Empiricism and *a priori* Knowledge

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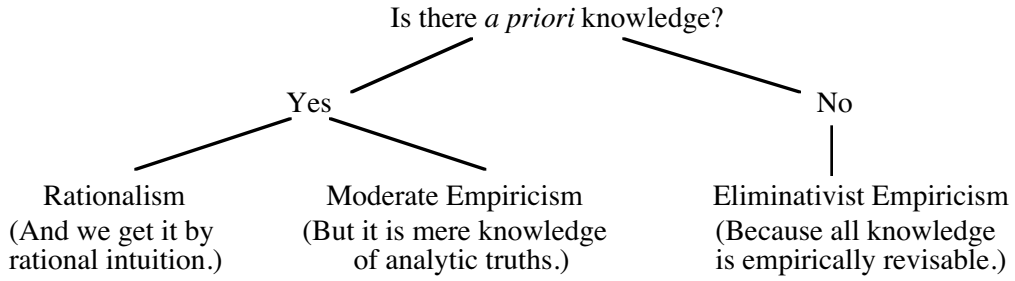
My aim in this paper is to discuss the moderate empiricist's account according to which *a priori* knowledge is mere knowledge of analytic truths. The questions that I will address are, thus, whether there is analytic knowledge, and if so, how that could help us explain the possibility of *a priori* knowledge. I have two aims, a bold one and a modest one. The bold one is to show that we cannot explain the *a priori* with the analytic. The modest one is to show that the moderate empiricists end up appealing to *a priori* knowledge in order to explain it away.

Empiricism and rationalism are opposing epistemic theories about the way we come to know the things we know, or about the sources of human knowledge. The main empiricist thesis is that all knowledge must be grounded in experience. Rationalism argues that besides experience, reason also is an important source of knowledge about the world.

The debate between empiricists and rationalists revolves around the *a priori*, that is, around the idea of knowledge by pure thought alone. Empiricists have to explain the strong intuition that the way we come to know mathematical truths seems to be different from the way we come to know empirical truths; rationalists have to explain how it is possible for us to know truths about the world by pure thought alone. The following flowchart shows the dialectic of the debate.



If all knowledge must be grounded in experience, how is *a priori* knowledge possible? There are two possible answers from the empiricists:

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The *eliminativist empiricist* answer is that it is not possible.

The *moderate empiricist* answer is that it is possible, but we don't need to appeal to a special capacity to explain it because *a priori* knowledge is mere semantic knowledge or knowledge of analytic truths.

The most popular kind of eliminativist response is Quine's. According to him, *a priori* knowledge is not possible because all knowledge is empirically revisable. I will not discuss here the eliminativist's answer. My aim is to discuss the moderate empiricist's answer, which is nowadays the most popular one.

Analyticity and the *a priori*

There are at least three types of statements that we seem to know by pure thought alone:

Mathematical claims.
Logical claims.
Conceptual claims like "All bachelors are unmarried."

If there is no such thing as a special capacity responsible for our *a priori* knowledge, how do we know what we seem to know *a priori*? The moderate empiricists try to reduce our *a priori* knowledge to something less problematic, like knowledge of facts about meaning or linguistic conventions. Their main claim is that although *a priori* knowledge is genuine knowledge, it is just knowledge of analytic truths.

The moderate empiricist view, then, is based on two major claims:

E1 *A priori* knowledge is mere knowledge of analytic truths.

E2 *A priori* knowledge is explained by way of analyticity, so we don't need to appeal to the powers proclaimed by the rationalists.

There are two common ways of understanding the notion of analyticity, which are the ones empiricists rely on to explain our a priori knowledge.[2]

Metaphysical notion of analyticity A sentence is analytic if and only if it is true purely by virtue of its meaning alone.

Epistemological notion of analyticity A sentence is analytic if and only if mere grasp of its meaning suffices for us to be justified in holding it true.

