Epistemic Analyticity and Inferentialism

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ABSTRACT

Strongly analytic assertions (or deductions) are known to be *true* (or *valid*) solely by virtue of knowledge of their meaning and are therefore unrevisable. *Modestly* analytic assertions (or deductions) are recognized as *correct in a language* solely by virtue of a knowledge of their meaning. Despite Quine's effective critique of analyticity, philosophers still debate whether there are analytic assertions or deductions. The answer depends on the conception of meaning adopted. According to an inferentialist conception of meaning (inferentialism), to understand a sentence in a language is to apprehend a set of possible meaning-constitutive inferences and assertions in which the sentence occurs. Paul Boghossian proposed a brand of inferentialism in his attempt to salvage strong analyticity. Boghossian's version of inferentialism faces serious objections, some raised by Timothy Williamson. The main thesis of this paper is that in epistemic contexts there are *modestly analytic* assertions and inferences. To support this thesis I outline a non-holistic, fallibilist inferentialism in which there are no strongly analytic assertions, but the meaning-constitutive assertions and deductions are modestly analytic.

1. Three changes in the analytic-synthetic distinction

The Kantian distinction between analytic and synthetic judgements is a distinction between two kinds of judgements whose truth can be known in two different ways. Analytic judgements can be known to be true based solely on possession of the concepts involved. If I grasp the concept of "body", says Kant, I know that it contains «the marks of extension, of impenetrability, of shape» and this suffices to know the truth of the judgement "All bodies are extended": «I do not need to go outside the concept»[1]. Therefore the judgement is analytic. Knowing the truth of

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[1] Kant, *Critique of Pure Reason*, B11, (Kant 1999, p. 141)

a synthetic judgement like "All bodies are heavy", by contrast, requires some epistemic ingredient that goes beyond mere possession of the concepts. Three features of Kant's original distinction have undergone crucial changes since the beginning of the twentieth century. The original Kantian formulation presupposed the Aristotelian subject-predicate theory of judgement, which was abandoned when Frege's new conception of logical form was adopted. The Fregean turn is the first change. Secondly, the notion of concept is now often equated with the notion of the meaning of a linguistic expression. The phrase "based solely on the possession of the concepts" is often replaced by "solely by virtue of meaning". This specific consequence of a more general linguistic turn in philosophy is the second change. Thirdly, some present-day philosophers obliterate the epistemic character of Kant's original notion of analytic judgement. Instead of using the term "analytic" to refer to sentences whose truth is *known* based only on knowledge of the meanings of the expressions involved, they simply speak of analytic sentences as sentences that *are true* solely by virtue of meaning, without requiring the meaning and truth in question to be known or knowable. These philosophers espouse a non-epistemic notion of analyticity[2]. The non-epistemic turn is the third change. While I accept the first and second changes, I do not follow those who endorse the non-epistemic turn of the analytic-synthetic distinction. Instead, I shall attempt to explore the plausibility of an analytic-synthetic distinction which, like that made by Kant, is epistemic.

2. Analytic assertions in a language

An epistemic distinction between analytic and synthetic is a distinction formulated in terms of epistemic notions such as knowledge, justification, warranted assertion. A plausible characterization of epistemic analyticity might be as follows:

i) an assertion in a language L is *analytic* if, and only if, knowing the meaning in L of the asserted sentence is a sufficient condition for recognizing that the assertion is correct in L.

"Meaning" is an epistemic notion. In Michael Dummett's words: «meaning is that which a man knows when he understands a word»[3]. We must start from the notion of *knowing the meaning* of an expression. This is the general approach to the

[2] Cf. Gillian Russell's book *Truth in virtue of meaning* (Russell 2008).
[3] Dummett 1973/1981, p. 95

problem of linguistic meaning taken in Dummett's writings[4]. For Dummett, a theory of meaning is a theory of the basic understanding of linguistic expressions that a speaker must have to count as a competent speaker. The core of a theory of meaning is a thesis about what it is to understand a sentence. Different theories choose different central notions to explain what it is to know the meaning of a sentence. For a truth-conditional theory of meaning, to grasp the sense of a sentence is to know its truth-condition. For a verificationist theory, to grasp the sense of a sentence is to know its verification-condition. For an inferentialist theory, to grasp the sense of a sentence is to associate with it a particular set of inferences. At this initial stage of our investigation, I do not take a stand about the nature of sentential meaning or opt for a particular theory of meaning, but simply adopt the general approach that connects meaning and understanding. If we accept the connection between meaning and understanding, the analysis (i) of epistemic analyticity can be reformulated as:

ii) an assertion A in a language L is an analytic assertion in L if, and only if, understanding the asserted sentence is a sufficient condition for recognizing that the assertion A is correct in L.

Whoever understands and uses the word "green" in English will accept the assertion "green is a colour" as justified: the assertion is analytic. "Nightmares are dreams"[5] is another analytic assertion. If an English speaker understands the word "nightmare", that speaker will agree that the assertion "nightmares are dreams" is correct. Many other such examples could be given[6].

3. Analytic deductions in a language.

Another development of the analytic-synthetic distinction is its extension beyond judgements and assertions to deductive inferences. Philosophers have claimed that some deductive inferences are valid solely by virtue of the meanings of the words involved. Sometimes they have explicitly termed such inferences "analytic".

The literature contains a surprising number of different notions of "inference" and "deduction"[7]. As such, I should be clear and explain what I mean

[4] Dummett 1975b, 1976, cf. 1973/1981 p. 92

[5] Cf. Katz 1974.

[6] A useful list of examples of this kind given by various philosophers is in Russell 2008, p. 180. Obviously, the analytic status of some items on the list is debatable.

[7] For a brief overview see Cozzo 2014, §1.

by these terms. An inference is an act of transition from certain premises to a conclusion such that premises and conclusion are assertions (which can be categorical or hypothetical, or dependent on hypotheses)[8] and the premises are intended to provide rational support for the conclusion. The intended support may be conclusive or non-conclusive. It is conclusive if it cannot be undermined by any stronger counterevidence. If the premises are intended to provide a conclusive support for the conclusion, the inference is deductive. A deductive inference is an elementary deduction. A composite deduction is a concatenation of many elementary deductions.

Many authors have maintained that some elementary deductions are analytic. A possible way of generalizing our characterization of analytic assertions and extending it to elementary deductions is as follows (I will explain the phrase "correct in L" in section 6):

iii) an elementary deduction D in a language L is an analytic deduction in L if, and only if, understanding the premises and the conclusion of D is a sufficient condition for recognizing that D is correct in L.

Extending the notion of analyticity to elementary deductions makes it much more interesting for the philosophy of logic. All instances of the basic rules of inference of formal logic are elementary deductions. Why are some logical deductions obvious, such that we accept them without objection? This is an important question for the epistemology of logic. If it is joined to an adequate conception of the meanings of logical constants, the notion of "analytic deduction" can help us to answer the question: it can provide an explanation for the fact that we feel compelled to accept basic logical inferences immediately. For example, it can explain why, if we understand the connectives, the conditional "if...,then..." ("$\rightarrow$") and the disjunction "or" ("$\vee$"), we immediately accept instances of *modus ponens* or *disjunction introduction*[9]. Moreover, once we apply the notion of analytic deduction to logical inferences, we can easily see that the notion of analytic assertion can be applied not only to sentences such as "bachelors are unmarried" or other similar examples of scant philosophical interest, but also to

[8] On the difference between categorical and hypothetical see Cozzo 2019, §§ 2-3.

