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CONTENT AND MEANING CONSTITUTIVE INFERENCES¹

SUMMARY: *A priori* theories of justification of logic based on meaning often lead to trouble, in particular to issues concerning circularity. First, I present Boghossian's *a priori* view. Boghossian maintains the rule-circular justifications from a conceptual role semantics. However, rule-circular justifications are problematic. Recently, Boghossian (Boghossian, 2015) has claimed that rules should be thought of as contents and contents as abstract objects. In this paper, I discuss Boghossian's view. My argumentation consists of three main parts. First, I analyse several arguments to show that in fact, Boghossian's inferentialist solution is not fully satisfying. Second, I discuss the matter further, if one accepts that basic logical rules are constitutive of meaning, that is, they constitute the logical concepts and the content of a rule is an abstract object, then abstract objects—like, for example, rules—could be constitutive of meaning. The question is whether conceptual priority is in the judgment or in the object and what theory of content is pursued. Grasping content as a matter of knowing how a word or concept behaves in inferences is not completely explicative. Finally, I contend that rules come to exist as a result of certain kinds of mental action. These actions function as constitutive norms. Logical rules are not abstract objects but ideal. What one construes as norms or rules of content may involve idealization, but this is because we share a language.

KEYWORDS: meaning, conceptual role semantics, inferentialism, content, logical rules.

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INTRODUCTION

The main goal of this study is concerned with the meaning and the content of the basic logical rules. In particular, this work investigates—in the overall view of the contemporary theories in philosophy of logic—the idea of the normative content of a rule.

In recent years, philosophical reflection about the justification of logic has been dominated by the enduring problem of circularity and the infinite regress puzzle. *A priori* theories of justification of logic, based on meaning, are standardly recognized to be akin to the conceptual role semantic theories that often lead to similar problems; in particular, to issues concerning a vicious circle. In general, to justify the logical rules inferentially involves using logical principles, which generates circularity. How can we justify logical laws in a way that doesn't rely on those laws?

In his defence of an inferential justification, Paul Boghossian (Boghossian, 2000; 2001; 2003a; 2003b)² has argued that the only way to justify the basic logical principles is to claim a rule-circular justification, according to which, knowledge of the validity of the basic rules of inference is the result or product of inferences. Boghossian considers the *apriority* of logical propositions from a meaning-based approach, that is, from theories that defend the claim that the understanding of the meaning contributes to the explanation of the justification of beliefs or the transition between beliefs of a person. In this sense, he assumes that the principles of logic, as theoretical principles, are part of the meaning of language expressions. Logical constants³ are implicitly⁴ (tacitly) defined, taking logical basic rules into account, which allow their introduction and/or elimination. According to his proposal, some patterns of basic inference are constitutive of meaning, they constitute the concepts. Some theories of *a priori* justification based on meaning, unlike theories, for example, such as that of Carnap (Carnap, 1937; 1947), among others, are developed from some kind of *Conceptual Role Semantics*⁵ (hereafter CRS) and emerge as alternative responses to the problems that are presented to theories based on intuition (Dogramaci, 2012). CRS theories are presented in a variety of ways, just as there are different theories of meaning.

² I will focus on this article in these Boghossian papers. His position has changed over recent years.

³ The problem of the meaning of logical constants is closely related to that of the justification of basic logical knowledge (Gómez Torrente, 2007; MacFarlane, 2015).

⁴ “In considering implicit definitions, we must bear in mind that they come in two varieties: explicit and implicit. An *explicit* implicit definition involves an explicit stipulation by a thinker that a given sentence $S(f)$ is to be true if its ingredient term f is to mean what it does. In the implicit variety, it is somehow tacit in that person's behavior with the term f that $S(f)$ is to be true if f is to mean what it does” (Boghossian, 2008b, chap. 10, p. 218).

⁵ While conceptual role semantics (CRS) in the philosophy of language is a theory of linguistic meaning, in the philosophy of mind, it is a theory of the mental content of attitudes such as beliefs or desires (Whiting, 2009).

In their diversity, what they have in common is that they are theories of meaning-as-use whose main precursor is Wittgenstein.⁶ In such theories, the meaning of an expression (or the propositional content of an attitude) is determined by the role it plays in the subject's language (or knowledge; Whiting, 2009).