As Paul Boghossian has argued, the metaphysical reading is of "dubious explanatory value."[3] After all, how could a sentence be true purely by virtue of its meaning? In a sense, all sentences are true by virtue of what they say. For

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[2] Boghossian, 1997, made the distinction between the two notions, since they normally appeared conflated. See Boghossian, 1997, p. 335 for the first of the two definitions below, and p. 337 for the second.

[3] Boghossian, 1997, p. 335.

instance, the sentence "Snow is white" is true, but if instead of expressing the propositions that snow is white it expressed the proposition that snow is blue, it would be false. The problem here is with the term "purely". To say that the sentence "Snow is white" is true *purely* by virtue of saying that snow is white is just part of the explanation. For the sentence to be true it also has to be the case that snow is white. Meanings do not make things be what they are. Sentences only express propositions that hold or not depending on the way things are. As Boghossian puts it:

> How could the *mere* fact that S means that p make it the case that S is true? Doesn't it also have to be the case that p?[4]

But, what about the epistemological notion of analyticity? Does that fare any better? A sentence is analytic in the epistemological sense if and only if the mere grasp of a sentence's meaning suffices for us to be justified in holding it true. But how could the mere grasping of a sentence meaning suffice to justify us in holding it true? Grasping the meaning of a sentence is the same as understanding what it says, and if understanding what a sentence says is sufficient for us to be justified in holding it true, it is because, in some way, we can see that the sentence is true. But if this is the correct way to understand the epistemological notion of analyticity, then, it seems, we end up appealing to a kind of rationalist explanation. If in a way we can see that a sentence is true, it is because we have a special capacity that enables us to see that. But that is precisely what the empiricists don't want. Let me elaborate.

As an example, in order to know that the sentence "Snow is white" is true, first, I have to understand the meaning of the sentence, and second, I have to know that snow is white. And I know that snow is white because I saw white snow (or something like that). Likewise, in order to know that the sentence "All bachelors are unmarried" is true, first, I have to understand the meaning of the sentence, and second, I have to know that all bachelors are unmarried. And how do I know that all bachelors are unmarried? By pure thought alone—because in a way I can see that all bachelors are unmarried. And thus we end up appealing to rationalism. Perhaps there is another way of understanding the notion the epistemological notion of analyticity. But if so, how? If meanings alone don't make sentences true or false (and I think that is undeniable) then how can we know that a sentence is true by virtue of understanding its meaning alone? Don't we also have to know that what the sentence says is true?

Propositional knowledge is a relation between a cognitive agent and a proposition. Propositions are the contents of declarative sentences; what they express. So, in order for us to know if a sentence is true or false, we have first to grasp the proposition that it expresses, and second see whether what it says is the case. As such, we can construct a definition of *a priori* knowledge that appeals to sentences, instead of appealing directly to propositions, as follows:

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[4] Boghossian, 1997, p. 335.

> A cognitive agent knows *a priori* that sentence S is true iff (i) he grasps the proposition expressed by S, and (ii) he is epistemically justified in believing in the truth of the proposition by pure thought alone.

But this just means that grasping the proposition expressed by a sentence suffices to epistemically justify us in believing the truth of the sentence. And this is what the epistemological notion of analyticity states. It shouldn't be a surprise to end up with a semantic counterpart of *a priori* knowledge, since after all the notion of analyticity is a semantic notion. But if this is so, if the epistemological notion of analyticity is just a semantic counterpart of *a priori* knowledge, we end up presupposing what we wanted to explain: the existence of a priori knowledge. Thus, while the empiricist's claim E1 could come out as (trivially) true on this reading of analyticity, the claim E2 comes out as false.

I conclude that, although there may be such a thing as analytic knowledge, this does not help us explain *a priori* knowledge.

Implicit definitions

One of the aims of the theory of implicit definition is to give another way to understand the sufficiency condition of the epistemological notion of analyticity. Let's see how it works. Boghossian characterises it as follows.