[9] I follow the usual logical terminology according to which *modus ponens* is the rule that allows to deduce the conclusion B from the two premises A and $A \rightarrow B$ and *disjunction introduction* the rule that allows to deduce a conclusion $A \vee B$ from the single premise A or from the single premise B.

instances of logical laws like the excluded middle or the law of non-contradiction, which are certainly more interesting to a philosopher.

However, our characterizations of epistemic analyticity in (i), (ii) and (iii) employ the notion of "correctness in L". How should this be understood? The word "correctness" suggests that some normative notion is applied to the practice of making assertions and deductions.

4. The assertoric-inferential practice

Assertions and inferences are actions performed in a context of utterance. They are linguistic actions belonging to an intersubjective practice: "the assertoric-inferential practice". A description of this practice should highlight its normative character. To make an assertion that *p* is to utter a sentence that means *p* and thereby to undertake a commitment to its truth[10]. To make a deduction is to pass from premises to conclusion and thereby to undertake the commitment that the premises provide a conclusive rational support for the conclusion. Members of the linguistic community are aware that speakers who make assertions or deductions undertake such commitments. This implicit awareness manifests itself in the fact that they acknowledge certain rights and obligations. An interlocutor has a *right to challenge* an assertion by *demanding a justification* of the claim that the sentence is true. Similarly, an interlocutor has the right to challenge a deduction if the premises do not appear to provide conclusive support for the conclusion. The speaker who makes the assertion or deduction has a *duty to retract* it if he, or she, is unable to respond to a legitimate challenge by offering a justification. The interlocutor has the *right to criticize and reject* an assertion or deduction that is not justified, but he, or she, *ought to accept* the assertion or deduction if the speaker responds adequately to challenges or criticisms. Thus, the assertoric-deductive practice is a normative practice that involves normative requirements: commitments, rights, duties. It is important to understand that these normative requirements are implicitly presupposed and intersubjectively enforced by the participants in the practice. It is equally important, however, to realize that the normative requirements of the assertoric-inferential practice are not always honoured. The speakers who make assertions or inferences, or react to them, are aware of how the assertoric-inferential practice ought to be exercised, how one

[10] For an explanation of the notion of a commitment to truth see Cozzo 2025, §1, pp. 2-4.

should act when one honours the commitments, but the actual individual aim of a participant in the practice may be unrelated to those commitments or even in conflict with them. The agent who makes an assertion or a deduction can exploit the assertoric-inferential practice to influence interlocutors in many ways, even to deceive them deliberately. Therefore, we must distinguish between the overall assertoric-inferential practice and the virtuous component of that practice, the sub-practice in which participants endeavour to honour the normative requirements and care for knowledge and truth[11]. Since its ultimate aim is the acquisition of knowledge, let us call this sub-practice the *epistemically virtuous practice*. The term "virtuous" is apt because the distinctive feature of the sub-practice is that it exhibits epistemic virtues: attentiveness, carefulness, critical attitude, self-scrutiny, intellectual honesty, curiosity, open-mindedness, intellectual courage etc.

5. Epistemic contexts and the critique of language

Speakers who make assertions and inferences are not always epistemically virtuous. But sometimes they are and sometimes they join other epistemically virtuous speakers to form an intersubjective situation, which I propose calling "epistemic context"[12]. An epistemic context can be thought of as a quintuple.

iv) An epistemic context C is a quintuple $<\gamma, \lambda, \delta, \alpha, \pi>$ where γ is a group of epistemically virtuous speakers (the members of the context), λ is a set of understood and accepted languages, δ is a set of justifications, α is a set of accepted assertions and inferences, π a set of open problems.

Assertions and inferences are made, challenged and criticized. Epistemically virtuous members respond to criticisms and doubts by offering justifications. If the justifications, assertions and inferences withstand all epistemically virtuous objections raised in the context, the virtuous participants are rationally compelled to accept them. If the justifications, assertions and inferences do not withstand the objections, the virtuous members of the context reject or retract them. Consequently, the set of accepted assertions and inferences and the set of

[11] The relation between the virtuous sub-practice and the overall assertoric practice is examined in Cozzo 2025, §4.
[12] Cf. Cozzo 2019, §4.

justifications can change. A critical attitude, curiosity and open-mindedness lead to changes in the set of open problems. Moreover, a language used or proposed may be subject to an evaluation of its rational acceptability. When this happens, the objects of rational evaluation are not individual assertions, inferences or arguments within a language but rather the language itself, or a fragment of it. We can call this "the critique of language"[13]. The critique of language is driven by the general aim of coordinating social interactions and organizing experience. It is multifaceted: simplicity, fruitfulness and consistency are different competing criteria involved in the evaluation. Sensory experience can be more or less resistant to our attempts to impose linguistic order upon it and this resistance affects our evaluation of the language in question. Many important changes in the history of science have involved a rational change of language: a previously accepted language was criticized and rejected, and scientists adopted a new language. The chemical revolution in the eighteenth century, for instance, was also a linguistic revolution that culminated in 1797 in Lavoisier's presentation to the *Académie des Sciences* of a new language for the new chemistry, expounded in a book instructively titled *Méthode de nomenclature chimique*[14]. It is important to note that the critique of language is *contextual*: it is not an evaluation performed once and for all, independently of the epistemic contexts in which languages are used. The critical evaluation of a language takes place in an epistemic context and the result may vary in different contexts: the same language is first accepted in one context and then rejected in another more advanced context.

In short, an epistemic context can change because the set of members, the sets of accepted assertions, inferences, justifications, languages and problems change. The critical character of the epistemically virtuous practice leads to changes in all five components of epistemic contexts. This is why epistemic contexts are always provisional and unstable.

6. Correctness in a context, correctness in a language

This brief outline of our assertoric-inferential practice and of its epistemically virtuous sub-practice that generates epistemic contexts, allows us to explain the phrase "correct in L" in our characterizations of epistemic analyticity.

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[13] I have emphasized the importance of this aspect of rational inquiry for the theory of meaning and the philosophy of language since Cozzo 1994 ch. V, 2002, section 22.
[14] Cf. Beretta 1998.

Let A be an assertion, D an elementary deduction, L the language to which A and D belong and let C be an epistemic context consisting of epistemically virtuous speakers in γ, accepted languages in λ, justifications in δ, assertions and inferences in α and open problems in π. The relevant notions of correctness are:

v) A is correct in C = $<\gamma, \lambda, \delta, \alpha, \pi>$ if, and only if, A belongs to α.
vi) D is correct in C = $<\gamma, \lambda, \delta, \alpha, \pi>$ if, and only if, D belongs to α.
vii) C is an L-context if, and only if, L belongs to the set λ of languages accepted in C
viii) A is correct in L if, and only if, there is at least an L-context and A is correct in all L-contexts.
ix) D is correct in L if, and only if, there is at least an L-context and D is correct in all L-contexts.