One of the ways of considering CRS is the so-called inferentialist conception (Brandom, 2000), according to which, apprehending the concept or understanding a word is determined by the disposition to infer according to the schema or pattern of inference of the concept. Thus, it can be stipulated, for example, that *I* is the concept, "I" is the term and *P* the schema of inference of which *I* is a constituent part. That is, for each concept there is, according to Brandom, a scheme of inference that is constitutive of that concept; so that, he or she who has the concept of square, must be able to infer correctly: if *x* is square, then *x* is not round, where *x* is an object visible to the subject in question. Being willing to infer properly following the right pattern, requires satisfying the possession of concept *I* or term "I". On the contrary, if someone is not disposed to infer following the correct scheme, he or she does not understand the term or does not understand the concept. In some way, this approach comes to the fore in his endeavour to spell out what is involved in our command of concepts in terms of inferential abilities and our disposition to infer according to the logical rules. These aspects point to the core of the dispute between inferentialist and representationalist conceptions of language. While for inferentialists, judging has the conceptual priority since asseverative contents are the smallest units that can register in inferences, for representationalists, thinking about *F* (if-then propositions, for example), is basic to their theory (Fodor & Lepore, 2002). So, according to representationalists, an abstract object like a proposition has primacy over propositional thought. Inferentialist conceptions—including Boghossian's proposal, and the conceptual role semantics (CRS) under any of its forms—have received extensive criticism from Williamson (2007) and, among others, also from Fodor (one of the advocates of representationalism) and Lepore (1993).

In this article, I will first analyse Boghossian's theory of justification based on meaning. Boghossian maintains the rule-circular justifications from the conceptual role semantics position, i.e. that principles of logic, as theoretical principles, are part of the meaning of language expressions. Secondly, I will present how the justification of deductive practice can be connected with the inferentialist conception of the meaning of logical constants. Considering that Boghossian explains this concept based on the notion of *blind reasoning*—that is, the basic inferential competence that is held prior to any explicit belief about logical validity or the conceptual resources necessary to articulate them—we are able to engage in *blind reasoning*: a capability to use rules without knowing those rules. Some of these rules can establish a kind of warrant.

⁶ Several philosophers uphold one or another version of this approach; some among many others are: Strawson, Sellars, Field, Harman, Block, C. McGinn, Peacocke, Brandom.

Boghossian (Boghossian, 2003b) emphasizes the distinction between inferential and constitutive construals of the relation between meaning and entitlement. Recently, Boghossian (Boghossian, 2015) stated that “rules themselves should be thought of as contents” and “contents are best thought of as abstract objects [...] as numbers, properties and propositions, rather than *concreta* like tables or (token) books” (Boghossian, 2015, p. 4).

On the other hand, Williamson (2011) rejects this inferentialist explanation and offers, instead, a causal explanation. From Williamson’s point of view, competence regarding public language depends on participation in linguistic practice: causal interrelations of speakers unify (in part) a conceptual or linguistic practice (Williamson, 2011, p. 504).

Second, I argue that, if basic inferences or logical rules are constitutive of meaning—that is, they constitute the logical concepts and the content of a rule is an abstract object (Boghossian, 2015)—then abstract objects—like, for example, rules—are constitutive of meaning. From this approach, some philosophers consider that these logical concepts are abstract objects and that these concepts “must have been brought into being by the creative activity of human beings” (Boghossian, 2015, p. 4). Boghossian believes that the role of conceptual creativity is understood better “within a framework in which we talk not about *creating abstracta*, but about *selecting* them, or *discovering* them” (Boghossian, 2015, p. 11).

Finally, I expound the idea that rules, conversely to Boghossian’s approach, come to exist as a result of certain kinds of mental action. Such a possibility occurs when something that we call “mental action” is carried out. The role of these actions is, roughly speaking, to function as constitutive norms, in this sense, logic is constitutive of thinking; thinking, as second nature (McDowell, 1994), takes place as part of human enrichment.

1. BOGHOSSIAN’S INFERENTIALIST PROPOSAL

1.1. Basic Inference as Constitutive of Meaning of the Logical Concepts

In this section, I am going to analyse Boghossian’s meaning-based theory of justification and the question of how to connect the justification of deductive practice with the inferentialist conception of the meaning of logical constants.

Boghossian explains this theory based on the notion of *blind reasoning*; blind reasoning is the basic inferential competence that is held before any explicit beliefs about logical validity or the conceptual resources necessary to articulate them.

Boghossian’s thesis maintains that one can justify the belief that a rule is correct from the knowledge of the meaning of the expression, that is, knowledge of the meaning of the conditional, for example, is sufficient to know that *Modus Ponendo Ponens* (MPP) is a valid inference rule. Moreover, according to inferentialism, the meaning of the expression is constituted by the rules of inference. It is said of these rules that they cannot be justified in terms of any other because

they are constitutive of the meaning of the logical constant in question; in this case, the MPP is a constitutive rule of the meaning of the conditional. Logical principles admit, then, a kind of justification that is *a priori* and is rule-circular. The basic rules of inference are justified by inferences among which are those same basic rules that they are intended to justify. The problem for rule-circular justifications and inferential justification in general, in the case of logical knowledge, is that both are rejected because of their circularity.⁷ For example, we consider that MPP is the only non-derivative inference rule, if we want to justify *a priori* the MPP from the knowledge of the meaning of the logical constant “if, then”, in this justification the MPP is assumed in at least a step, without previously being justified (Boghossian, 2001, p. 10). That is, we acquire knowledge of the MPP using only the logical rules and no non-inferential knowledge (Wright, 2001, p. 68). In short, the problem is that in the deduction of the validity of the MPP, we use the MPP, which generates a vicious circle. Specifically, in ordinary circular justifications, one observes two mistakes; first, *begging the question*: it assumes what it is trying to prove. The conclusion explicitly asserts the presupposed premises stated at the beginning, which goes against the idea of what it means to prove something or argue it.

