Philip A. Ebert

Transmission of warrant-failure and the notion of epistemic analyticity

Introduction

In this paper I will argue that Boghossian's explanation of how we can acquire a priori knowledge of logical principles through implicit definitions commits a transmission of warrant-failure. In the first section I will briefly outline Boghossian's account [1], followed by an explanation of what *transmission of warrant-failure* consists in. I will also show that this charge is independent of the worry of rule-circularity which has been raised concerning the justification of logical principles and of which Boghossian is fully aware.[2] Thus, it constitutes a distinct worry for Boghossian's account. In the third section I will argue for the insufficiency of Boghossian's template which is meant to explain how we acquire a warrant for logical principles. I will show however that the insufficiency of his template can be remedied by adopting what I call the Disquotational Step. In the fourth section I will then argue that incorporating this necessary further step makes his template subject to a transmission of warrant-failure, assuming that certain rather basic and individually motivated principles hold. Thus, Boghossian's account faces a dilemma: Either he adopts the Disquotational Step and subjects his account to the charge of a transmission of warrant-failure, or he drops this additional step leaving the account confronted with explaining the gap that has previously been highlighted. The fifth section discusses various rejoinders that Boghossian might adopt, but I will argue that none of these can resolve the dilemma. Lastly, I will raise and briefly discuss the question whether this worry generalizes to other accounts, such as Hale & Wright's [Hale &

---

[1] I focus on [Boghossian, 1996: 360-91], [Boghossian 1997: 331-68], other relevant papers are [Boghossian 2000: 229-54], [Boghossian, 2001: 1-40] and [Boghossian, 2003: 225-48].
[2] Boghossian actually uses rule-circularity as a genuine and legitimate type of justification. However, this claim won't be the subject of this paper.

Wright 2000: 286-319], that aim to explain our knowledge of logic and/or mathematics in virtue of implicit definitions.[3]

1. Boghossian's template for a priori knowledge of logical principles

Boghossian's explanation of our a priori knowledge of logical principles has two steps. The first is based on assuming what might be called *inferentialism*, the thesis that genuine meaning-constituting rules provide an *entitlement* to reason according to such rules. Although inferentialism might give us an entitlement to use a certain rule, Boghossian notes that this by itself does not yet explain our belief that certain rules are valid. On his view the subject does not need to *know* that a certain rule is meaning-constituting in order to be entitled to infer according to it. Therefore a second step is required in order to explain our *knowledge* of certain presumably a priori principles. Namely, we need to explain how we can be warranted to believe that those principles are valid or true, which is explained in virtue of Boghossian's *template*. In the following, I will leave aside the issue of whether inferentialism is acceptable and sufficient to provide entitlements for suitably restricted rules and focus on the second step.[4]

In his earlier paper 'Analyticity' he suggests that we can explain how to gain a 'warrant for our belief in the elementary truths of logic [Boghossian 1997: 358]' by the following (slightly adjusted) template:

> *Boghossian's template*
>
> 1. If C is to mean what it does, then A has to be valid
> 2. C means what it does
> 3. A is valid

---

[3] I won't have space to discuss other similar positions as in [Peacocke 1999] and [Peacocke 2000: 255-85]
[4] [Williamson 2003: 249-93] provides a recent attack on inferentialism as such and [Wright 2001: 41-85] raises other worries with Boghossian's proposal.

This template is a meta-language construction. The first premise above is what Boghossian considers to be an implicit definition of C, while C should be regarded as a name for a term, such as 'and' and A as a name for the meaning-constituting inferences for 'and', such as its Introduction and Elimination rules (I-E rules). The second premise is the antecedent of the conditional of the first premise. It is phrased slightly confusingly and I suggest that it be understood such that `C means what it does' is roughly equivalent to 'C refers as intended by the implicit definition' or 'C refers as intended' for short.[5] I will discuss this ambiguity in due course.

Various problems have been highlighted concerning Boghossian's account.[6] The following criticism is independent of points previously raised in the literature. Before outlining my criticism let me quickly explain the basic notions I will use in my criticism such as 'warrants', 'transmission of warrants' and 'transmission of warrant-failure' and the contrasting idea of a 'rule-circular justification'.

2. Warrants, Transmission of warrant(-failure) and Rule-circular justification.

I will be rather brief in my explication of the notion of a 'warrant' and only later introduce further complication in the context of possible rejoinders for Boghossian. For the moment, it will be enough to regard 'warrant' - a notion hardly explained in Boghossian's article - as a placeholder for that which turns a true belief into knowledge. The notion of *transmission of warrant* also needs clarification and can be characterized by contrasting it to the notion of *closure of warrant*.[7] The latter notion merely claims that if there are warrants for the premises of a valid argument then there is a warrant for the conclusion too. The notion of a *transmission of warrant* is stronger in that it provides a stricter connection between the warrants for the premises and the resulting warrant for the