In other words, an assertion or deduction is correct *in an epistemic context* if, and only if, it is accepted in that context. Given the notion of correctness in an epistemic context, we can explain the notion of correctness *in a language*. "A is correct in L" expresses the circumstance that A is correct only because the language L is accepted. If A is an assertion belonging to the language L, and A is correct in an epistemic context C, then C must be a context in which L is accepted, an L-context. But C is only one particular L-context and A may be correct in C by virtue of some non-linguistic evidence which may be absent in another L-context, whereas to be correct in L is to be correct in all L-contexts. An assertion (or deduction) is correct *in a language* if, and only if, it is correct in all conceivable epistemic contexts in which that language is accepted and the set of such contexts is not empty. Therefore, if an utterance (an assertion or deduction) is correct in a language, the fact that it is accepted in a context C must depend on a feature that context C shares with all conceivable contexts in which the language is accepted. What is this common feature? In all those contexts the language is not only accepted: it must be understood (if it were not understood, it could not be genuinely accepted as a language). In conclusion, the acceptance of an utterance that is correct in a language L depends solely on the acceptance and understanding of L. This is the insight contained in our characterizations of analyticity (ii) and (iii). Some assertions and some elementary deductions are accepted in an epistemic context simply because the language is accepted and therefore understood. These assertions and deductions are analytic.

7. Conceptions of meaning.

A careful reader will object that providing definitions like (ii) and (iii) does not prove that there are assertions and deductions that fall under the concepts thus defined. The defining condition is that understanding the sentences involved suffices to recognize the correctness of assertions and deductions in a language L. Is this condition ever satisfied? One may doubt that it is. Serious doubts about analyticity were raised by Willard Van Orman Quine in his celebrated 1951 essay *Two Dogmas of Empiricism*.

Two Dogmas is «one of the most influential papers in twentieth century philosophy» [15]. Quine's attack on the analytic/synthetic distinction convinced many philosophers in the second half of the century that the distinction should be avoided. However, Kathrin Glüer [16] was right when she remarked, at the conference "50 Years of Empiricism without Dogmas" in 2001, that the concept of analyticity was «certainly experiencing a renaissance». Instances of the "renaissance" are Paul Boghossian's numerous papers on this topic. The most important of these papers probably is "Analyticity reconsidered", published in 1996, in which Boghossian «attempted to [...] salvage a notion of analyticity from Quine's widely accepted critique»[17].

Quine's critique presupposes that the supporter of analyticity espouses a positivist conception of meaning and understanding, by which understanding a sentence, grasping its meaning, consists in associating with the sentence a set of sequences of sense-experiences constituting possible verifications of it and another set of sequences of sense-experiences constituting possible falsifications. This is just one of many available conceptions of meaning in philosophical debate and today it is certainly not a fashionable view. Perhaps analyticity can be salvaged if one adopts a different conception of meaning. This is what Boghossian attempted.

Boghossian proposed a version of epistemic analyticity by which to say that S is analytic is to say that «mere grasp of S's meaning by T suffices for T's being justified in holding S true»[18] so that not only is T «justified without appeal to empirical evidence», but also «the justification in question is not defeasible by

[15] Miller 1998, p. 114.
[16] Glüer 2003, p.37.
[17] Boghossian 2003b, p. 15.
[18] Boghossian 1996, p. 363. Cf. 2003b.

any future empirical evidence»[19]. Therefore «the notion of analyticity can help explain how we might have a priori knowledge»[20]. For Boghossian, an analytic sentence is a sentence «knowable to be true [solely] on the basis of grasp of meaning»[21]. To support his claim that mere knowledge of meaning can give us a priori knowledge, Boghossian adopts a conception of meaning that is different from the verificationist conception targeted by Quine.

Boghossian's conception belongs to a variegated family of views about meanings and concepts most commonly termed "inferentialism" or "conceptual role semantics". In different ways, such views were advocated in the 1930s by Ludwig Wittgenstein[22], Rudolf Carnap[23] and Gerhard Gentzen[24]; and later by Wilfrid Sellars[25] (1954) and many others[26]. We can roughly summarize the general idea by saying that we can form a concept or give meaning to a linguistic expression by associating a certain role in our reasoning with the concept, or by associating a role in our public assertoric-inferential practice with the linguistic expression. A more specific version of the idea at the linguistic level is that we can give meaning to an expression by (implicitly) adopting rules to the effect that certain assertions or inferences in which the expression occurs are acceptable. On this view, to understand a sentence, a speaker must grasp a meaning that is not a pair of sequences of sense-experiences, but a set of links with other sentences, a set of inferences. Boghossian says that the idea is «that meaning facts are facts about inferential role: an expression means what it does by virtue of participating in one set of inferences rather than another»[27]. Correspondingly, at the mental level, we can constitute a concept by assuming certain beliefs or mental transitions associated with it.

[19] Boghossian 1996, p. 362.
[20] Boghossian 1996, p. 362.
[21] Boghossian 2020, p. 244.
[22] Wittgenstein 1956, VII, section 30.
[23] Carnap 1934, p. v.
[24] Gentzen 1934, p.189.
[25] Sellars 1954.
[26] Cf. Cozzo 2008.
[27] Boghossian 1994, p. 110.

8. Holistic and non-holistic inferentialism.

According to an inferentialist conception of meaning, to understand a sentence in a language L is to apprehend a set of possible acceptable utterances (inferences and assertions) in which the sentence occurs: this is the set of utterances that are meaning-constitutive for that sentence. They are part of its meaning: apprehending them is part of understanding the sentence. To say that an assertion A in a language L is meaning-constitutive is to say that understanding the sentence asserted is a sufficient condition for recognizing that assertion A ought to be accepted whenever the language L is used and understood, which is precisely to say that A is correct in L, according to (viii). Similarly, to say that an elementary deduction D is meaning-constitutive is to say that understanding premises and conclusion is a sufficient condition for recognizing that deduction D is correct in L according to (ix). If we accept (ii) and (iii), the obvious conclusion is:

x) an utterance X in a language L is analytic in L if, and only if, X is meaning-constitutive.

If the set of meaning-constitutive utterances for a sentence is the set of all inferences and assertions involving that sentence, the inferentialist theory is holistic. An influential proposal of a *holistic inferentialism* is developed by Robert Brandom in his book *Making it Explicit*[28]. Many objections can be levelled at a holistic conception of meaning. Here I simply observe that if we adopt a holistic inferentialist theory of meaning as a theory of understanding, the analytic-synthetic distinction disappears: all assertions and all inferences are analytic in the sense of (i), (ii) and (iii), since they are all part of the meanings of the involved sentences.

It is, however, entirely possible for an inferentialist to maintain that not all inferences and assertions involving a sentence are constitutive of its meaning, but only some of them, those which are constitutive of the meaning of some expression occurring in the sentence. This is a non-holistic inferentialism. A non-holistic inferentialist theory of meaning for a language was expounded in my *Meaning and Argument*[29]. The inferentialist conception of meaning proposed by Boghossian is also non-holistic. Non-holistic inferentialism can be summarized by the following thesis.