Second, *bad company*: if we accept the rule-circular justifications, we will be able to demonstrate the correctness of rules that are not correct. The rule-circularity allows you to prove anything, even if it is unjustifiable (Boghossian, 2001, p. 11). Since an argument justifies an assertion only if it comes from premises that are justified, a related question is whether the knowledge of the premises depends on prior knowledge of the conclusion. This kind of circularity is usually called *epistemic circularity*. However, Boghossian considers that the MPP can be justified inferentially by rule-circular justification, which requires explaining that not every rule-circular justification falls into these two errors.

Although circular argumentation is not inherently fallacious, it can be if the argumentation is used to conceal, in a certain way, that one fails to prove something completely. Firstly, *begging the question* (Hansen, 2015) is defined as an argument in which what one wants to demonstrate is presupposed. Suppose that someone is asked to prove that this book (whose authorship is the subject being discussed) was written by Gala, to which that person responds by saying: “All the books here were written by Gala”. Without independent evidence, the premise that “all the books were written by Gala” considers warranted the claim that “this book was written by Gala”, instead of demonstrating this by satisfying the requirements of proof. In this case, the question is whether an argument in which the MPP rule is used justifies the validity of that rule since we are using the same rule whose validity we try to prove (Boghossian, 2000, p. 248).

⁷ Along with Devitt (2005), which is based on Braithwaite, Dummett does not see any problem here. This is what he calls a “pragmatic circularity” (Boghossian, 2008b, p. 199).

Boghossian argues that the argument in which the MPP rule is used to justify such a rule (and so, the conclusion is already presupposed before having proven it), would not amount to begging the question if the knowledge of the premises is obtained properly regardless of the conclusion. To solve the problem of begging the question, then, we must resolve the question of whether the justified rule-circular belief that a rule, such as MPP, preserves the truth enables us to use that rule of inference, and how a circular-rule argument can warrant its conclusion (Boghossian, 2001, p. 12).

On the other hand, we have the bad company problem. Boghossian points out that there is a big difference between an ordinary (or grossly) circular argument, where the conclusion is one of the premises, and a rule-circular argument, in which the rules whose validity is to be demonstrated are used during the proof (Boghossian, 2000, p. 245). In any case, the problematic situation that arises is that a rule-circular justification seems to be available for any rule (Wright, 2001, p. 49), that is the objection of bad company, as the connective (“tonk”) of the example of Prior (1960).

In his brief article *The Runabout Inference Ticket*, Prior criticizes a certain idea of the definition of the logical constants. Prior takes the case of the conjunction to present the theory of meaning that he intended to discuss. According to that theory, the rules of introduction and elimination of the conjunction establish the meaning, and because someone knows the meaning of that constant, he or she knows how to infer using the conjunction. Similarly, the connective “tonk” could be established:

Its meaning is completely given by the rules that (i) from any statement P we can infer any statement formed by joining P to any statement Q by “tonk” (which compound statement we hereafter describe as “the statement P-tonk-Q”), and that (ii) from any “contonk-tive” statement P-tonk-Q we can infer the contained statement Q. (Prior, 1960, p. 39)

Prior argues that the definition of logical constants is not clearly determined and that any statement can be inferred from another in an analytically valid way; for example, using the new constant “tonk” we can infer in two steps “2 plus 2 equals 5” from “2 plus 2 equals 4” (Prior, 1960, pp. 38–39). This approach of analytical validity creates a plethora of other possibilities for other rules with connectives such as “tonk”, that is, it allows one to produce rules of inference arbitrarily. This is one of the objections that any inferentialist theory must solve.

Boghossian (Boghossian, 2000, p. 251, note 19), following Dummett (Dummett, 1991, p. 202), considers that not all rule-circular arguments involve the two errors indicated. He proposes a theory based on the conceptual role to deal with the problems that circularity presents. According to this theory, a genuine definition of the logical constant in question is required in such a way that the arguments based on the basic inference rules linked to that constant are valid. This definition will prevent a rule-circular justification from being available for any

rule. Defended in this way, the rule-circular arguments avoid the charge of bad company. According to Boghossian (Boghossian, 2001, p. 28), the dilemma is to explain how a person can reason in a certain way, without that person's knowing (knowing the validity of) the rule contained in his or her reasoning. Boghossian illustrates what our constants mean based on their conceptual role:

(...) that our logical words (in the language of thought) mean what they do by virtue of their inferential role, that "if, then", for example (or more precisely, its mentalesque equivalent) means what it does by virtue of participating in some inferences and not in others. If this is correct, and if, as is overwhelmingly plausible, it is by virtue of its role in fundamental (i.e., underived) inference that the conditional means what it does, then we have an immediately compelling answer to the question: how could someone be entitled to reason according to MPP without having a positive belief that entitles him to it. *If fundamental inferential dispositions fix what we mean by our words, then, as I shall now try to show, we are entitled to act on those dispositions prior to and independently of having supplied an explicit justification for them.* (Boghossian, 2001, pp. 28–29, italics mine).