5. Also note that I will neglect the minor difference between premise (1) and (2) in that (1) says `[. . . ] is to mean what it does' and (2) reads `[. . .] means what it does.' I will assume that both occurrences are intended to be used interchangeably to warrant the modus ponens inference.
6. Criticism concerning implicit definitions and I-E rules can be found in [Prior 1960: 38-9] [Horwich 1997: 423-40], [Margolis and Laurence 2001: 293-302], [Wright 2001; 41-85] and [Williamson 2003: 249-293]
[7] This distinction was previously drawn in [Wright 2002: 330-48]. I follow closely this discussion. The notion of closure of warrant goes back to [Dretske 1970: 1007-23].

conclusion. It imposes requirements on the thinker acquiring a warrant for the conclusion *in virtue* of the premises being warranted. Hence the idea is that a warrant is transmitted if a thinker acquires a warrant for the premises of a valid argument, knows that it is valid and *thereby* - i.e. in virtue of both components - acquires a warrant for the truth of the conclusion.

We also need to clarify the notion of a *transmission of warrant-failure*. There are different ways in which such failure might occur. One type, which will be important to my argument, can be characterized as a form of *begging the question*.[8] The basic idea is that in order to hold true one of the premises of the argument, i.e. to have a warrant for the truth of the premises, already presupposes having acquired a warrant for the truth of the conclusion. This results in a *transmission of warrant-failure*, as we can't transmit a warrant for the truth of the conclusion from the premises, because such warrant already has to be acquired in order to ascertain a warrant for the premises.

It is important to note that this charge is independent of the problem already highlighted by Quine [Quine 1935: 77-106], [Quine 1954: 107-32] and others that to justify logical inference results in a justificatory circle - another form of *begging the question* - as we already need to presuppose the logical inference in question in order to appreciate the validity of the argument which aims to provide a justification for its validity. Boghossian is aware of the issue of *rule-circular justification* (RCJ), but he aims to provide an account in which we can regard this rule-circularity as providing a genuine justification. Let me briefly clarify the notion of a rule-circular justification, highlight some differences and then move on to my argument against Boghossian's account.

A canonical statement of the rule-circularity worry is that an argument is unpersuasive if the conclusion of an argument establishes the validity of an inference rule, whose validity is already presupposed in reasoning from the premises to this very conclusion. To wit, both worries (TOWF and RCJ) have to do with the persuasiveness or conclusiveness of

---

[8] Note that the case of *begging the question* is not a counterexample to the closure of warrant-thesis.

an argument, but I think there are various considerations that show that the worry of (RCJ) is distinct from the charge of a *transmission of warrant-failure*.

(RCJ) applies to the justification of inferences, where an inference is used in the argument and occurs in the conclusion. Reconsider the above example with the connective 'and' and its meaning-constituting rules in the template. The conclusion is about the validity of the 'and' rules and the reasoning merely uses modus ponens, so there is no charge of a rule-circular justification possible. The (TOWF)-worry is in this respect more general as, if it is correct, it will show that the template is wrong for any introduced connective. Furthermore, the charge also applies to statements that might be justified in virtue of the above reasoning which are not inferences. Consider, e.g. an extension of Boghossian's account to mathematical principles such as Hume's Principle (HP), which, if I am right, fails due to a transmission of warrant-failure.[9]

There are further differences, but I won't dwell on them here and instead present the main thrust of this paper. In the next section I will further investigate Boghossian's template, as I think it suffers from serious insufficiencies. Important amendments have to be made in order to regard it as being able to at least primae facie provide a 'warrant for our belief in the elementary truths of logic' [Boghossian 1997: 358]. But having these amendments in place will be to commit a transmission failure, as I will show in section 4.

3 Step 1: The insufficiency of Boghossian's template

The issue here surrounds the elusive and inherently ambiguous notion of 'is to mean what it does' of the first premise or 'means what it does' of the second premise, which presumably are synonymous. Still, there are various ways to interpret the phrase. One option is to deflate this notion and accept that even an empty term 'means what it does', namely we can give some descriptive content to it. So take for example the term

---

[9] Disregarding for the moment that HP might be rephrased as Introduction and Elimination Rules.

'extension' as introduced by the inconsistent axiom Basic Law V.[10] Despite the axiom's inconsistency one can contend that on the deflated version of the second premise the term 'extension' means what it does, in that we can explain the notion with appeal to co-extensiveness. Thus, on this reading, the second premise of Boghossian's template is close to trivial, while putting most of the weight on the first premise, which becomes rather substantial: Why should the mere having of descriptive content be sufficient to figure in valid patterns of inference? Just consider Basic Law V again.