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[28] Brandom 1994.
[29] Cozzo 1994, cf. 2002.

xi) The non-holistic inferentialist thesis: some (but not all) inferences or assertions in which an expression occurs are meaning-constitutive for that expression.

The first problem for a non-holistic inferentialist is how to justify the distinction between those inferences and assertions that are constitutive of the meaning of an expression and those that are not[30]. In what follows, I will sometimes simply use "utterances" as shorthand for "inferences and assertions". My proposed solution to the first problem facing non-holistic inferentialism starts from the general methodological principle that a theory of meaning should account for relevant features of linguistic practice. If a distinction is made in linguistic practice the methodological principle gives a good ground for adopting a corresponding theoretical distinction. The first problem for non-holistic inferentialism can be solved by exploiting a distinction that is present in linguistic practice: the distinction between utterances that are treated as meaning-constitutive and utterances that are not. Speakers treat an utterance (assertion or inference) as meaning-constitutive for an expression E when they treat it as a primitive utterance for E. We must specify "for E", because an utterance can contain several expressions and be primitive for one of them, but not for another. What do I mean by "primitive"? The answer is as follows.

xii) *U* is a primitive utterance (assertion or inference) for an expression E in a language L for a speaker S if, and only if,
S expects of every competent speaker X of L that
a) in using E, X accepts *U* and neither envisages the possibility of a (non-circular) justification of *U* nor acknowledges the need to give such a justification;
b) X is convinced that whoever understands and uses E in L ought to treat *U* in the way specified in (a).[31]

I propose equating the theoretical distinction between utterances that are meaning-constitutive and utterances that are not meaning-constitutive with the distinction between primitive and non-primitive utterances. A critical reader may wonder whether the primitive/non-primitive distinction is genuinely present in linguistic practice. Do we really treat some assertions or some inferences as primitive? It seems to me that we do. Many philosophers try to explain this fact by

[30] Cf. Cozzo 2002.
[31] A similar notion of primitive use is in Cozzo 2008, p. 296.

crediting us with a faculty of intuitive knowledge. We are supposed to immediately know the properties of concepts and the relations between them, as if we could see them through the mind's eye. This idea of intellectual perception, which plays a central role especially in the philosophy of Descartes, was effectively criticized by Charles Sanders Peirce and by Wittgenstein. Wittgenstein does not espouse the view based on intuitive knowledge. But he does describe primitive utterances when he writes in the *Philosophical Investigations*: «I have exhausted the justifications, I have reached bedrock, and my spade is turned [...] I am inclined to say 'This is simply what I do'»[32].

An important comment on the above characterization of primitive utterances is that the speaker S, who considers *U* a primitive (and thus meaning-constitutive) utterance of E in L is not necessarily a speaker who accepts L nor necessarily a speaker who uses the expression E. The speaker S may be a speaker who is reflecting on the use of expression E in L without accepting that use. S may even be a speaker who understands the language L, but refrains from using it.

9. Primitive deductions

Elementary (one-step) deductions can be challenged. For example, Lisa makes an elementary deduction from the premise "If she runs, then she wins or she loses" to the conclusion "therefore if she runs she wins, or if she runs she loses", which we can represent as passing from a premise of the form $A\rightarrow(B\vee C)$ to a conclusion $(A\rightarrow B)\vee(A\rightarrow C)$. This is an elementary deduction, but an interlocutor, Maria, challenges Lisa's deduction: "does it really follow?" and demands a justification. In response, Lisa justifies her deduction by breaking it down into simpler elementary deductions that are compelling for Maria. Lisa advances a more articulate composite deduction containing instances of *modus ponens* and disjunction-introduction and *reductio ad absurdum*. Maria accepts the more articulate deduction because she accepts the simpler component deductions. Now Lisa and Maria fully agree because they both treat the simpler component elementary deductions as primitive deductions (deductive inferences that are primitive utterances for some expression).

Let us consider disjunction-introduction, for example. An inference of disjunction-introduction is a primitive deduction for Lisa and Maria. Lisa and

[32] Wittgenstein 1953, §217.

Maria would not know a non-circular argument to justify an instance of disjunction-introduction, but they do not feel uncomfortable: they expect every competent speaker who uses the connective of disjunction to exclude the possibility of an inference of disjunction-introduction being legitimately challenged, simply because accepting such inferences is part of what it is to use disjunction and remain faithful to its meaning. Therefore, Lisa and Maria think that no need to provide a justification can arise. In an individual inference of disjunction-introduction from the premise "she wins" to the conclusion "she wins or she loses", they discern a general pattern, *a deductive rule*, and treat the rule as meaning-constitutive for disjunction.

Lisa and Maria's attitude towards the rule of disjunction introduction is very different from their attitude towards the rule that allows to infer $(A \rightarrow B) \vee (A \rightarrow C)$ from the premise $A \rightarrow (B \vee C)$: the latter rule is not meaning-constitutive. They implicitly adopt a non-holistic inferentialism in terms of deductive rules. The generic formulation of their implicit view is

xiii) the non-holistic rule-inferentialist thesis: some (but not all) rules of inference concerning an expression are meaning-constitutive for that expression.

For Lisa and Maria meaning-constitutive rules are those rules whose instances are primitive deductions. Primitive deductions and assertions satisfy the conditions specified in (i), (ii) and (iii). Thus we may state the following:

xiv) an elementary deduction D is analytic for a speaker S if, and only if, D is a primitive deduction for S;

xv) An assertion A is analytic for a speaker S if, and only if, A is a primitive assertion for S.

10. Recapitulation

Sections 2 and 3 contain preliminary characterizations of analytic assertions ((i) and (ii)), and deductions (iii). These first approximate characterizations employed the notions of meaning and understanding without explaining them. The notions of meaning and understanding were left indeterminate: no clear and explicit conception of meaning was adopted. Sections 4, 5 and 6 illustrated the assertoric-inferential practice, introduced epistemic contexts and the notion of correctness in epistemic contexts. In section 7, considering Quine's critique of analyticity, the need to indicate a specific conception of meaning was highlighted. Thus in section

8 the investigation focused on a particular conception of meaning: inferentialism. From the point of view of inferentialism, "analytic" is equated with "meaning-constitutive" (see (x)). Holistic inferentialism dissolves the analytic-synthetic distinction. Our attention now turns to non-holistic inferentialism. The first problem for non-holistic inferentialism is to offer good grounds for a distinction between those inferences and assertions that are meaning-constitutive and those that are not. A conception of meaning and understanding should account for existing linguistic practice. Therefore, a conception of meaning should account for the distinctions that speakers make in practice. My claim is that speakers make a distinction between utterances that do not require justification and are primitive in the sense specified in (xii) and utterances that are not primitive. Primitive utterances are treated as if accepting them were part of the speakers' understanding. Thus, there are good grounds for taking the distinction between meaning-constitutive and non-meaning-constitutive to correspond to the distinction between primitive and non-primitive. We can rethink analyticity in terms of two equations ANALYTIC = MEANING-CONSTITUTIVE and MEANING-CONSTITUTIVE = PRIMITIVE. Analytic assertions and deductions are those assertions and deductions that are primitive.