Then, Boghossian proposes that for the case of basic inferences, the rule involved must be **m e a n i n g - c o n s t i t u t i n g**; this would explain why the person is entitled to use the rule without a demand that he or she knows that the rule preserves the truth (Boghossian, 2001, p. 29). So, he formulates the following principle:

(L) If M is a genuinely meaning-constituting rule for S, then S is entitled to infer according to M, independently of having supplied an explicit justification for M. Notice that (L) does not require that S know that M is meaning-constituting for S if S to be entitled to infer according to M but only that M be meaning-constituting for S. (Boghossian, 2000, p. 250)

Boghossian must argue that rule-circular justifications are genuine justifications as long as we distinguish between a rule-circular and an ordinarily (grossly) circular argument, since the latter does not guarantee trivial success. If you rely on a small number of uses of a particular rule, an adequate rule-circular argument allows you to support that rule preserving the truth in any possible use necessarily only in the instance that the rule in question is constitutive of the meaning (Boghossian, 2000, p. 254). For this, it must be established that the meaning of logical constants is determined by their conceptual role. If an inferential disposition constitutes the meaning, then it is *a fortiori* reasonable, so it can be used justifiably without a supporting argument (Boghossian, 2000, p. 250).

On the other hand, one of the problems of the CRS is that it is based on a holistic approach to meaning (or content) (Whiting, 2009), this implies that an expression cannot have meaning by itself, since, as we have indicated above, an expression is significant by virtue of its inferential relations. This represents a difficulty from the point of view of communication since, according to this semantic approach, the inferential meaning of an expression will depend on the

beliefs that a subject has. If two subjects have different beliefs about an expression, each one will be willing to infer according to inferential transitions that understand that expression, and if the beliefs of the subject change, the inferential transitions, therefore, will be diverse. As Martínez-Vidal states:

(...) intuitionists and classical logicians have tried to solve the dispute putting forward the import that maintaining one position or the other has for mathematical practice. But of course, determining whether a given mathematical practice is right depends, to a certain extent, on the philosophical thesis we assume. This is so because our intuitions or judgements about the correctness of a given argument will differ depending on (...) our philosophical views. (Martínez-Vidal, 2004, p. 204)

Hence, if we consider that the same word, according to the CRS, has different meanings and is to be understood in different ways, it will be practically impossible that the meaning remains constant (Whiting, 2009). To avoid these problems, several authors, including Boghossian, argue that analytical/synthetic distinction is needed to differentiate the inferential transitions that determine the meaning (or the content) and those that do not:

This would provide something constant—an invariant significance—that could be grasped despite differences in belief. And, moreover, it respects compositionality, since the meaning of a complex expression is fixed only by its role in analytic inferences, and that is determined by the meaning of its parts. (Whiting, 2009)

In *Epistemic Analyticity: A Defense* (2003b), Boghossian presents his defence of epistemic analyticity to explain our knowledge of the validity of basic principles of inference. Boghossian takes the notion of analyticity as a property of linguistic items from which grasping the meaning of a sentence is enough to justify belief in the proposition it expresses. Or similarly, grasping a proposition p is sufficient to justify his belief in p :

I will talk of grasp of the meaning of a sentence as sufficing for justified belief in the proposition it expresses; but I could equally well have talked simply about grasp of a proposition p as sufficing for justified belief in p . Thus, too, I will talk about words being synonymous with each other; but I could equally well have talked about concepts being identical to one another. Finally, I will talk of holding some sentences true, as a condition of meaning some specific proposition by them; but I could equally well have talked of believing some propositions as a condition of having some of their ingredient concepts. (Boghossian, 2008b, p. 212)

Epistemic analyticity is a way of explaining how factual propositions can be known *a priori*. The models for the construction of the epistemic analyticity that Boghossian presents are three: the Frege-analyticity, the Carnap-analyticity and the constitutive model (Boghossian, 2008b). According to the constitutive model,

the semantic facts themselves provide the necessary justification, as opposed to the knowledge that a subject can have of them (Boghossian, 2008b, pp. 4–5). Boghossian states that, by the mere fact that the subject grasps the meaning of the rule of inference from R, it implies that this subject is enabled to infer according to R. Thus, any inferential transition from the conditions of possession of a concept is by itself, *prima facie*, entitling, that is, it gives a warrant.