Alternatively, we can - as I will do for the rest of this paper - interpret the phrase as equivalent to 'refers as intended'. This renders the first premise close to trivially true, as what it claims is that, if a term has the intended reference in order to make a pattern of meaning-constituting rules valid, then this pattern will be valid. On a material conditional interpretation this above conditional is a necessary truth. But, the second premise becomes rather substantial as it claims that a term refers as intended. However, on what grounds can we rule out that it is not an empty term? It is this issue that will become prominent in my later discussion, and the main point will be that in order to appreciate or to have a warrant that the term involved refers as intended, we already have to appreciate or have to have a warrant for believing that the conclusion - i.e. the meaning-constituting patterns - are valid. The core of my charge consists of two key thoughts that highlight the shortcomings of Boghossian's account. Firstly, the template as outlined by Boghossian has to guarantee knowledge of the validity of a pattern of inference as an *object-language* statement and not merely as a *metatheoretical* statement - a claim that I will substantiate in this section. Secondly, to grasp the (object-language) content of the second premise - that is the intended reference of the term - an understanding of the term's role in whole sentence such as the conclusion is necessary. Thus, in order to be in a position to know that the term has its intended reference, we need to know that the conclusion has the meaning to make the pattern of meaning-constituting inferences valid. This will eventually lead to a transmission of warrant-failure of Boghossian's template - the details of this latter claim will be expounded in section labeled 'step 2'.

---

[10] Basic Law V is Frege's famous principle which introduces the term `extension' (or rather the identiy-conditions of this term) in virtue of co-extensiveness. It's fame is mainly due to its inconsistency which was first shown by Russell (and independently by Zermelo)

To develop my worries culminating in the claim that Boghossian's account needs further amendments let us look closer at the conclusion of the template, as cited it says:

Boghossian's template

1. If C is to mean what it does, then A has to be valid
2. C means what it does
3. A is valid

But, as already mentioned C and A are names for connectives and meaning-constituting rules, and thus the conclusion is merely a meta-linguistic statement. This however raises an immediate worry, namely how does the meta-linguistic statement concerning the validity of the rule guarantee that the subject has grasped the *content* of the rule in question? That is, granting that the template provides a warrant for the validity of A for the subject, it is not secured that the subject has also understood the rule he has a warrant for. To wit, the meaning-constituting rules for 'and', or other more complex connectives, might be written in Chinese and, as it happens, my Chinese friend tells me that premise one and two are true without telling me which connective he is talking about. Surely, I would be able to assent to the conclusion and agree such and such signs represent valid rules of inference, without *grasping the content* of the rule in question. That is, it seems questionable - to say the least - that the template as stated is sufficient to provide the *right type* of warranted belief in the rules/principle.

Therefore, I believe Boghossian's template needs to be adjusted in order to account for such a case (the Chinese friend example). This is to add a further step which I will label the Disquotational Step (DS).[11] The idea, roughly, is that we can account for the kind of

---

[11] This step is not strictly speaking an instance of disquotation, Disquotation normally concerns the truth of a statement and not the validity of an inference rule as in the above template. One option to bring my use of (DS) closer to the standard usage is to reinterpret the Boghossian's template in terms of statements of a rule and consequently to use truth instead of validity and so make the additional step a genuine instance of disquotation. However, I chose to remain as close as possible to Boghossian's initial characterization of the

identifying knowledge that is needed in explaining our knowledge of logic or the rules in question if we are warranted to disquote on what Boghossian took to be the conclusion that is (3) above. Thus, I will adjust the above template by adding a further step from the initial conclusion (3) to the new conclusion (4) - i.e. the object-language statement of (3). This further step is what I will refer to as the Disquotational Step. For purposes of presentation and clarity I will use 'and' for A and 'P and Q $\Rightarrow$ P' for C, while also omitting the second elimination rule for simplicity.

Boghossian's new template

1. If 'and' is to mean what it does, then 'P and Q $\Rightarrow$ P' has to be valid
2. 'and' means what it does
3. 'P and Q $\Rightarrow$ P' is valid
4. P and Q $\Rightarrow$ P[12]

Adding the last conclusion forecloses the above worry of knowledge by testimony, but it raises the question how we can justify the move from (3) to (4). As we have seen above, the premises as so far understood, are insufficient to provide a guarantee for the *Disquotational Step* (remember the Chinese friend counterexample). Thus we have to examine how we can warrant this move and I will argue that, based on other assumptions which I will outline below, this will lead to a transmission of warrant-failure for the new and adjusted template.

---

template and merely labelled the additional step, which I argued is necessary, a 'Disquotation Step' for lack of a better name. See also footnote 12 for further discussion.

[12] As noted above, in order to turn the step from (3) to (4) into a genuine disquotation move we could further adjust the template such that we are not talking about the validity of I-E rules ('$\Rightarrow$' is meant to represent an inference), rather the truth of the statement of the rule. Accordingly (3) would then be represented as 'P and Q $\models$ P' is true. I contend however that nothing hinges on this variation since my argument concerns a *structural* difficulty with Boghossian's template: What is merely needed is a way to represent the step from being warranted in believing that conjunction elimination is valid (or that the statement of conjunction elimination is true) to being warranted in believing conjunction elimination and (DS) is meant to represent just this move. If, as I argued, this move is necessary for a subject being warranted believing (and grasping the content of) such inference, the following section will outline a transmission of warrant-failure for Boghossian's position. If the step is rejected then I find it hard to see how the template could suffice to explain a subject's warranted belief and thereby grasp of the truths of logic.