11. Paul Boghossian's proposal in "Blind Reasoning"

In his paper "Blind Reasoning", Boghossian (2003a)[33] proposes an explanation for the cogency of inferences of *modus ponens* and of other deductive rules, which to some extent resembles that outlined above. He maintains that «following certain inferential rules is constitutive of our grasp of the primitive logical constants» and that «if certain inferential rules are constitutive of our grasp of certain concepts, then we are *eo ipso* entitled to them, even in the absence of any reflectively appreciable support»[34]. Boghossian thus espouses a non-holistic rule-inferentialism. He describes the non-holistic rule-inferentialist thesis as a «traditional influential thought». He would like to add to this thesis a second «traditional influential thought» that he calls «meaning-entitlement connection», to the effect that every instance of a meaning-constitutive rule is justified.

[33] This paper considers only one phase of Boghossian's thought, especially his views in *Blind Reasoning* (2003a). Boghossian 1994 takes a different attitude towards inferentialism. Later, in Boghossian 2020, p. 244, he seems to abandon inferentialism.

[34] Boghossian 2003a, p. 248.

In other words, a meaning-constitutive rule is «*eo ipso* entitling»[35] or «blamelessly employed without any reflective appreciation of its epistemic status»[36]. However – he remarks – «unfortunately matters are not quite so straightforward», because «there seem to be clear-cut counterexamples [...]»[37]. The unrestricted "meaning-entitlement connection" is false because there are clear cases in which a rule of inference is meaning-constitutive but the inferences governed by that rule are not justified. Arthur Prior's connective "tonk"[38] is a «famous illustrative case». Accepting the rules of inference that give meaning to "tonk" would lead one to accept deductions from every possible premise to every possible conclusion, which is clearly absurd.

12. The a priori restrictive strategy

Boghossian's remedy for this problem consists of two moves: he first distinguishes between defective and non-defective concepts (or meanings)[39] and then restricts the meaning-entitlement connection to non-defective concepts[40]. In other words, Boghossian's emended proposal in "Blind Reasoning" is that i) some rules are constitutive of defective meanings and some of non-defective meanings; ii) an inference is justified if it is an instance of a rule that is constitutive of a non-defective meaning.

It is not necessary to go into the details of Boghossian's distinction between defective and non-defective meanings (or concepts). What is important here is that Boghossian posits an *a priori* distinction between defective and non-defective made once and for all, independently of the epistemic contexts in which a language is used. In this respect, Boghossian's strategy is not essentially different from the line of thought chosen by the majority of the inferentialists who, starting from Nuel Belnap (1962), reacted to Prior's connective "tonk".

In general, inferentialism needs to confront the fact that rules of inference can give rise to meanings that turn out to be problematic and wrong. The majority of those who favour the inferentialist insight choose an *a priori restrictive strategy*. In the first place, they formulate a single pre-condition *a priori* that

[35] Boghossian 2003a, p. 241.
[36] Boghossian 2003a, p. 239.
[37] Boghossian 2003a, p. 241.
[38] Cf. Prior 1960.
[39] Cf. Boghossian 2003a, p. 246.
[40] Cf. Boghossian 2003a, p. 248.

should be satisfied by good sets of rules. So they attempt to draw a line of demarcation between good sets of rules and bad sets of rules. The general idea is that good sets of rules constitute good or genuine meanings, while bad sets of rules constitute meanings that are defective, as Boghossian says, or (according to some other philosophers) illusory-meanings, or pseudo-meanings. In the second place, the philosophers who adopt this strategy maintain that the good rules generate inferences that are valid by virtue of meaning and sentences that are true by virtue of meaning. So, the good rules yield analytic truth and analytic validity. For example, Michael Dummett maintains that the rules of inference for classical logical constants (e.g. double-negation elimination) do not constitute genuine meanings, classical logical constants are unintelligible, and the classical logician who believes that classical logical constants are understood is a victim of «illusions implicit in our misunderstandings of our own language»[41]. For Dummett, the essentially classical rules of inference are not good rules. On the other hand, the intuitionistic rules for the logical constants are good rules, because they satisfy some general requirements: in agreement with «a molecular view of language»[42] the introduction rules are such that their premises and discharged assumptions are of lower complexity than the conclusion[43] and the elimination rules are in harmony with the introduction rules (they are inverses of the introduction rules in accordance with Dag Prawitz's inversion principle[44]). Thus the intuitionistic logical constants are endowed with genuine meanings. Instances of the introduction rules are meaning-constitutive and hence valid. Instances of the elimination rules are valid by virtue of the meanings shaped by the introduction rules. Intuitionistic logic is valid, while typically classical logical rules, double-negation elimination, *reductio ad absurdum*, excluded middle, are not valid.

13. Objections to the a priori restrictive strategy

My first objection to the *a priori* restrictive strategy is that it is at odds with our pre-theoretic criteria of understanding. In section 8 I adopted a methodological principle[45] according to which a theory of meaning should respect the data of our

[41] Dummett 1977, p. 380.
[42] Dummett 1978, p. 222.
[43] Cf. Dummett 1991, p. 258.
[44] Cf. Prawitz 1965, p. 33.
[45] Cf. Cozzo 2008, p. 304.

pre-theoretic linguistic practice: meaning-constitutive is what speakers treat as meaning-constitutive. If a rule of inference is instantiated by primitive deductions for a speaker, then the rule is meaning-constitutive for that speaker, regardless of its form and of the relative complexities of premises and conclusions. If we adopt this methodological requirement, the thesis that classical logical constants are unintelligible becomes untenable. Further, if we adopt the methodological requirement, an adequate theory of meaning must also account for the fact that the language of Cantor's set theory was (and still is) understood and the unrestricted comprehension principle was (and is) treated as constitutive of the Cantorian concept of set. Thus the word "set" in Cantor's language is understood and meaningful, though that meaning generates the set-theoretic paradoxes. In general, it is a fact that in many historical contexts linguistic and scientific communities have treated paradoxical fragments of languages as fully intelligible. Therefore, acknowledgement of the intelligibility of paradoxical languages is a condition of adequacy for a theory of meaning[46]. Nevertheless, epistemic virtues recommend critical caution towards paradoxes, when they are discovered. If possible, paradoxes should be resolved and eliminated: they are a *prima facie* indication that something is wrong. The Cantorian meaning of "set" was understood, but the paradoxes were a reason to critique the language of Cantor's set theory. For the sake of consistency, it was rational to try to shape a new meaning for the word "set". The moral is that the theory of meaning and understanding on the one hand, and the rational evaluation of an already understood and meaningful language on the other, are two issues that ought to be kept distinct.

