practical* -- what to do -- ones. I did not say that normative pluralism fails to deflate normative questions *per se*. Indeed, it would seem to. (This is presumably why debates in academic ethics, epistemology, and so on threaten to be "verbal", just like debates in non-evaluative fields, like metaphysics.) But mathematical pluralism also fails to deflate practical questions. It does not tell us, e.g., what notion of set to use. So, there is no contrast after all.

But this objection is short-sighted. Mathematics is theoretical while normative inquiry is practical. We do not determine what we ought to do for the sake of accumulating "normative theorems". We do so to act. But, then, the fact that knowledge of the normative facts fails to settle practical questions is a problem. It does not show that normative realism is *false*. It shows that it fails to do the primary thing it should do -- i.e., tell us what to do! On the other hand, nobody would suggest that mathematical facts tell us -- all by themselves -- what to do. They do not even tell us what mathematical notions, or axioms to use. This is just a simple application of Hume's point that one cannot derive an "ought" from and "is", and of Moore's original point that one can know that something is F, for any *descriptive* property, F, while failing to "endorse" it.

Might the above considerations instead show that practical deliberation is resolved by *ineffable* facts (Eklund 2017)? It does not seem so. There are two ways in which "practical propositions" could be ineffable. They could be structurally ineffable in the sense of Hofweber (2017). They could fail to possess sentential structure. But, if so, then it would be impossible to explain the

connection between our linguistic behavior with normative sentences and the practical propositions to which we appeal in deliberation. If you utter S and I reply ~S, where S is a normative sentence, then we should at least be able to infer that the practical propositions that we believe are inconsistent. But if practical propositions are structurally ineffable, then the notion of consistency may not even *apply* to them -- since there may be no operation on them corresponding to sentential negation. So, it might be thought that practical propositions are ineffable because, while they possess sentential structure, practical *properties* are ineffable. But if this were why practical propositions were ineffable, then we could just reformulate pluralism and bypass talk of sentences. Call *practical pluralism* the view that there are a plurality of practical-like propositions, true of different parts of the practical-like pluriverse. (We must be able to *mention* these propositions if the ineffability thesis is coherent.) Then, even assuming practical pluralism, the question of whether to kill the one to save the five seems to remain.

To be sure, there is *something* puzzling about normative pluralism. But this is what we would expect if the facts failed to settle practical questions, as alleged. For any descriptive area, F, the notion of F-like properties makes sense. We can imagine set-like properties, possibility-like properties, consequence-like properties, and so on. If there are such things as normative properties, then why do we have trouble "tweaking" them, as we tweak the property of being a set? The obvious answer is that, in ordinary language, we do not use "ought to be done" to express a property at all. We use it to answer what to do questions.[7] *And pluralism about what*

[7] This is exactly the moral that Blackburn draws from Moore's argument. He concludes, "evaluative discussion just is discussion of what to do about things [1998, 70]."

*to do may well be unintelligible*. But this truism is no thanks to special facts that we cannot even *assume* to be non-objective. It is thanks to the banal fact that we can only do one thing.[8]

Realism and Objectivity Revisited

I have discussed the Benacerraf problem for realism about areas like mathematics, modality, and logic, as well as the pluralist response to it. I have argued that normative realism is peculiarly unsatisfactory. If normative pluralism affords a resolution to the Benacerraf Problem for normative realism, this is only because normative facts fail to settle practical questions.

On a traditional taxonomy, the conclusion of this article might be taken to show that practical questions are not objective. But this would be misleading. The conclusion shows that realism is false of those questions. Practical questions are what remain when the facts, even the normative facts, come cheaply. But far from undercutting the objectivity of practical inquiry, this is why its objectivity is robust. If practical questions answered to the facts, then their objectivity would be compromised if the facts were abundant -- just like mathematical, modal, or logical questions.

On the other hand, any mathematical realist is a geometrical realists as well. But pure geometry fails to be objective in a key respect. A disagreement over the Parallel Postulate can be resolved by stipulation: you take lines$_{\text{Euclidean}}$ and I will take lines$_{\text{hyperbolic}}$. There is no non-verbal

[8] Thanks to Jennifer McDonald for suggesting this way of putting the point. This response is especially compelling if (Gibbard 2003) is right that the resolving attitude is intention (assuming that we cannot intend to X and ~X, at the same time). (Note that if the New Open Question Argument works, it works however one construes the facts. For instance, if the normative facts are construed "constructivistically" *a la* (Street 2006, Sec. 7) or (Korsgaard 1996), then the problem becomes Enoch's "agent/shmegent" problem. Just as we can wonder whether to do what we ought1 as opposed to ought2 to do, realistically construed, we can wonder whether to be an agent or a shmagent (Enoch [2006]).)

disagreement to have about "the pure lines simpliciter". The Benacerraf problem invites a similar stance on foundational mathematics, modality, logic, and other descriptive areas for which the Benacerraf problem is pressing. It is *as if* conventionalism about these areas were true.