4. Step 2: Transmission of warrant-failure of the new template

So, if the stronger conclusion (4) is needed to establish a warranted belief in the truth of the principle in question, how can we justifiably move to this conclusion? That is, what is it that warrants the application of the Disquotation Step - moving from premise (3) to the conclusion - and thus disquote? The worry I will raise in the following is an instance of the *transmission of warrant-failure* charge. Namely, that under a suitable reading of (2) and (3) we need, in order to justify the Disquotational Step, a prerequisite warrant for (4). This claim is based on four assumptions, which individually are either implicitly held by Boghossian or can be considered as rather minimal claims. In the following I will outline those assumptions and then clarify my worry.

A1: Being warranted to disquote a sentence requires an understanding of that sentence

The idea is that in order to be *warranted* in making the Disquotational Step it is necessary to *understand* the sentence being disquoted - this much seems to me a *platitude*. And in order to have such understanding one has to possess, or rather grasp, the *concept* that the principle is about, i.e. in our case 'and', hence one has to *understand* or *grasp* the content of the second premise. This assumption is introduced so to avoid knowledge by testimony and thereby to account for the justification to use the Disquotation Step. The following assumption is rather distinct and more general.

A2: The Context Principle

Basically, the thought encapsulated in the Context Principle (at least in the following rather deflated version) is that the basic semantic unit for our understanding are sentences and, hence, in order to appreciate what reference a term has, one has to understand the role this term plays in various sentences. This version is close to Evan's *Generality constraint* and we can assume that *primae facie* it is accepted by Boghossian.

A3: Understanding involves knowledge of meaning

Just as (A1) and (A2), I also consider this claim to be rather benign and generally acceptable. Thus, in the following I won't assume a specific model of what understanding involves (knowledge of truth-conditions perhaps), rather the minimal conditional that - in general - to understand a sentence is to have knowledge of the meaning of the sentence.

A4: Epistemic notion of analyticity

Lastly, (A4) is Boghossian's very own conception of *epistemic analyticity*. More explicitly he claims that a statement S is *epistemically analytic* for a person T, if 'the mere grasp of S's meaning by T sufficed for T's being justified in holding S true' [Boghossian 1997: 334]. Thus Boghossian's conception of analyticity, slightly rephrased, involves that knowing the meaning of a statement S, implies a warrant for the truth of S. Although, the onus is not on me to motivate such a conception, there surely are rather intuitive examples that give rise to such a view. Take for example the sentence 'Everything red is coloured'. Here it is *primae facie* appealing to think that a grasp of the truth conditions of this statement by a person T suffices for T being justified in holding the sentence to be true.[13]

With these assumptions in place let me outline my charge of a *transmission of warrant-failure* in the new template above concerning the added fourth premise. Hence, let us ask what it is to have a *warrant* for the Disquotational Step. The following argument will show that a necessary condition for such a warrant is that one has to have a prerequisite warrant for the conclusion.

The argument goes as follows: Based on (A1), to have a warrant for making the Disquotational Step one has to have an understanding of the second premise. The idea

---

[13] However Boghossian distances himself from superficially similar views such as [BonJour 1998] who appeals to some form of rational insight.

here is that in order to be justified to disquote one has to be in possession of the concept involved - in our case 'and' - which is just the content of the second premise. However, in order to understand the second premise, that is, to understand the intended referent of A (which is the content of the second premise) we have to understand the role this term plays in appropriate sentences, due to an application of the Context Principle (A2), i.e. we have to have a previous grasp of statements like the conclusion in Boghossian's argument. But, in order to have an understanding of the conclusion it involves, by (A3), knowledge of the meaning of this statement. However, and this is the crux of the argument, the logical principles in question are, for Boghossian, to be regarded as epistemically analytic. Hence, we can assume (A4) - Boghossian's conception of epistemic analyticity - according to which, one can have knowledge of the meaning of a sentence only if one has a warrant for the truth of such sentences. Thus, assuming the transitivity of the conditional, one can only have a warrant for the Disquotational Step in Boghossian's new template if one has a prior warrant for the truth of the conclusion.[14]

Therefore, we can confront a proponent of Boghossian's account with the following dilemma. Either his template is inherently insufficient in accounting for our knowledge of certain principles on the basis of being unable to guarantee disquoting the initial conclusion (3). Or he faces - presupposing the tenability of the above assumption - a *transmission of warrant-failure*. This charge is based on his template and his additional thesis of *epistemic analyticity*, which (so I argued) are incompatible. To put the basic charge rather crudely, we can say that the incompatibility arises because his template requires that understanding a sentence/rule is distinct from knowing, or being warranted in believing, that the sentence/rule is true/valid. Otherwise the template can't transmit a

---

[14] For the more formally minded, the argument can be represented using the following abbreviations: DS stands for Disquotational Step; $K(\alpha)$ for knowledge of α; $U(\alpha)$ for understanding α; $M(\alpha)$ for meaning of α; $W(\alpha)$ for warrant/being justified for α and $T(\alpha)$ for truth of α.
Step 1
$W(\text{DS on } 3^{rd} \text{ premise}) \Rightarrow U(2^{nd} \text{ premise})$ - due to A1
Step 2
$U(2^{nd} \text{premise}) \Rightarrow U(\text{conclusion})$ - due to A2
Step 3
$U(\text{conclusion}) \Rightarrow K(M(\text{conclusion}))$ - due to A3
Step 4
$K(M(\text{conclusion})) \Rightarrow W(T(\text{conclusion}))$ - due to A4

warrant for the conclusion. However, his own conception of epistemic analyticity is such that a mere understanding of the sentence/rule suffices to know, or be warranted to regard, that the sentence/rule to be true/valid. This is the basic tension in Boghossian's account that this argument is aimed to expound.