My second objection concerns the rational evaluation of language. The *a priori* restrictive strategy gives a picture of the rational evaluation of language that does not correspond to the way a critique of language mostly takes place. The *a priori* restrictive strategy attempts to circumscribe the good or non-illusory meanings a priori through a single uniform non-contextual demarcation that should apply to all epistemic contexts at once. This picture conceals the fact that there is not just one demarcation, but many demarcations in different epistemic contexts. Epistemic contexts are genuine stages of our rational inquiry in which inquirers subject a language to criticism in various ways, with different outcomes. If we look at the history of science, we see that concepts and meanings that are understood and accepted by epistemically virtuous inquirers in a given

[46] Cf. Cozzo 1994, pp. 144-5.

epistemic context are rationally rejected or modified in a subsequent more advanced context. Differences notwithstanding, this was what happened with many scientific concepts: the Ptolemaic concept "planet", the concepts of Newton's method of fluxions, the concept "phlogiston", Cantor's concept of set. In an epistemic context prior to Lavoisier's chemical revolution the language of phlogiston is rationally accepted and the inference from the premise "x is a flammable material" to the conclusion "x contains phlogiston" is immediately justified, because it is part of the meaning of the word "phlogiston". However, after Lavoisier's revolution, it is no longer a justified inference. Lavoisier knows that in the language of phlogiston the inference in question is meaning-constitutive, but in his new epistemic context the inference is not justified, because the language of phlogiston is no longer rationally acceptable. There was a rational transition from the context in which the concept "phlogiston" was accepted to the context in which it was rejected. The transition was a change of language that depended on various criteria of rational acceptability and on the results of some experiments.

14. Against strong epistemic analyticity.

Lavoisier rejects the language of phlogiston, but he understands that language. He knows that if one uses and understands "phlogiston", one ought to accept the assertion "phlogiston is contained in flammable material". But in the post-revolutionary epistemic context the assertion is no longer justified, because the language of phlogiston is rejected. Galileo rejects the Ptolemaic astronomical language, but he understands that language. He knows that if one uses and understands the Ptolemaic language, one ought to accept the assertion "the sun is a planet". But in the Copernican epistemic context the assertion is not justified, because the Ptolemaic language is rejected[47]. An intuitionist logician rejects the classical language, but he understands that language. He knows that if one uses and understands classical negation and disjunction, one ought to accept every assertion of the form "A or not-A" as justified. But for the intuitionist, if there is no guarantee of decidability for A, the assertion of the excluded middle is not justified, because the intuitionist rejects the meanings of classical negation and disjunction and thereby rejects the classical logical language.

[47] Cf. Kuhn 1962-2012, p. 128.

These examples illustrate two points that those inclined towards inferentialism should take into account. 1) *A rationally rejected language is understood by those who reject it.* Since understanding consists in knowing the meaning-constitutive rules, it is possible to know the rules that are meaning-constitutive for an expression and to understand the expression without accepting instances of those rules as justified. 2) *The fact that an inference is meaning-constitutive does not in itself suffice for that inference to be justified* in an epistemic context. A meaning-constitutive inference (or assertion) is justified in an epistemic context only if the language to which the inference (or assertion) belongs is rationally accepted in the context. An utterance that is meaning-constitutive is not justified if the language is not accepted.

If the two points above are correct, the thesis that every instance of a meaning-constitutive rule is justified solely because it is meaning-constitutive (Boghossian's «meaning-entitlement connection») is false even if it is restricted to non-defective meanings. If a meaning is non-defective, it is not due to some intrinsic characteristic of the meaning-constitutive rules, but because the rules and the corresponding meaning belong to a fragment of language that is accepted in our epistemic context, which may change; if the context changes, the meaning-constitutive inferences may no longer be justified. Boghossian's notion of epistemic analyticity, according to which «mere grasp of S's meaning by T suffices for T's being justified in holding S true» [48] is empty, because mere grasp of meaning and of the meaning-constitutive rules is never sufficient to justify holding an asserted sentence to be true, or a deduction valid; something more is needed: an epistemic context in which the language is accepted. Mere knowledge of the meaning-constitutivity of a rule of inference without acceptance of the language does not make instances of the rule justified in an epistemic context. Knowledge of meaning does not in itself generate justifiedness. Justifiedness depends on rational acceptance of the language.

I argued in section 5 that acceptance of the language in an epistemic context depends on many competing criteria of rational acceptability, including adequacy to sensory experience. Therefore, justification is never entirely *a priori*. Quine was right about this.

In my opinion, Quine's main argument in *Two Dogmas* was that if analytic truths are sentences that can be known to be true solely by virtue of knowledge of their meaning, then there are no analytic truths. If we stated an

[48] Boghossian 1996, p. 363.

analytic truth, we would make an assertion that would be unrevisable on empirical grounds. But we cannot claim that there are such assertions. The notion of analyticity that Quine successfully attacked (and Boghossian defends) is much stronger than the analyticity that can be defended on the basis of non-holistic inferentialism. Quine's target was the idea that some sentences (and therefore some assertions) have a property that one may term "strong epistemic analyticity".

The thesis of *strong epistemic analyticity* for an assertion states that mere understanding of the sentence asserted is sufficient for knowing its truth (which is independent of the epistemic context). If an assertion were strongly analytic, its truth would be knowable a priori, independently of sense experience. The thesis of strong analyticity for a deductive inference D states that mere understanding of the premises and conclusion of D is sufficient to recognize that D is valid and preserves truth (independently of epistemic contexts). If a deduction were strongly analytic, its validity would be knowable a priori. Quine's target was strong epistemic analyticity. In my opinion, Boghossian's attempt to salvage this notion of analyticity from Quine's critique was unsuccessful.

15. Modest epistemic analyticity

The theses of strong analyticity are false for all assertions and deductions. The non-empty notion of epistemic analyticity that can be salvaged is in my opinion *modest epistemic analyticity*. In the light of the explanations about epistemic contexts in sections 5 and 6, the initial formulations (i), (ii) and (iii) in section 2 and 3 are already characterizations of modest epistemic analyticity. In the subsequent sections the notion is made more precise by means of the two equations ANALYTIC=MEANING-CONSTITUTIVE and MEANING-CONSTITUTIVE=PRIMITIVE. An assertion or a deduction that is modestly analytic is justified only in an epistemic context in which the language of the sentences involved is accepted[49]. In other epistemic contexts, modestly analytic assertions and deductions can be understood but are not justified. What is guaranteed by modest analyticity is merely justifiedness in some epistemic contexts, not aprioricity, nor validity, nor truth. The notion of truth is important, because epistemically virtuous inquirers seek truth. Truth is a regulative idea for the assertoric-inferential practice[50]. But modest analyticity is not "truth by virtue of

[49] Cf. Cozzo 2024a, p.107.
[50] Cf. Cozzo 2025.

meaning". In the language of phlogiston the assertion "phlogiston is contained in flammable material" is (modestly) analytic, but it is not true.

There are epistemic contexts in which modestly analytic utterances are not justified, but they are understood. They can be understood because a speaker can know the meaning-constitutive rules even though he, or she, rejects those rules, the language to which they belong and the corresponding meanings. Thus we need a clear distinction between knowing a rule and accepting a rule.

16. Knowing and accepting constitutive rules

A deductive inference is an act of transition from certain premises to a conclusion such that premises and conclusion are assertions (which can be categorical or hypothetical) and the premises are intended to provide conclusive support for the conclusion. We can consider an axiomatic assertion (for example an assertion of the law of non-contradiction or of the excluded middle) as a particular case of deductive inference: an inference without premises, whose conclusion is a categorical assertion. Thus, what follows about deductive rules also concerns the particular case of axiom schemata.

xvi) A deductive rule R is individuated by a characteristic pattern Σ, such that a deductive inference I is an instance of R if, and only if, pattern Σ can be discerned in I.