Implicit definition It is by arbitrarily stipulating that certain sentences of logic are to be true, or that certain inferences are to be valid, that we attach a meaning to the logical constants. More specifically, a particular constant means that logical object, if any, which would make valid a specified set of sentences and/or inferences involving it.[5]

According to the theory of implicit definition, logical words acquire their meaning by virtue of participating in certain inferences or sentences that we take to be valid or true. This may be illustrated with the following inference.

MP If A, then B.
A.
Therefore, B.

It is by virtue of our stipulation to regard this inference as valid that 'if, then' acquires its meaning (if any). Namely, the conditional means whatever it does (if anything) that makes MP valid. But how does this work in order to explain our *a priori* knowledge of logic? Since we stipulate that the conditional means whatever in fact makes those inferences valid, then we know *a priori*, that is, independently of any sensory experience, that those inferences are valid, given that this is the way we fixed the meaning of the logical expression "if . . . then . . .". And the same goes for the other logical constants. In this way, we say that some inferences (the meaning-constitutive ones) implicitly define the meaning of our logical constants.

[5] Boghossian, 1997, p. 348.

Boghossian presents the following argument that helps us see how the doctrine of implicit definition works to justify our *a priori* knowledge of logic.[6]

(1) If "if, then" is to mean what it does, then the inference MP has to be valid, for 'if, then' means whatever in fact makes MP valid.
(2) "If, then" means what it does.
Therefore, (3) MP inference is valid.

Knowing (1) and (2) is knowing what "if, then" means. And (3) clearly follows from (1) and (2). Thus, knowledge of the facts about meaning suffices for us to be justified in the validity of certain logical inferences, so that empirical support is not required. Therefore, so the story goes, our knowledge of logic can be analytic in the epistemological sense required, and thus *a priori*.

I will now discuss two problems that the theory of implicit definition faces.

The ignorance problem

First I want to consider the ignorance problem, which consists in the following. If what we aim to explain with the epistemic model just provided is our knowledge of logic, then, apparently, we can only use it to explain the knowledge of logic of sophisticated people like Boghossian himself. Knowledge of premise (1) of Boghossian's model is just too sophisticated to be used in explaining the *a priori* warrant of non-philosophers in believing logical inferences and truths. But if this is the case, then our explanation is too weak, since our aim is to explain knowledge of logic *simpliciter*, and not the knowledge of logic of some philosophers.

Boghossian answers this objection by arguing that someone could be justified in believing in something despite the fact that he is not able to spell out what sort of justification he has to believe it.[7] And that seems to be what happens in many cases. If we allow Tyler Burge's distinction between entitlement and justification, we can easily explain what is going on.[8] Entitlement is a weaker requirement for knowledge than justification. If a person is justified in believing a certain proposition, then that person is entitled to believe in it. We have, thus, the following two kinds of warrants for knowledge.

> *Entitlement* A cognitive agent is just *entitled* to believe a certain proposition if and only if there is a justification for his belief but he is not able to spell it out, either because he never came to think about it, or because he is not able to do it.
>
> *Justification* A cognitive agent is *justified* in believing a certain proposition if and only if he is capable of spelling out the reasons that support his belief.

Applying this distinction to the case of logic, we can say that all of us are entitled to believe logical truths and inferences, but only some of us are justified

[6] Boghossian, 1997, p. 357.
[7] Boghossian, 1997.
[8] Burge, 1993.

in the narrow sense just stated. And, thus, Boghossian's model seems to be correct.

I am not totally convinced that this explanation works. Both entitlement and justification are types of warrants, and justifications and entitlements are supposed to explain how we know what we know. If our justifications or entitlements are unable to account for the way we know what we know, how can they be correct? If it's not by virtue of knowing that the meaning of "if . . . then . . ." was fixed in order to make MP valid, how can this explain our knowledge of MP? Let me elaborate.