5. Various rejoinders to my criticism

In this section I will discuss three replies that could be made on behalf of Boghossian to my criticism. The first discusses the application of the Context Principle. The second takes up a distinction between internal and external warrants and develops a reply along externalist lines that Boghossian seems likely to adopt. Lastly, I will draw a distinction within the notion of *acquiring a warrant* on the basis of which a further response can be developed. I will argue that none of these lines of response undermines my argument.

5.1 The Context Principle revisited

A possible reply against my argument is that the application of the Context Principle does not guarantee that in order to understand the second premise one *has* to have an understanding of the conclusion. Rather, granting that the Context Principle correctly applies here, it only demands that one has to understand some sentences in which the newly introduced term occurs. This does not necessarily imply that it has to be the conclusion of the template.

Although I think this is a correct observation I don't believe it has much force. The conclusion of the argument is a disquoted version of what is supposed to be the meaning-constituting rules for the new term in question. Hence, to grasp the reference of the term in question, which implies (at least) knowing what role the term plays in whole sentences (Context Principle), one must grasp what role the term plays in its own meaning-constituting rules that are meant to fix the reference of the term. Hence, although I can discern a weakness in the general structure of the argument, the fact that the conclusion is concerned with the meaning-constituting inferences of the term in question should imply

that grasping the reference of the term as such, already involves a grasp of the conclusion.

But to reinforce my argument note the following two points: Firstly, if the role of the Context Principle is accepted and one has to appeal to *some* sentences to grasp the reference of the new term, while excluding the conclusion to avoid my argument, then this implies the following insufficiency: The template - by itself - is not suffcient to account for a subject's knowledge of the logical principle in question, rather the subject has to appeal to other sentences not mentioned in the template in order to understand and thus acquire knowledge of that principle.

Secondly, to focus the discussion we might imagine a scenario in which a character, who barely has a grasp of language and who has no grasp of any logical connectives, is meant to be introduced to these new connectives in virtue of the template. This is a case in which Boghossian's template should be able to generate a warrant for the logical principle for the character in question. The crucial point in this scenario however, is that the character only knows of the meaning-constituting rules for the connectives (on the basis of premise (1)) and thus, if the Context Principle is in place, *has* to appeal to the conclusion of the argument as, *per impossibile,* there are no other occurrences of the term he can refer to. Hence, I think that exploiting the structural weakness of my argument won't establish a serious line of reply to my charge of a transmission of warrant-failure.

5.2 Internal vs. External warrants

In his various papers on rule-circular justification of logical inference, Boghossian can be interpreted as adopting an externalist position in order to evade the charge of rule-circularity and even to show that such circularity can be used as a kind of justification for our knowledge of logical principles. Boghossian's point - in a nutshell - is that we can still acquire a warrant for an inference despite its circularity because it is not required that we have to appreciate an *antecedent* warrant for the rule in question. That is, in an externalist fashion, we don't need to first reflectively acknowledge the truth-preserving

nature of the inference to be warranted - on the basis of this inference - to be justified in accepting this very same inference.

A specific notion of warrant is assumed for such externalism. Let us therefore distinguish two different statuses a warrant might have. A warrant is internal if the warrant that underlies a certain belief (that a certain inference is valid for example) can be claimed to be had by the subject in virtue of a priori reasoning, self-knowledge or reflection. A warrant is external if the warrant that underlies a certain belief is not so accessible and thus cannot be claimed through a priori reasoning, self-knowledge or reflection. Having this distinction in place, maybe one line of response for Boghossian is to argue that, as in the case of rule-circular justification, merely an external warrant is required for the conclusion and not an internal one.

There are large issues lurking in the background of which three questions can be separated for the discussion at hand. Firstly, the very general issue, which I won't discuss here, as to whether externalism in the context of logic and mathematics can be regarded as providing the *appropriate type* of warrant. Secondly, and more importantly for the issue at hand, is whether an appeal to externalism is suitable to evade my criticism. Is Boghossian in a position to make use of external warrants? That is, is his position that aims to explain the warrant for our beliefs in logic in virtue of the template compatible with merely providing external warrants? And lastly, if it is compatible, how exactly would an appeal to external warrants circumvent my charge of a transmission of warrant-failure, considering that my argument did not appeal to a specific type of warrant.