The problem is how to avoid the charge of bad company faced by this model that seems to have counterexamples of the type of “tonk”, which we have already presented; that is, the rules for “tonk” are not correct, they allow one to move from true premises to any conclusion, including false conclusions (Boghossian, 2001, p. 13); but what is wrong in a rule-circular justification of one of the “tonk” rules is not circularity (Boghossian, 2001, pp. 33–34), but the fact that practice according to that rule fails to constitute any meaning:

(...) a practice which allowed that “A tonk B” may be inferred from either A or B individually, and that both A and B individually may be inferred from it, would establish no meaning for “tonk”. By contrast, the practice of inference in accordance with *modus ponens* is part of a meaning constituting practice: a practice which constitutes the meaning of “if..., then...” And that, ultimately, is why we may in principle justify the belief that *modus ponens* is sound by a derivation which uses *modus ponens* in its course. (Wright, 2001, p. 52)

To safeguard this model, Boghossian suggests the following: restrict the model to certain concepts in which an entitlement is given or restrict what we are going to consider as a genuine concept. This is the correct way to understand the conceptual semantic role (Boghossian, 2001) and avoid the problem of bad company.

A conceptual role semantics, by virtue of its ties to the notion of justification, transforms this constraint on meaning into a constraint on justification that simultaneously vindicates the possibility of rule-circular justifications while staving off the threat of an unpalatable relativism. (Boghossian, 2001, pp. 33–34)

Thus, Boghossian proposes an improved version of the constitutive model: any rules written into the possession conditions for a non-defective concept are *a fortiori* entitling. So, how could a thinker be entitled to reason according to MPP just by virtue of grasping the meaning of that rule? The answer is that he or she can be so entitled because MPP is a possession condition for the conditional, and the conditional is a non-defective concept.

2. CONCEPTUAL ROLE DETERMINES A MEANING?

According to Boghossian, following certain rules of inference is constitutive of our understanding of primitive logical constants. Secondly, if certain rules of inference are constitutive of our understanding of certain concepts, then we are

entitled to them, even in the absence of any reflexively appreciable support. To deal with the problem of bad company, Boghossian presents a solution based on the CRS approach; but, from a purely theoretical foundation of meaning, to say that any possible conceptual role determines one meaning or another, as was mentioned, is not enough.

We should insist that a conceptual role determines a meaning for an expression only if it manages to contribute in some determinate way to determining how the world would have to be if sentences involving the expression are to be true. (Boghossian, 2001, p. 33)

To conclude, the arguments Boghossian has offered demonstrate that the rule-circular argument for MPP allows the use of MPP (use to which we are enabled if the MPP is a rule that constitutes the meaning) to be able to determine that MPP necessarily preserves the truth in any possible use (Boghossian, 2000, p. 252). If the rules involved in the rule-circular justification are rules constitutive of meaning, we are entitled to use those rules of inference, independently of whether we are justified in believing that any such rule is valid. In this way, Boghossian argues that basic logical knowledge is justified inferentially and that circular-rule justifications are genuine justifications. To explain how a person is enabled to infer, without implying that the person knows something about the rule used in his inference, he responds that this entitlement naturally flows from considering the rules as meaning-constituting (Boghossian, 2000, p. 249), and proposes his approach concerning warrant transfer (Boghossian, 2001, p. 29).

On the other hand, Williamson (2007) argues that all knowledge is propositional. Thus, while Boghossian starts from the fact that linguistic or conceptual practice is a precondition for understanding certain links, such as understanding-assent, Williamson objects to Boghossian that no justification or knowledge can be derived from linguistic or conceptual competence. Among other reasons, while knowing implies assenting or accepting, from the assertion or acceptance knowledge does not necessarily follow (Williamson, 2007, p. 76).

Williamson, in addition, underlines an aspect that is important. For Boghossian, logical-term competence involves assenting to the kind of understanding-assent link required (Williamson, 2011, p. 503). Williamson argues that such links are not necessary. When a word or term belongs to a public language, being competent about that term involves causal relationships with other speakers, other subjects. The question is what explanation of the linguistic competence is pursued.

According to Boghossian conceptual practice is a precondition for understanding links such as understanding-assent, but for Williamson (2007), the idea that understanding-assent links are the case belongs to an inaccurate theory of meaning, according to which, if these links do not occur, the distinction between understanding and not understanding is dissolved. Speakers who understand the same term may have nothing in common that constitutes a shared meaning.

On the other hand, Williamson offers an alternative theory of meaning according to which such links do not exist and there is a shared language. He rejects the thesis that the shared understanding of a word requires a stock of shared obviousness. This is because to defend this presupposes acceptance that the uses by different agents can be united to form a common practice of using that word with a given meaning only due to an invariant core of beliefs. Therefore, according to Williamson, the idea that understanding is epistemologically sufficient to assent is based on a false conception of what it is to understand. The social determination of meaning is not based on the idea that meaning cannot be determined individually; but, when an individual uses a shared language as such, the individual meaning is parasitic on social meaning. Much of the practical value of language is its ability to facilitate communication between agents in asymmetric epistemic positions when the speaker knows something that the listener does not know. The practical constraint for communication is that there must be a background of broad agreement in the use of the terms. This practical constraint is holistic (the agreement at a certain point can be exchanged by agreement with others). However, the existence of a broad agreement is not a necessary condition. For example, being competent in the use of English does not require the acceptance of the principle of non-contradiction.