Suppose there is a person —we'll call him 'Julius'—who knows that there is a table in front of him, but doesn't know how to justify that. We want to say that in this case, Julius is *a posteriori* entitled to believe that there is a table in front of him—and now comes the justification—because he sees the table and there's nothing wrong with his perception of it. The justification that entitles Julius to his belief that there is a table in front of him is one that depends on his perceptual capacity of vision. What this means is that he is *a posteriori* entitled to have his belief, and that is why we must provide an *a posteriori* justification for his entitlement. The justification must connect him with the thing he came to know and explain what sort of cognitive capacity was responsible for his knowledge. If a cognitive agent knows something he must know it in some way: by virtue of some capacity. What this means is that for a justification to be correct at explaining someone's knowledge, it must explain how that person came to know what he knows; and for that it has to relate him with the capacity used in obtaining that knowledge.

To make this last point clearer, imagine now that Julius, eager for knowledge, learns a few more things. He learns that Fermat's last theorem is true, and so he now knows that Fermat's last theorem is true. But how does he know it? He is not capable of understanding Andrew Wiles' proof, and so he doesn't know it in the same way Wiles knows it. What this means is that the justification that entitles and justifies Wiles in believing the truth of Fermat's last theorem is not accessible to Julius' cognitive capacities. The sort of justification that is accessible to Julius and that actually entitles him to his belief is the fact that someone told him that the theorem is true, and he has no reason to suspect that that person is not reliable. Assuming that knowledge by testimony is *a posteriori* and knowledge by inference is *a priori*, we can say that Julius is *a posterior*i entitled to his belief that Fermat's last theorem is true and Wiles is *a priori* entitled to it. What this means is that the justification that explains Julius' entitlement to his belief that Fermat's last theorem is true is different from the justification that explains Wiles entitlement because they came to know it in different ways. And they came to know that Fermat's last theorem is true in different ways because they exercised different cognitive capacities in acquiring that knowledge. With this in place we can infer the following general principle about justification.

General principle of justification For a justification to explain in the right sort of way the knowledge of a particular cognitive agent, it must be such as to relate, explicitly or implicitly, the cognitive agent to the cognitive capacity exercised in obtaining it.

Epistemic justifications are not universal; that is, different agents can know the same proposition in different ways, and even the same agent can know the same proposition in different ways. For instance, we can know *a posteriori* a certain arithmetic result and then learn it *a priori* by making some mental calculation. If we fail to respect this general principal of justification, we may end up appealing to the wrong justification to explain someone's knowledge. For instance, we could explain my just acquired knowledge that 142 • 6 = 852 by saying that I came to know it by virtue of understanding the meaning of '•' and '=', when in fact I came to know it because I made a mental calculation.

Boghossian argues that although his epistemic model can be used to explain our knowledge of MP, we don't need to know premise (1) of his model. We could say something similar regarding Julius' case. Although Julius is incapable of understanding Wiles' proof of Fermat's last theorem, it is that proof that epistemically justifies Julius in believing Fermat's last theorem. It is easy to see that this cannot be so, since Julius knows Fermat's theorem *a posteriori*. Thus, we cannot explain his knowledge by appealing to the proof. The reason why we can appeal to the proof to explain Wiles' knowledge is because he came to know Fermat's theorem, by hypothesis, via his proof, which is not how Julius came to know that.

We could reply to this by saying that the justification, independently of the mode of acquisition, is the same in both cases. That is, the justification that entitles Julius and Wiles to believe Fermat's last theorem is the same in both cases. The justification is the proof: That is what warrants them to believe it. But this reply involves an equivocation between what proves the truth of Fermat's Theorem and how we came to know it. It is true that Wiles and Julius are in a sense entitled to their beliefs in Fermat's last theorem because Fermat's last theorem is a genuine theorem, and that is what Wiles' proof shows. But suppose that someone came to believe the theorem after reading a comic book in which there was a reference to the truth of the theorem. Is that person epistemically entitled to believe the theorem? No. A comic book is not a reliable source from which one could come to know Fermat's last theorem. In other words, the way in which this belief was acquired does not epistemically warrant the person in question to his belief in Fermat's last theorem; and the fact that there is a proof for it is irrelevant. It is one thing whether the content of a belief is true or false, and quite another thing is whether someone is or is not epistemically entitled in believing in the propositional content of that belief.[9]