Let us first consider whether Boghossian can appeal to external warrants. I think there is an awkwardness in interpreting him as invoking only these kinds of warrants in the context of logic. This is because he provides a template to explain how a subject could, *on the basis of reasoning* through the template, acquire a warrant for our logical principles. Surely, a warrant acquired in this way would be internal in the sense that it can be claimed by a priori reasoning or reflection itself, otherwise it is unclear what the point of his template is. Furthermore, consider that Boghossian appeals to a notion of *epistemic*

analyticity where grasping the meaning of terms suffices to be warranted in holding true certain statements. It seems rather intuitive, also in this case, that the *type* of warrant can't just be purely external - that is not claimable by reflection or self-knowledge. To use external warrants here would seem to imply that grasping the meaning of the term or understanding a certain expression is spelled out externally, which (at least intuitively) goes against the initial motivation for the notion of epistemic analyticity. Hence, I have strong reservations in interpreting Boghossian's position in a strict externalist fashion.

Nevertheless, even assuming he is merely in the business of providing external warrants there seems no reasonable way out of the transmission of warrant-failure charge unless Boghossian gives up on his template. To wit, a strict externalist should not be concerned with providing a template in the first place, and hence would not accept that there is a transmission of warrant failure - just because the actual source of the warrant for the conclusion is some kind of reliable process and not reasoning based on the template. Hence, for a strict externalist there is no transmission of warrant-failure, *just because there is no warrant to be transmitted from the premises to the conclusion.* And unless Boghossian wants to give up on the template transmitting a warrant, appeal to external warrants seems no way out. This point has a further interesting consequence for Boghossian's positions, namely that assuming that the template does some work in explaining our knowledge of logic, it seems as if the template is aimed to provide warrants which are *internal* and thus might be in conflict with his more recent thoughts on the matter.

5.3 Two notions of 'acquiring a warrant'

Here I want to suggest a last rejoinder by drawing a further distinction within our notion of warrant. This distinction is not concerned with internal and external warrants, rather it has to do with the relation a warrant (internal or external) can have to a subject. Thus, we might distinguish two different statuses for a warrant to count as 'being acquired'.

On the one hand a thinker might be in *possession* of a specific warrant for a belief. That is - metaphorically speaking - the subject has the warrant within his epistemic field. In contrast a thinker might have a specific warrant merely *available* without actually possessing the warrant. That is, to use the above metaphor, the subject has the warrant close to his epistemic field ready to be possessed without actually possessing it. Although this distinction might not be as clear-cut as one would like, the intuitive idea is clear and will prove to be useful for this discussion.[15]

There might be various ways in which Boghossian could apply this distinction. Here, I will discuss the most obvious option. He might argue that the notion of *epistemic analyticity* should be revised such that instead of maintaining that a statement S is *epistemically analytic* for a person T, if 'the mere grasp of S's meaning by T sufficed for T's being justified in holding S true', we should say that 'the mere grasp of S's meaning by T sufficed for T's having *available* a warrant in holding S true' without necessarily *possessing* it. This alteration might be used to stop the charge of a transmission of warrant-failure in the following way: In order to make the last step in the above argument I need to assume that what the notion of epistemic analyticity provides is the *possession* of a warrant, which would then lead to a transmission of (possessed) warrant-failure, as to possess a warrant for the second premise involves already possessing a warrant for the conclusion. But, crucially - so the line of response might go - having acknowledged the above distinction, the notion of epistemic analyticity involved is weaker in that it only makes *available* a warrant for the conclusion. However, this does not suffice for a genuine transmission of warrant-failure *per se*, as what we end up with is that the possession of a warrant for the premises will involve the availability of a warrant for the conclusion. But this result - by itself - can't be sufficient to reject the template, because for every valid argument it will be the case that somehow the possession of a warrant for the premises will involve the availability of the conclusion - otherwise how could there be any transmission of warrant in the first place?

---

[15] Williamson in his [Williamson, 2000] draws this distinction with respect to knowledge - furthermore a similar distinction is often made in the context of self knowledge.

I want to consider two lines of response to this thought. First, I will examine whether weakening the notion of epistemic analyticity is intelligible. Second, I will argue that even if it is the case that the possession of a warrant for the premises merely involves the availability of a warrant for the conclusion, there still remains a problem for Boghossian in the special case of his template.

I think that the suggested revision of the notion of epistemic analyticity will weaken this notion to such an extent that the conception of epistemic analyticity hardly does any work in an epistemology of the a priori. To wit, the main motivation for the notion of epistemic analyticity is that a grasp of meaning plays a substantial role in being justified in holding certain sentences to be true. Now, on the weakened version of epistemic analyticity, understanding can't be appealed to in claiming to be in possession of a warrant for holding a statement true. Understanding merely makes a warrant available to a subject, which however, is not sufficient as a genuine justification for holding true certain statements. Thus, on this weakened version of epistemic analyticity a further story, over and above the template and the idea of epistemic analyticity, has to be told in order to explain why a subject (seems to) *possess* a warrant for a logical principle. Hence, making this revision within the notion of epistemic analyticity will lead to an insufficiency in the account, as put forward by Boghossian, which has to be remedied by appealing to other theses that in turn might threaten to undermine the initial position.