Knowledge of a rule manifests itself in our capacity to recognize those acts or situations in which the characteristic pattern is discerned as instances of the rule.

xvii) A speaker X (implicitly) knows a deductive rule R if, and only if, X discerns the pattern Σ characteristic of R in some utterances and considers all and only those single utterances in which pattern Σ can be discerned as instances subsumed under the same rule.

In general, a rule can be known and nevertheless rejected as wrong (in various senses of "wrong"). Specifically, this is true of deductive rules. Knowing a deductive rule and accepting it are not the same.

xviii) A speaker X (implicitly) accepts a deductive rule R if, and only if, X accepts all discerned instances of R as justified.

Here we are particularly interested in meaning-constitutive rules. Meaning-constitutive rules are rules whose instances are primitive.

xix) A deductive rule R is meaning-constitutive (or primitive) for an expression E in a language L for a speaker S if, and only if, a) S knows

R and b) all instances of R are primitive utterances for the expression E in L for S.

A first comment on (xix) is that the definition of "meaning-constitutive" must be relative to a particular expression E. Various expressions may essentially occur in the characteristic pattern of a rule and sometimes a rule is meaning constitutive for some but not all of these expressions. Suppose we add to our language the biconditional "if, and only if,", symbolized by "↔". We then establish deductive rules for "↔": an introduction rule (↔I) and two elimination rules (↔E1), (↔E2). According to the introduction rule (↔I), a conclusion of the form "A↔B" can be deduced from the joint premises "A→B" and "B→A". According to the two elimination rules (↔E1), (↔E2) the conclusions, respectively "A→B" and "B→A", can be inferred from the single premise "A↔B". Suppose we treat these rules as meaning-constitutive for "↔".

$$\frac{A \rightarrow B \quad B \rightarrow A}{A \leftrightarrow B}\ (\leftrightarrow I)$$

$$\frac{A \leftrightarrow B}{A \rightarrow B}\ (\leftrightarrow E1) \qquad \frac{A \leftrightarrow B}{B \rightarrow A}\ (\leftrightarrow E2)$$

We have given meaning-constitutive rules for the biconditional "↔", But we did not intend to fix the meaning of the conditional "if, ...then", symbolized by "→". For the conditional "→" we already had a meaning, fixed by other introduction and elimination rules. So, if someone does not know the rules for the biconditional (↔I), (↔E1), (↔E2), we will not say that he, or she, does not understand the conditional "→", even though the conditional essentially occurs in the pattern of those rules. An understanding of "↔" presupposes an understanding of "→", but an understanding of "→"does not presuppose an understanding of "↔". This non-symmetrical relation of presupposition and its role in a non-holistic inferentialist theory of meaning are investigated in *Meaning and Argument* [51].

A second comment is that, according to (xix), a rule may be meaning-constitutive for a speaker, even though the speaker does not accept the rule. This is possible because the speaker can understand the language L without accepting it. The two necessary conditions for a rule R to be meaning-constitutive in a language L for a speaker S, are a) that S knows R and b) that S treats the instances of

[51] Cf. Cozzo 1994, Ch. 3, pp. 59-119. See also Cozzo 2002.

R as primitive utterances in L. Both (a) and (b) can be true even if S rejects R and the language L. As to the first condition (a), the analysis (xvii) states that knowing R requires that S can discern the characteristic pattern of R in its instances, not that S accepts those instances. When S does not accept the instances of R, according to (xviii), S does not accept R. As to (b), the second condition, we have seen in section 8 that S can consider *U* a primitive utterance of an expression in a language without accepting that language and without accepting *U*.

Let us draw our conclusion about analyticity.

xx) An utterance *U* in a language L is modestly analytic for a speaker S if, and only if, *U* is an instance of a rule R that is meaning-constitutive (i.e. primitive) for S

A modestly analytic utterance in L is justified in those epistemic contexts in which the language L is accepted, but not in all epistemic contexts. A modestly analytic utterance is not valid or true solely by virtue of meaning: it is not strongly analytic.

A deductive rule that is meaning-constitutive and accepted in some epistemic contexts can be rejected in other epistemic contexts. For example, consider the rule of disjunction-introduction. Lisa and Maria in section 9 accept disjunction-introduction as a primitive rule. So do intuitionistic and classical logicians. But over the course of the history of logic, some logicians have rejected disjunction-introduction, despite knowing the rule and being able to recognize its instances[52]. Some contemporary logicians who reject disjunction-introduction may know that other logicians favour intuitionistic logic and treat disjunction-introduction as meaning-constitutive. They know, but they nevertheless reject the rule, because they reject the intuitionistic meaning of disjunction and are not willing to use intuitionistic disjunction. We could give many other examples. The intuitionists reject the classical rule of double-negation-elimination, that is meaning-constitutive for Wittgenstein[53]: they obviously know the rule, but they reject the classical meaning of negation and do not wish to use classical negation. Lavoisier understands the word "phlogiston" but has concluded that it should not be used. A word can be understood even if it is not used. On the other hand, if an epistemically virtuous speaker not only understands, and knows that a rule is constitutive of the meaning of a word, but also intends to use that word with

[52] Cf. Cozzo 2024b, pp. 485-89.
[53] Cf. Wittgenstein 1969, §14.

that meaning, then that speaker must accept the meaning-constitutive rule and its instances as primitive.

The non-holistic inferentialism advocated in this paper is fallibilist, it is a *critical inferentialism*. It emphasizes the role of the critique of language in epistemic contexts. Meaning-constitutive rules can be wrong; there are epistemic contexts in which they are accepted and epistemic contexts in which they are understood, criticized and rationally rejected. A distinctive feature of critical inferentialism is that it attributes importance to the fact that an expression can be understood but not accepted. Consequently, meaning-constitutivity does not imply acceptance. Understanding an expression requires only that all its meaning-constitutive rules are known.

xxi) A speaker S understands an expression E in a language L if, and only if,
1) S knows a set Ω (E) of primitive rules and
2) Ω (E) is the set of all rules that are meaning-constitutive for E in L for S.

According to (xxi), (xix) and (xviii), there is no contradiction in saying that S understands E and S does not accept rules that are meaning-constitutive for E. Understanding an expression E does not imply accepting E.

Moreover, it is important to add that accepting a rule is not the same as following it. To accept a rule is not to comply with it. There is no contradiction in saying that an agent accepts a rule but violates it. While playing football, a player violates the rule against handling the ball deliberately. Nevertheless, since the player is playing football, he or she must accept the rule: he or she must acknowledge that handling the ball was wrong and must accept the penalty inflicted by the referee. Violations of the rules in a rule-governed practice may be blameworthy but are fairly common. One can accept a rule and violate it at the same time[54]. This is also true of constitutive rules. Suppose we treat *modus ponens* as a meaning-constitutive rule for "if...then" and we accept it. It is entirely possible that in some special cases we are not epistemically virtuous and, although we accept the premises A and "if A, then B", we refrain from drawing the unpleasant conclusion B. We can violate elementary logical rules in many ways: intentionally, out of stubbornness, out of deceit, or unintentionally, out of error.

[54] Cf. Cozzo 2008, p. 301.