In order to understand how someone came to know something, we have to look to the way that belief came about. If the same kind of justification were appropriate

[9] This is basically the moral of the story of Gettier's 1966 counterexamples to the traditional definition of knowledge.

for everyone, we couldn't say that Julius came to know Fermat's theorem *a posteriori* and Wiles *a priori*. Imagine that Fermat knew his theorem by some sort of rational insight. Although Wiles and Fermat came to know the theorem *a priori*, they came to know it in different ways. And this is the sort of story, so relevant for explaining someone's knowledge, that we would be unable to tell if we ignored the modes of acquiring knowledge.

If we fail to distinguish epistemic justifications from metaphysical justifications (by virtue of which some proposition is true), we can end up appealing to the latter in order to explain the former. For instance, if we don't distinguish the justification of the way Julius acquired his belief of Fermat's last theorem from the justification of the truth of the theorem, we can end up appealing to the latter to explain Julius' knowledge. And that we saw, that is wrong.

I think this is Boghossian's mistake, and a common mistake among empiricists. By trying to understand how knowledge is possible, some philosophers focus their attention on the justification clause of the traditional analysis of knowledge, forgetting sometimes that it is epistemic justification that is at issue.

The epistemic justification has to do with the way cognitive agents know the things they know. The metaphysical justification has to do with what explains the truth of a certain proposition. Although it is Wiles' proof that explains the truth of Fermat's last theorem, it is not by virtue of that proof that most of us came to know the theorem. In the same way, although Boghossian's model could explain what makes MP a valid rule of inference—because the conditional means whatever it means that makes MP valid—it is difficult to see how this could explain how we know MP, specially when we don't need to know the argument behind the model in order to know that MP is valid. That is why we said that justifications and entitlements are supposed to account for the way we know the things we know. Both justifications and entitlements have to satisfy our general principle of justification. And the model of the theory of implicit definition does not satisfy that.

Let's consider another example. Suppose we stipulated that the term "meter" would refer to the length of a certain stick S in Paris.[10] In that case, the person who did the stipulation knows *a priori*, arguably, that the stick S is one meter long. That person is *a priori* justified in believing that S is one meter long, because it was he who made the stipulation. Those who did not participate in the ceremony of stipulation can only know *a posteriori* the size of stick S. Suppose that Julius came to believe that S is one meter long because the person who did the stipulation told him. Does the same justification that explains that person's knowledge also work to explain Julius' knowledge? No. The person who did the stipulation knows it by stipulation, thus *a priori*, and Julius knows it by testimony, thus *a posteriori*. And in the same way that appealing to the ceremony of stipulation does not work to explain the knowledge of those who did not participate in the ceremony, appealing to the facts about how the meaning of "if, then" was fixed does not work to explain the knowledge in the validity of MP of people who ignore those facts. Let's rephrase premise (1) of Boghossian's model for this case.

[10] This example is from Kripke, 1974.

> (1*) If "meter" means what it means, then "one meter is the size of stick S at time t" must be true, for "meter" means whatever in fact makes this sentence true.