Concerning the second issue, even if we grant that the distinction between possession and availability is intelligible and a revised version of epistemic analyticity is compatible with Boghossian's position, there still remain problems that are reminiscent of a transmission of warrant-failure. My reply will partly rely on appealing to the intuition that in order to have adequately accounted for a subject's knowledge of logical principle in virtue of this template, the subject should be able to *reflect* on its warrants for the premises and its conclusion and thus be in a *position to claim* a warrant for them. According to the above rejoinder on behalf of Boghossian, to possess the warrant for making the Disquotational Step involves the mere availability of a warrant - due to the weakened version of epistemic analyticity - for the conclusion. However, from a reflective stance *to claim to*

possess a warrant for this premise also involves a *claim to have available* a warrant for the conclusion. Thus, we need to ask on what grounds can I make the *claim to have available* a warrant for the conclusion?

And here is the impasse - in the form of a dilemma - that Boghossian faces. He might show how we can claim to have available such warrant by appealing to further resources, independent of the template, but by doing so he would have to concede the insufficiency of his template; or he might take the only other route to make such a claim and this is to proceed via the template, reflect on it and agree that it is correct. This would provide a claim to have available a warrant for the conclusion. However this latter option is equally insufficient in order to claim to have a warrant available for the conclusion, as it presupposes - as previously acknowledged - that the subject is in a position to go through the argument and consider whether it can claim to *possess* a warrant for the premises. Thus, no progress is made and the initial problem re-occurs. Thence, I believe that Boghossian's template is still insufficient in providing genuine warrants for holding true certain logical principles.

So to conclude, I believe I have shown that Boghossian's position faces genuine difficulties which can't be remedied in any obvious way, as my discussion of the various possible rejoinders showed. The question that remains to be discussed here is whether these problems are specific to Boghossian's account or whether they can also be extended to other similar conceptions that aim to found our knowledge of logic and arithmetic on implicit definitions. In the following and last section, I will briefly discuss whether the so-called *Neo Fregean programme* is likely to be affected by the transmission of warrant-failure charge. Although I won't be able to argue for this in detail, I will briefly outline the general structure of their position and argue that the means to generate a similar problem for their view are available.

6 Extending the argument to Hale & Wright's conception

Two elements have to be in place to generate a transmission of warrant-failure for other positions. Firstly, we need to argue that something akin to Boghossian's notion of epistemic analyticity is accepted and, secondly, a template which has a transition from the meta-language statement of the implicit definition to its object-language version has to be in place. In what is to follow, I will briefly discuss a position defended in [Hale & Wright 2000: 286-319], which aims to defend a Neo-Fregean, i.e. broadly Logicist position in the philosophy of mathematics.

The first question above raises an interesting issue. Namely, to what extent is a position that aims to use implicit definitions to account for our knowledge of mathematics committed to a notion of epistemic analyticity? Intuitively, it seems to me that the project has to incorporate the view that understanding implicit definitions provide warrants for holding true these statements. Thus, although much more could (and should) be said, I will assume in this context that there is a necessary link between founding knowledge of logic and/or arithmetic on implicit definitions and adopting the idea of epistemic analyticity. The second issue of whether the position of Hale & Wright involves a similar move from meta-language to object-language constructions can be discussed on the basis of the relevant passage of their paper, where they write:

> How, just by stipulating that a certain sentence '#f' is true   where '#' is already understood, and 'f' is a hitherto contentless expression [. . .]   is it supposed to be possible to arrive at an a priori justified belief that #f? [. . .] Well, the route seems relatively clear provided that two points are granted: first that a stipulation of the truth of the particular '#f' is so much as properly possible [1.] [. . .] and second that the stipulation somehow determines a meaning for 'f'.[2.] [. . .] Moreover if the stipulation has the effect that 'f' and hence '#f' are fully understood [. . .] then nothing will stand in the way in the way of an intelligent disquotation [3.]: the knowledge that '#f' is true will extend to knowledge that #f. In other words: to know both that a meaning is indeed determined by an implicit definition

and what that meaning it is, ought to suffice for a priori knowledge of the proposition thereby expressed. [Hale & Wright 2000: 295-6]

What is clear in this passage is that Hale & Wright are aware of the understanding problem (that is the Chinese friend example above) and thus evade the first horn of the dilemma (see [3.]). Hence, the issue remains whether they should be charged with a transmission of warrant-failure. Although it is not easy to discern a template of how knowledge of the principle in question is acquired just on the basis of this quote, we might put forward the following simplified reasoning that represents their line of thought, assuming that it is 'so much as properly possible' to stipulate '#f':

Hale & Wright template

1. The stipulation that '#f' true is successful.
2. If '#f' is true then it determines a meaning for 'f'.
3. If the stipulation that '#f' is true has the effect that 'f' and '#f' are fully understood then we are warranted to disquote on '#f'.
4. #f

The first observation concerning their 'template' is that Hale & Wright use the converse of the conditional that Boghossian uses. Reconsider Boghossian's first premise which, rephrased in the Hale & Wright terminology, states: 'If 'f' has a determined meaning ['means what it does' or 'refers as intended'], then '#f' is true'. Hence, there are differences within the details of the two approaches. The second observation is that there does not seem to be a direct link between premise (2) and premise (3). Somehow, (2) seems to be idle in that the consequent is not appealed to in the further reasoning. Therefore, it seems that maybe a more suitable interpretation uses a slightly rephrased third premise - call it (3*).