17. Timothy Williamson's objections to inferentialism

I have emphasized two distinctions. The distinction between knowing a rule and accepting it; the distinction between accepting a rule and following it. The two distinctions reveal that some formulations of the inferentialist insight are misleading. When Boghossian says that «inferring according to» *modus ponens* «is a precondition for having the concept» expressed by the word "if", he neglects the two distinctions between knowing and accepting and between accepting and following.

Timothy Williamson[55] rightly criticized Boghossian's formulation of inferentialism. Williamson imagines a student who has read an article about purported counterexamples to *modus ponens* and therefore rejects inferences by *modus ponens.* Against Boghossian, Williamson remarks that the student «may still use "if" competently in ordinary conversation» and thus still understands. The student can understand "if...,then" and reject *modus ponens.* Criticizing *modus ponens* or refraining from inferring in accordance with *modus ponens* does not deprive a speaker of an understanding of the connective "if...,then". In light of the previous section these remarks do not refute the claim that *modus ponens* is meaning-constitutive for "if...,then". We have seen that understanding does not imply acceptance. Thus, the critical inferentialism outlined here easily admits the possibility that the student understands "if ...,then", but rejects the meaning-constitutive *modus ponens.* However, Williamson has a second objection against inferentialism that I must now address.

Non-holistic inferentialism is the thesis that speakers associate particular inferential rules with a linguistic expression and treat these rules as meaning-constitutive for that expression. Williamson claims that this thesis clashes with our pre-theoretic conception of understanding. This is his second objection to inferentialism. He starts with the fact that the linguistic usage of two different speakers is never exactly identical. However, since we are talking of a public language, meaning is social, and – he writes – «the social determination of meaning requires nothing like exact match in use between different individuals; it requires only enough connection in use between them to form a social practice. Full participation in that practice constitutes full understanding. Consequently there is no litmus test for understanding»[56]. In other words, Williamson says that there are no precise pre-theoretic criteria of understanding adopted by a linguistic

[55] Williamson 2003, pp. 251-2.
[56] Williamson 2003, p. 277.

community. Our pre-theoretic conception of understanding requires only a vague convergence that Williamson describes as "enough connection in use". Therefore the inferentialist thesis that speakers treat the acceptance of certain specific inferences as necessary for understanding and using a particular expression is false: «Unfortunately for inferentialism, the nature of language as a medium of communication between individuals who disagree with each other in indefinitely various ways undermines attempts to make accepting a given inference a necessary condition for understanding a word; therefore [...] it undermines attempts to make accepting the inference a necessary condition for having the concept»[57].

18. Reflective meaning

Williamson's objection would perhaps be fatal to inferentialism, if our use of language were always unreflective. But it is not. Each speaker learned and – to some extent – continues to learn from other speakers that words should be used according to certain patterns. Initially, the patterns governing the use of a word are implicitly apprehended without reflection and they are vague, indeterminate, unstable. At this early stage we have a pre-reflective understanding and what the speaker grasps is a pre-reflective meaning. In many everyday linguistic interactions, the indeterminacy of pre-reflective meaning goes unnoticed, though it can cause confusion and mystification. But it soon happens that a speaker discovers that she, or he, is not using a word in the same way as some other speaker and that there are differences in the ways the same word is understood. Such discoveries lead speakers to reflect upon meaning. As Dummett wrote: «theorizing about our language and its working, theorizing which is carried out within that language itself [...is] an activity in which all speakers of the language constantly engage, however inchoately or inexplicitly, and which consequently affects our linguistic practice all the time»[58]. There are contexts in which speakers participate in a practice that leads them to make meanings more explicit and stable. Reflection on meaning becomes especially important in situations where the commitments undertaken in the assertoric-inferential practice are challenged and

[57] Williamson 2003, p. 290. Gillian Russell (2008, p. 205) makes a similar point using a well known example about arthritis proposed by Tyler Burge «to undermine the idea that some particular piece of knowledge of meaning is required in order for speakers to be competent with an expression».
[58] Dummett 1973/1981, p. 107.

linguistic acts must be justified. Implicitly we are always aware of patterns that guide us in our employment of words: we have only «impressions of meaning». But «when [...] the justification of certain statements is called in question, we are forced to scrutinize these patterns of use, and perhaps to revise them or make them precise, with the intention of abiding, in our future use, by the new precise patterns»[59]. The challenge to an assertion or inference is sometimes a challenge to make the meaning of a word explicit or more precise: "What do you mean by that?". A response to the challenge is some explanation of the way the word is used, which is an explanation of its meaning. Obviously, such exchanges aimed at clarifying the meanings of words often happen in epistemic contexts. The commitments undertaken by epistemically virtuous speakers include a commitment to clearly intelligible meanings. In section 5 I emphasized the role of the critique of language in epistemic contexts. A first level of the critique of language is the pursuit of clarity. Meanings can be criticized when the lack of clarity is an obstacle. In epistemic contexts epistemically virtuous speakers engage in the practice of inquiry aimed at knowledge (and thus at truth). The indeterminacy of meaning may generate pointless disagreements and various kinds of misleading equivocation and confusion. Epistemically virtuous speakers wish to resolve these problems. Thus, a prominent role in epistemic contexts is played by a reflection aimed at making the meanings of words clearer and more explicit, in order to resolve merely verbal disagreements and other problems that indeterminate, unstable pre-reflective meanings can cause. A component of the practice of inquiry is a reflection on meanings. Clearly, reflection on meanings is not yet a theory of meaning. While theories of meaning are a comparatively new philosophical topic, reflection on meanings, to varying degrees, is as old as rational inquiry. Theories of meaning are a very advanced stage of the development of our reflection on meanings.

When the reflection on meanings begins and previously unnoticed differences are discovered between the patterns of use associated with the same words by different speakers, the members of the epistemic context can eliminate the misunderstandings by mutually adjusting their different ways of using the same words (especially primitive utterances). We may term the result of this practice of meaning-clarification and adjustment "reflective meaning". Williamson is right when he maintains that there are no precise pre-theoretic criteria of understanding adopted by a linguistic community in the overall everyday use of

[59] Dummett 1973/1981, p. 107

language. But if we consider epistemic contexts, Williamson is not correct. In epistemic contexts precise criteria of understanding are established, even if they are not necessarily part of an articulated theory of meaning, and in this sense are still pre-theoretic. The epistemically virtuous members of the epistemic context endeavour to make the criteria of understanding clear and determinate. In this way they fix determinate reflective meanings. Reflective understanding is the grasp of reflective meanings. The inferentialist thesis is that speakers treat acceptance of certain specific inferences as necessary for using and understanding a particular expression. If this thesis concerns the unreflective, or pre-reflective, use of language, it is wrong, as Williamson says. But if we consider the reflective use of language in an epistemic context, if we consider reflective meaning, the inferentialist thesis is right. Epistemically virtuous speakers tend to agree that acceptance of specific utterances is necessary for using and understanding particular expressions. For reflective understanding there is «a litmus test». Thus, in epistemic contexts there are modestly analytic assertions and inferences. A deduction or assertion in a language L is modestly analytic if, and only if, reflective understanding of the sentences involved is a sufficient condition for recognizing that the deduction, or assertion, is correct in L.

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