In this way, Williamson rejects the inferentialist explanation and offers, instead, an approach based on the causal interrelations between speakers; it is these relationships that constitute the competence and we agree with this explanation: the competence regarding public language depends on participation in linguistic practice. Causal interrelations of speakers unify (in part) a conceptual or linguistic practice (Williamson, 2011, p. 504). From my point of view, and as McDowell (1994) pointed out, a shared language is a primary medium in which understanding is generated.

On the other hand, Wright (2004a) argues that being constitutive of meaning based on blind reasoning is not sufficiently explanatory since it does not clarify how “blind” inferences confer knowledge. Thus, the problem of Boghossian’s approach is not with respect to the acquisition of knowledge, as Wright contends, but with respect to the justification for it. Blind reasoning as an explanation of the second is not enough.

According to Wright, we can consider a kind of justification in a non-inferential weak sense, a rational warrant that does not require evidence of truth and can avoid both circularity and the infinite regress of justifications. This warrant consists of a mode of acceptance of a proposition and may be rational but not equivalent to belief (in the primary meaning of belief). It is the entitlement to assume the initial presuppositions, as long as there is no evidence against them, even if there is no evidence in their favour (Wright, 2004a, p. 161). This rational warrant is also a viable solution for the particular case of logic. Wright argues that basic rules of inference such as the MP are one of the types of initial presuppositions. We can trust in the validity of basic inferences, and this, in the end, enables us to state knowledge of the reasoning products obtained through the

application of that basic logic (Wright, 2004b, p. 208). In the case of logical knowledge, a logical proposition is presented with a statement as following necessarily from the premises within a given logical system.

If, in addition, one considers that basic inferences are basic mental actions that function as constitutive norms (Wright, 2014), then one accepts that the meaning of logical expressions is given by the basic rules. For Wright, justification does not derive from conceptual understanding but rather, the rules should be assumed as a starting point.

However, this approach presents several problems (Garcia-Arnaldos, 2017). On the one hand, it is not clear how to explain the status of the fundamental rules of inferences. On the other, basic inferences can assume patterns that are not very solid, sometimes we make mistakes, for example, confusing the directionality of if-then propositions (*fallacious modus ponens*). To solve these problems, we must first answer the question, what is a rule?

3. ABSTRACT OBJECT AS CONTENT FOR A RULE

Regarding how can we define a rule, Boghossian claims that “rules themselves should be thought of as contents” and “contents are best thought of as abstract objects (...) as numbers, properties and propositions, rather than with *concreta* like tables or (token) books” (2015, p. 4).

The question whether there are abstract objects such as numbers, universals, and propositions, is analysed in many contemporary philosophical debates. Several philosophers argue that abstract objects exist, but they are conceived as mind-independent objects (without causal contact). Some philosophers consider that logical concepts are abstract objects and that these concepts “must have been brought into being by the creative activity of human beings” (Boghossian, 2015, p. 4); for instance, Thomasson’s conception of some abstract objects as artifacts (Thomasson, 2014), i.e. tools designed to improve our ability to represent reality. Others are not willing to accept abstract objects in their ontology.

Boghossian believes that the role of conceptual creativity is understood better “within a framework in which we talk not about *creating abstracta*, but about *selecting* them, or *discovering* them” (2015, p. 11):

When one is born into a society that has accepted certain norms and lives by them, and if one continues to live with and benefit from that society, then, other things being equal, one is obligated to live by the norms that are accepted in that society (...).

The main point right now is that it would be a mistake to look for a source of normativity either in the rule itself or in the mere fact that a rule has been accepted. If there is an obligation to obey a rule it cannot come from any source other than from the requirements of morality, which, as I previously emphasized, provide a norm on behaviour independently of whether they have been accepted. (Boghossian 2015, p. 11)

In my belief, rules come to exist as a result of certain kinds of mental action, when a certain mental action is carried out. The role of these actions is, roughly speaking, to function as constitutive norms, as Wright pointed out. The word “norm” or “normative” is usually defined as involving a rule or correctness. Normative inferentialism maintains that the meaning of a word is constituted by rules or norms governing inferences, so the meaning of expressions is constituted by the rules of inference. For Broome (2013; 2014b), it means involving a reason or ought.

My premise is that logical rules are not abstract objects, but ideal, similar to what Wittgenstein (1953, §38) called “ideal”.⁸ What we construe as norms or rules of content, inferential rules such as MPP, may involve idealization, but this is because we already share a language within a given culture. According to Railton:

Logic does involve idealization, the creation of “crystalline” models. But the function of these models is not to give us an ideal for all thought and language, an image of how the content of our thinking would be structured if all were right with us (...).