3*. If the stipulation that '#f' is true and 'f' has a determined meaning, then 'f' and '#f' are fully understood.

Having this premise in place seems to provide a genuine link between (1), (2), (3*) and the conclusion (4). Also, so conceived (3*) is the crucial premise, as it is this claim which justifies disquotation. Thus, importantly holding this premise to be true rules out the kind of Chinese Friend counterexample, where I have knowledge from testimony that the stipulation is true and fixes a meaning for 'f', without grasping the content of the stipulation. Still, we should raise the more general worry, of how, in detail, the application of the Disquotational Step is justified in virtue of the antecedent of the above conditional. Let us grant Hale & Wright that the stipulation is successful and so true, and assume that it is 'f's determined meaning that provides the link to understanding[16], thus we might focus on the following simplified conditional:

> 3**. If 'f' has a determined meaning [refers as intended], then
> 'f' and '#f' are fully understood.

However, (3**) is reminiscent of the problem raised concerning Boghossian's template. Namely, how can a subject be warranted to know what 'f' refers to without grasping its role in the relevant sentences in the object-language. Hence, the charge against Hale & Wright would be that in order to be warranted to grasp the intended meaning of 'f' and thereby come to understand 'f' and '#f' we already have to have a warrant for #f, assuming the same notion of epistemic analyticity is adopted by them.

Hence, although this argument will need further detailed discussion (which has to be postponed to another occasion), as it leaves Hale & Wright much space to manoeuvre, the general idea behind my argument seems *primae facie* applicable to the approach of Hale & Wright. Thus, to (cautiously) generalize, the charge of a *transmission of warrant-failure* for templates invoked to found our knowledge of mathematics and logic on

---

[16] A claim that might well be challenged by Hale & Wright.

implicit definitions by appealing to a notion of epistemic analyticity seems to pose a general threat to the viability of these conceptions.[17]

Philip A. Ebert
Arché, AHRB Research Centre for the Philosophy of
Logic, Language, Mathematics and Mind
School of Philosophical and Anthropological Studies
University of St Andrews,
Scotland, UK

email: pae1@st-andrews.ac.uk

References

Boghossian, Paul 1996. Analyticity reconsidered. Nôus, 30: 360–391.

Boghossian, Paul 1997. Analyticity, in *Companion to the Philosophy of Language*, ed. Hale and Wright, Oxford: Blackwell: 331-68.

Boghossian, Paul 2000. Knowledge of Logic, in *New Essays on the A priori*, ed P.

Boghossian and C. Peacocke, Oxford: Oxford University Press: 229-54.

Boghossian, Paul 2001. How are Objective Reasons possible?, *Philosophical Studies* 106:1–40.

Boghossian, Paul 2003. Blind Reasoning, in *Proceeding of the Aristotelian Society Supplementary Volume*, 77: 225-48.

BonJour, Laurence 1998. *In Defense of Pure Reason*, Cambridge: Cambridge University Press.

Boghossian, P. and Peacocke, C. 2000. *New Essays on the A priori,* Oxford: Oxford University Press.

Dretske, Fred 1970. Epistemic Operators, *Journal of Philosophy*, 67: 1007–23.

Hale, B. and Wright, C. 1997. *Companion to the Philosophy of Language,* Oxford:
    Blackwell.

Hale, B. and Wright, C. 2000. Implicit Definition and the A Priori, in *New Essays on
    the A priori*, ed P. Boghossian and C. Peacocke, Oxford: Oxford University Press:
    286-319

Horwich, Paul 1997. Implicit Definition, Analytic Truth, and A Priori Knowledge, *Nous*
    31: 423–440.

Margolis, E. and Laurence, S. 2001. Boghossian on Analyticity, *Analysis* 61: 293–302.

Peacocke, Christopher 1999. *Being Known.* Oxford University Press, Oxford.

Peacocke, Christopher 2000. Explaining the A Priori: The Programme of Moderate
    Rationalism, in *New Essays on the A priori*, ed P. Boghossian and C. Peacocke,
    Oxford: Oxford University Press: 255-85.

Prior, Arthur 1960. The Runabout Inference Ticket, in *Analysis*, 21:38-9

Quine, W. V. 1935. Truth by Conventions, in *The Ways of Paradox,* Cambridge: Harvard
University Press: p.77-106

Quine, W. V. 1954. Carnap on logical truth, in *The Ways of Paradox,* Cambridge:
    Harvard University Press: p.106-132

Williamson, Timothy 2000. *Knowledge and its Limits*. Oxford: Oxford University Press.

Williamson, Timothy 2003. Understanding and Inference. *Proceeding of the Aristotelian
    Society Supplementary Volume*, 77: 249-93

Wright, Crispin. 2001. On basic logical knowledge. *Philosophical Studies*, 106:41–85.

Wright, Crispin 2002. Anti sceptics simple and subtle: Moore and McDowell. *Philosophy
    and Phenomenological Research*, 65:330–48.