Boghossian argues that although most of us do not know the facts about how we fix the meaning of our logical constants, premise (1) of his epistemic model works to explain why people are entitled to believe in the validity of MP. Why? Because it is enough to understand the meaning of the conditional for us to be epistemically justified in believing in the validity of MP—as required by the epistemological notion of analyticity. But how can the mere understanding of the meaning of "if, then" justify us in believing in MP? Because understanding the meaning of "if, then" entails knowing something about the way the meaning of the conditional was fixed, namely, that the conditional means whatever it means that in fact makes MP valid. But we (the ignorant people) don't know that, so knowing the meaning of "if then" does not entail such a thing. In the same way, understanding the meaning of "meter" does not entail knowing that stick S is one meter long. Boghossian could reply by saying that they don't know that MP is valid explicitly but implicitly. And that is why premise (1) does not work as a justification but as an entitlement. But can we know such a thing implicitly? Knowing something implicitly is knowing without knowing that we know. But as we saw, we can know the meaning of "meter" without knowing (explicitly or implicitly) how the meaning of the term was fixed. I conclude that the epistemic model of the theory of implicit definition does not work in explaining our *a priori* knowledge. And the reason why this explanation does not work is because it fails to satisfy our general principle of justification.

Boghossian showed that the metaphysical notion of analyticity is of no explanatory value by arguing that it did not respect the meaning-fact truism: "How could the mere fact that S means that p make it the case that S is true? Doesn't it also have to be the case that p?" We can now modify his argument to show that the epistemological notion of analyticity also suffers from a lack of explanatory value. The metaphysical notion of analyticity fails to respect the meaning-fact truism; likewise, the epistemological notion of analyticity fails to respect the knowledge-fact truism. After all, modifying Boghossian's argument:

> How could the *mere* fact that we know that S means that p justify our knowledge that p? Doesn't it also have to be the case that we know that p?

For instance, how could the mere fact that we know that "Snow is white" means that snow is white justify our knowledge that snow is white? Don't we also have to know that snow is in fact white? Likewise, how could the mere fact that we know the meaning of "All bachelors are unmarried" justify our knowledge that all bachelors are unmarried? Don't we also have to know that all bachelors are unmarried? I conclude also that the epistemological notion of analyticity is of no explanatory value.

The stipulation problem

There is another problem with empiricism which also shows that we cannot explain the *a priori* with the analytic.

Stipulations seem to be a common activity in every linguistic community. We can stipulate that the word "meter" will refer to the length of a certain stick in Paris, that our dog will be named "Putchy", that snow will be called "snow", that "white" will refer to white things, and so on. And in the process of dubbing we stipulate that certain sentences will be true, namely those sentences in which one of its constituent words is the new word introduced during the dubbing process. For instance, saying that my dog will be called "Putchy" is saying that the sentence "This dog is Putchy" is true (pointing to Putchy)— and this sentence is for me known *a priori*. There is nothing wrong with this kind of stipulation: We do rule over language.

But do we rule over truth or validity? Besides the trivial cases of dubbing and stipulation like the ones that occur in wedding ceremonies, it is difficult to see how we could stipulate a sentence to be true. What makes a sentence true or false is the world, and we cannot decide that the world is to be of a certain way or another. But we can stipulate a word to pick out something in the world to make a sentence true.[11] For instance, I can stipulate that the word "Bla" will mean whatever will make the sentence "2 + 2 = Bla" true. In this case, we know that "Bla" can only pick out 4. And in this way we can say we succeeded in stipulating truth. But there are other problems. How do we know that the word we stipulate to pick out that thing that makes a certain sentence true did the right job? In the case of "2 + 2 = Bla" we already knew that 4 was the right answer. But how do we know that "Ble" can make the sentence "Ble is a vampire" true? Given that there are no such things as vampires, there is nothing in the world to make this sentence true. Thus, stipulating a sentence to be true does not make it true, what makes it true is the world. What this amount to is that we cannot stipulate truth or validity without some independent reason that supports the success of our stipulations. In other words, we cannot explain our knowledge by appealing to stipulations, given that we assume the former in order to explain the success of the latter.

Arthur Prior introduced a new connective called 'tonk' to make this point.[12] If validity were just a matter of stipulation, then we could stipulate that "tonk" will mean whatever it means that would make the following inferences come out valid.

Tonk	A tonk B.	A.
	Therefore, B.	Therefore, A tonk B.