The *norma* and *regula* were said to function regulatively for us as builders *a priori*—standards we require our cuts to meet, and correct them to fit (...). Wittgenstein says of logic: “the crystalline purity of logic was, of course, not a result of investigation: it was a requirement” (PI 46). But what sort of requirement? One sense might be a *logico-metaphysical requirement*. (Railton 2000a, p. 189)

Boghossian assumes the source of normativity as requirements of morality (in a society). The source is not in the rule itself and it is not in the mere fact that a rule has been accepted. The question is whether—in the requirements of morality—the conceptual priority is in the judgment or in the object. Boghossian doesn’t clarify this issue. I believe that the conceptual priority is in both, in the judgment and the object (in this case, the logical rules) and the requirements are logico-metaphysical ones. That is, logical rules are neither prescriptions of thinking nor psychological laws. “Their ‘validity’ or necessity is *sui generis*; if anything, it is what we might today call metaphysical” (Glüer & Wikforss, 2018).

These points are to be stressed; as Wright (2014) argues, one is able to rationally rely on the validity of basic inferences because they are basic mental actions that function as constitutive norms, (in the same way that one relies on deductive reasoning since one of the primary functions of reason—as Burge [1993] states—is to present truth). Then, a basic inference will be a *norm of rational action*, in such a way that only by the activity and in accordance with it, does a subject achieve intentionality. Furthermore, all action has a *directiv-*

⁸“(T)he most that can be said is that we construct ideal languages. But here the word “ideal” is liable to mislead, for it sounds as if these languages were better, more perfect, than our everyday language: and as if it took the logician to shew people at last what a proper sentence looked like” (Wittgenstein, 1953, §38).

ity, in that it is directed to something beyond the action itself. If one does not want to fall back into the regression to infinity produced by the recourse to intentionality, this can be understood as a *guiding disposition*.

For Broome (2014a), the mental action in which inference consists is a *guiding disposition*. Broome proposes that when one reasons or infers, one is guided by the rule. The guidance given in the rule is *intentional guidance*.⁹ This intention or habit is a disposition that guides the reason: “An intention is a sort of disposition to behave in a particular way.” (Broome, 2014b, p. 629). So, when one intends to comply with the rule, it is most likely that this intention is a habit. These intentions or habits are dispositions to the mental action that constitutes the rule.

On the other hand, one can make mistakes in inferring. That is, one makes an inference because it seems correct, but it might not be. Broome has maintained that, even without defining what that correction consists of, what is important is the difference itself, the fact that one can distinguish between *seeming right* and *being right*. One makes an inference because it seems correct, but it does not mean that one is not going to make a mistake. According to Broome, inferring wrongly is inferring anyway. Making an inference could be a problem if one wants to maintain certain logical normativity.

To solve the mistake problem, Broome presents two senses of *normative*. One can think of normativity as belonging to a correction standard (Broome, 2014a, pp. 24–25). If one conceives normativity in that way, a rule would be automatically normative, (“right” as a synonym of “correct”), but then, when one utilized correct rules, there would be no error, no mistakes. Hence, Broome holds another sense of “weaker” normativity: there are rules that do not entail that one has reasons to follow these rules; and also, that a rule can be followed without apparent reason. This other sense of normative would involve a reason or an ought (Broome, 2013; 2014b). To make it clear, Broome distinguishes between *normative guidance* and *intentional guidance*: when one thinks one should do something, one is guided in some way to act, it is a normative guide. In this case, a belief-reason is insufficient, a belief-ought is needed. Applied to the rules of reasoning, one of the problems of normative guidance, according to Broome, is the acquisition of beliefs that a reasoning rule must be followed. If one has reasons to follow the MPP (for example), the reasons must be rational. But rationality does not require following the MPP. MPP is a correct rule of reasoning, according to Broome, because rationality allows it, not because rationality requires it. That is to say, although a rule is normative in a “weak” sense, it is not necessary that it be so in a “strong” sense; one does not need normative thinking, nor a reason to believe the conclusion when one arrives at it following a rule. But,

⁹ “Intentional guidance cannot be reduced to normative guidance, then. It does not need to be, because intentions provide perfectly good guidance by themselves; they require no help from normativity. On the other hand, normative guidance does need help from intentional guidance. A normative belief does not guide you directly” (Broome, 2014b, p. 630).

from Boghossian's view, one has yet to solve this question: "In general, nothing normative follows from the mere fact that one is following a rule. It all depends on the content of the rule. So, where does the normativity of obeying the law come from?" (Boghossian, 2015, p. 10).