The upshot is that the concepts of realism and objectivity, which have been widely identified, do not merely bifurcate. They are in tension.

Bibliography

Beall, JC. 1999. "From Full-Blooded Platonism to Really Full-Blooded Platonism." *Philosophia Mathematica*. 7 (3): 322—327.
-----. and Greg Restall. 2006. *Logical Pluralism*. Oxford: Oxford University Press.
Berry, Sharon. 2018) "(Probably) Not Companions in Guilt", *Philosophical Studies.* 175 (9): 2285-2308.
Benacerraf, Paul. 1973 "Mathematical Truth." *Journal of Philosophy*. 70 (19): 661-679.
Blackburn, Simon. 1998. *Ruling Passions*. Oxford: Clarendon Press
Boyd, Richard. 1988. "How to Be a Moral Realist." in Geoffrey Sayre-McCord (ed.), *Essays on Moral Realism*. Ithaca: Cornell University Press. 181-228.
Clarke-Doane, Justin. 2015, "Objectivity in Ethics and Mathematics. Ben Colburn (ed.), *Proceedings of the Aristotelian Society, The Virtual Issue, No. 3 (Methods in Ethics)*. http://www.aristoteliansociety.org.uk/pdf/2015_virtual_issue.pdf
-----. [2017] "Modal Objectivity." *Nous*. https://doi.org/10.1111/nous.12205
-----. Forthcoming A. "Set-Theoretic Pluralism and the Benacerraf Problem." *Philosophical Studies.*
-----. Forthcoming B. *Morality and Mathematics.* Oxford: Oxford University Press.
Das, Ramon. Forthcoming. "Moral Pluralism and Companions in Guilt." Christopher Cowie and Richard Rowland (eds.), *Companions in Guilt Arguments in Metaethics.* Routledge.
Dasgupta, Shamik. 2019. "Realism and the Absence of Value." *Philosophical Review*. Vol. 127. 279-322.
Enoch, David. 2006. "Agency, Shmagency: Why Normativity Won't Come from What Is Constitutive of Action." *Philosophical Review*. 115 (2): 169-198.
-----. 2011. *Taking Morality Seriously.* Oxford: Oxford University Press.
-----. and Tristram McPherson. 2017. "What do you mean 'This isn't the Question?'" *Canadian Journal of Philosophy.* 47 (6): 820-840.
Field, Hartry. 1989. *Realism, Mathematics, and Modality*. Oxford: Blackwell.
-----. 1998. "Which Mathematical Undecidables Have Determinate Truth-Values?" reprinted in *Truth and the Absence of Fact*. New York: Oxford University Press.
-----. 2005. "Recent Debates about the A Priori." in Gendler, Tamar and John Hawthorne (eds.) *Oxford Studies in Epistemology*, Vol. 1. Oxford: Clarendon Press. 69 – 88.
Gibbard, Alan. 2003. *Thinking How to Live.* Cambridge: MA: Harvard University Press.
Hamkins, Joel David. [2011] "The Set-Theoretic Multiverse". arXiv. https://arxiv.org/abs/1108.4223
Horgans, Terence and Mark Timmons. 1992. "Troubles on Moral Twin Earth: Moral Queerness Revived." *Synthese.* Vol. 92 (2): 221-260.
Huemer, Michael. 2005. *Ethical Intuitionism*. New York: Palgrave Macmillan.
Jackson, Frank and Philip Pettit. 1995. "Moral Functionalism and Moral Motivation." *Philosophical Quarterly.* 45 (178): 20-40.
Jonas, Silvia. Forthcoming. "Mathematical and Moral Disagreement." *Philosophical Quarterly.*
Korsgaard, Christine. 1996. T*he Sources of Normativity.* New York: Cambridge University Press.
McPherson, Tristram. Forthcoming. "Authoritatively Normative Concepts." Shafer-Landau, Russ (ed.), *Oxford Studies in Metaethics*. https://philpapers.org/archive/MCPANC.pdf
Moore, G.E. 1903. *Principia Ethica*. http://fair-use.org/g-e-moore/principia-ethica

Scanlon, Thomas. 2014. *Being Realistic about Reasons.* Oxford: Oxford University Press.
Schechter, Joshua. 2013 "Could Evolution Explain our Reliability about Logic?" in Hawthorne, John and Tamar Szabò (eds.). *Oxford Studies in Epistemology*, *Vol. 4*. 214–239. Oxford: Oxford University Press.
Sider, Ted. 2011. *Writing the Book of the World.* Oxford: Oxford University Press.
Stalnaker, Robert. 1996. "On What Possible Worlds Could Not Be." in *Ways a World Might Be: Metaphysical and Anti-Metaphysical Essays*. Oxford: Oxford UP. 40–54.
Street, Sharon. 2006. "A Darwinian Dilemma for Realist Theories of Value." *Philosophical Studies.* Vol. 127. 109-166.
Werner, Preston. 2018. "Why Conceptual Competence Won't Help the Non-Naturalist Epistemologist." *Canadian Journal of Philosophy*. 48 (3-4): 616-637.