There is no meaning that "tonk" might have that would make this inferences valid. Nonetheless, I think we have succeeded in stipulating a meaning for "tonk", namely, that meaning implicitly defined in tonk inferences that, in fact,

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[11] I owe this formulation to David Papineau.

[12] Prior, 1960.

make tonk invalid. So, although the doctrine of implicit definition may succeed in the task of explaining how our logical words acquired the meaning they have, namely, they acquired the meaning they have by virtue of the role they play in certain inferences, it seems to fail in its epistemic task. Implicit definition relies on the idea that we could stipulate truth (or validity) in order to explain knowledge in the same way we explain it in the case of certain conventions, as in Kripke's example of the standard meter in Paris, or in the everyday cases of dubbing. But if we cannot stipulate truth in such a way, then we cannot make a case for knowledge by convention.[13]

What this means is that we only distinguish cases where we succeed in our stipulation from those in which we do not, as in the tonk case, when we already have a reason to believe in the success of our stipulations. The way we know that there is no meaning that "tonk" might have that makes those inferences valid seems to be indistinguishable from the way we know that in the MP case there is a meaning that "if . . . then . . ." has as to make MP inferences valid. The same process that *a priori* entitles us to our belief that tonk rules are invalid seems to be at work in our entitlement to the belief that MP is valid. And if that is so, it is not because we stipulated, since we did the same thing in both cases, but because we knew it independently of our stipulation. But if this is the case, then the doctrine of implicit definition fails in its epistemological task.

This seems to imply that there is something fundamentally wrong with any reductionist project. Knowing facts about meaning or the way the meaning is fixed seems to be a precondition of any kind of propositional knowledge, whether *a priori* or *a posteriori*. To know that some sentence is true, we must: (i) understand what the sentence is about, which is the same as understanding its meaning, and (ii) know whether what the sentence is about makes the sentence true. And this is the knowledge-fact truism we talked about earlier. Modifying Boghossian, we can say:

> How could the mere fact that we know that S means that p justify our knowledge that p? Doesn't it also have to be the case that we know that p?

Now we can understand why people used to conflate the epistemological notion of analyticity with the metaphysical one. If we want to argue that knowledge of meanings is enough to justify us in believing a sentence to be true, we have also to argue that a sentence is true by virtue of its meaning alone. If what made a sentence true were its meaning—the fact—then we could say that it is enough to know that fact to justify us in holding it true. But meanings don't make sentences true. Likewise, knowing meanings of sentences does not justify our knowledge of analytic truths.

We can sum up the reductionist dialectic in this way: First the moderate empiricists argue that knowing the meaning of a sentence is enough for us to be justified in holding it true. Then we ask: Why? Because we stipulate it to be

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[13] See Horwich, 1997, for a similar point.

enough, they say. And how do we know that this stipulation succeeds? Because we already knew it. But then, as Quine said when he criticised the first reductionist doctrine:

> Now it seems to imply nothing that is not already implied by the fact that elementary logic is obvious or can be resolved into obvious steps.[14]

Bibliography

Boghossian, Paul
1997 Analyticity
In Bob Hale & Crispin Wright, *Blackwell Companion to the Philosophy of Language*, Blackwell.

Burge, Tyler
1993 Content preservation
The Philosophical Review, pp. 457–488.

Gettier, Edmund
1966 Is justified true belief knowledge?
Analysis, vol. 23, pp. 121–123.

Horwich, Paul
1997 Implicit definition, analytic truth and a priori knowledge
Noûs, vol. 31, pp. 423–440.

Quine, Willard van Orman
1966 Carnap and logical truth
In *The Ways of Paradox and Other Essays*, by W. V. O. Quine, Harvard University Press, pp. 107–132.

Prior, Arthur
1960 The runabout inference-ticket
Analysis, vol. 21, pp. 38–39. Also in *Readings on Logic*, 2nd edition, Irving M. Copi & James A. Gould, The Macmillan Company, 1964, pp. 217–218.

[14] Quine, 1966, p. 112.