To answer, I would say there is a kind of "normative freedom", as Railton (2000b) states; but these may not necessarily be two opposite perspectives. It could be said that the normative combines these two elements: force and freedom. To illustrate this point by which, in a broad sense one makes inferences on a daily basis (that is, without involving a specific rule): if one tells someone that one spent the afternoon reading and did so productively; would one take the calculator and do an operation to calculate exactly how many pages one read, or would one simply say one had read about x pages? The "mental calculations" and the more or less simple reasonings that one usually applies in one's daily life do not always follow precise rules. And, on the other hand, there are rules, like the basic logical rules that are correct and objective, but it does not mean that one always has reasons to follow them. The objectivity of logic is not affected, since one has started from the distinction between seeming right and right. The basic logical rules do not cease being objective and correct just because a rule does not seem good to someone. The meaning I hold of "normative freedom" has to do with the potential capacity to give reasons to the supposed norms of reason. I put forth that, similarly, Boghossian argues that "rules and rule following facts are not normative in themselves":

Rules are themselves abstract objects: either normative propositions or instructions. Their status as norms on behavior can be explained in some cases without anything—as in the case of true moral propositions—or, in other cases, via their acceptance, either directly or indirectly. Following a rule is not in general a problem. What is a problem is explaining rule-following in cases where there is no explicit intention to conform one's behavior to a rule. Finally, rules and rule following facts are not normative in themselves. They derive what normativity they may on occasion have from the holding of some underlying moral truth. (Boghossian, 2015, p. 11)

To complete the picture of the relations between content and normativity, I would refer to the idea of a second nature. The role of mental actions is, roughly speaking, to function as constitutive norms, as has been discussed. In this sense, we can maintain that logic is constitutive of thinking, and thinking, language, culture, as a second nature (McDowell, 1994) takes place as part of human development. One of the central issues of *Mind and World* (McDowell, 1994) is how it is possible to insert freedom and normativity into the scientific image of the world. McDowell solves this issue by overthrowing the dichotomy between the logical space of reasons and the realm of laws and introducing the notion of second nature. The need for this concept is debatable, as I argue elsewhere (Garcia-Arnaldos, 2018), but McDowell points out this important aspect: it is not our mental states that determine the meaning of our

words, but it is the relationship with the world and with other subjects that does so. We understand because we have the ability to relate to one another. I perceive the rational connections, and, in this way, these links become rational to me. But reason alone cannot be understood without the ability to go beyond itself. The starting point is knowing, but our knowledge has limits. The limits of the thinkable are determined by the characteristics of our faculty of understanding. One learns to make inferences only when one has a language and the language is always shared. Even if one invented a new language or expressions, one could not conceive them except with the elements, the linguistic “rules of the game” learned socially. To learn something new, a good inference must use a process that preserves truth; but, how does one learn to infer properly and use a process that preserves the truth? Surely, one cannot always avoid error, but as one studies ideal objects within the framework of a publicly controlled dialogic practice, one must be willing to rethink the legitimacy of the allegedly rational connections that constitute the space of reasons. Culture and science are collective activities and, as our second nature (McDowell, 1994), are part of human enrichment.

4. CONCLUSION

Upon analysing if inferential articulation is sufficient to account for conceptual content and in which sense concepts are norms determining the correctness in reasoning, inferentialists place judging over other kinds of mental acts. The question is whether the conceptual priority is in the judgment or the object and what theory of content is pursued. Grasping content as a matter of knowing how a word or concept behaves in inferences is not completely explicative. The main conclusions from the above investigations are as follows:

- I. Conceptual Role Semantic is not destined to play the principal role in a justification of logic or rule-circular justification. I believe that such positions are problematic. On the one hand, Boghossian’s answer to how to connect the justification of deductive practice with the inferentialist conception of the meaning of logical constants based on the notion of blind reasoning—a capability to use rules without knowing those rules—is not a definitive solution.
- II. I consider with Wright (2004a; 2014) that justification does not derive from conceptual understanding, but rather that the rules should be assumed as a starting point. On the other hand, Williamson (2011, p. 504) rejects the inferentialist explanation and offers, instead, an approach based on the causal interrelations between speakers; it is these relationships that constitute the competence.
- III. Boghossian (2015) also faces the problem of what is a rule. Contrary to common opinion, he sustains that rules themselves can be thought of as contents and contents are abstract objects (2015, p. 4). I discuss how abstract objects—like, for example, rules—would be constitutive of meaning. Basic inferences are basic mental actions that function as constitutive norms, but log-

ical rules are neither prescriptions of thinking nor psychological laws. I contend that the conceptual priority is in both in the judgment and the object (the logical rules) and the requirements are logico-metaphysical ones. In this sense, one can maintain that logic is constitutive of thinking. But reason alone cannot be understood without the ability to go beyond itself. One learns to make inferences only when one has a language and the language is always shared. Even if one invented a new language or expressions, I cannot conceive them except with the elements, the linguistic “rules of the game” learned socially. In this sense, competence regarding language depends on participation in linguistic practice.

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