Inference markers and conventional implicatures [1]

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1 Introduction

Grice's 'Meaning' (1957) already contains two of the main theses of his philosophy. The paper is concerned with the distinction between natural and non-natural meaning, a question Grice approaches by providing some restrictions that any instance of non-natural meaning should meet, in a nutshell:

> "*A* meant$_{nn}$ something by *x*" is (roughly) equivalent to "*A* intended the utterance of *x* to produce some effect in an audience by means of the recognition of this intention" [Grice (1989), p. 220]

This idea was later developed in his papers 'Utterer's Meaning and Intentions', 'Utterer's Meaning, Sentence Meaning, and Word-Meaning', and 'Meaning Revisited' [Vid. Grice (1989)], and has been consistently associated with Grice's name under the form we specify below:

(M) Meaning and intentions. Non-natural meaning is a function of the intentions of the speaker.

The 1957 paper already contains a reference to another idea that was to characterize Grice's philosophy of language and produce a deep impact on many language researchers:

> I think it follows from what I have said about the connection between meaning$_{nn}$ and recognition of intention that (in so far as I am right) only what I may call the primary intention of an utterer is relevant to the meaning$_{nn}$ of an utterance. For if I utter x, intending (with the aid of the recognition of this intention) to induce an effect E, and intend this recognition effect E to lead to a further effect F, then insofar as the occurrence of F is thought to be dependent solely on E, I cannot regard F as in the least dependent on recognition of my intention to induce E. That is, if (say) I intend to get a man to do something by giving him some information, it cannot be regarded as relevant to the meaning$_{nn}$ of my utterance to describe what I intend him to do. [Grice (1989), p. 221]

Different levels of meaning should be differentiated. We may perform different speech acts when we utter a sentence. Some of them are *central*, at the *ground-floor* level, and their result should be compared with the world in order to evaluate the truth of our claim, while the others convey different sorts of information and should not interfere with this type of evaluation.

> (C) Centrality of meaning. Special attention must be paid to the difference between "central ranges of signification" and "nonprimary ranges" [cfr. Grice (1989), p. 359].

Grice's favored notion of *what is said* is the result of the central speech acts we perform when we utter a sentence. *Nonprimary ranges of meaning* essentially include generalized and particularized conversational implicatures and conventional implicatures. Thesis (C) surfaces now and then in Grice's papers on (M) [vid. e.g. Grice (1989), p. 88; Grice (1989), p. 121 and ff.], and it is the main topic of

'Logic and conversation' and *Strand Five* of the 'Retrospective Epilogue' [Grice (1989)].

In this paper we will analyze a particular nonprimary range of meaning, that of conventional implicatures; more specifically, conventional implicatures involving the use of the connective 'but' between two concepts. We will call those instances *PbH* cases, from Grice's famous example 'Sue is poor but honest', which allegedly implicates in a conventional way that there is some sort of contrast between being poor and being honest. We will argue for the independence of this level of meaning and present a treatment of this kind of conventional implicatures that is completely compatible with one of the theories of meaning that have remained loyal to (M) and (C), Truth-Conditional Pragmatics.

2   A non-reductionist view on conventional implicatures.

In this section we will stand up for a non-reductionist view on conventional implicatures. We think that the information conventionally implicated in PbH cases does not fit into any other level of meaning, be it what is said, what is conversationally implicated, or what is presupposed. We will vindicate the basic idea that the truth-value of a claim is independent of the status of the information conventionally implicated.

The first step to make room for the level of conventional implicatures in the study of meaning was to claim that we can speak truly even if the information conventionally implicated by our statements turns out to be erroneous. This sole feature isolates conventional implicatures from what is said, what is entailed, and what is presupposed. If what we say/entail is false, then our claim is judged to be false. Presupposition failures supposedly cause statements whose truth-values cannot be established.

> In some cases the conventional meaning of the words used will determine what is implicated, besides helping to determine what is said. If I say (smugly), *He is an Englishman; he is, therefore, brave*, I have certainly committed myself, by virtue of the meaning of my words, to its being the case that his being brave is a consequence of (follows from) his being an Englishman. But while

> I have said that he is an Englishman, and said that he is brave, I do not want to say that I have *said* (in the favored sense) that it follows from his being an Englishman that he is brave, though I have certainly indicated, and so implicated, that this is so. I do not want to say that my utterance of this sentence would be, *strictly speaking*, false should the consequence in question fail to hold. So *some* implicatures are conventional, unlike the one with which I introduced this discussion of implicature. [Grice (1989), pp. 25-26]

This strategy uses what we will call Criterion 1 for a non-reductionist thesis:

> Criterion 1. The truth-value of a proposition expressed by a normal utterance of a sentence S, some of whose components trigger a conventional implicature, is independent of the status of the conventionally implicated material.

Criterion 1, however, does not discriminate conventional implicatures from conversational implicatures. Conventional implicatures, unlike conversational implicatures, cannot be cancelled –without oddity– and, crucially, are not calculable:

> ... the final test for the presence of a conversational implicature [has] to be, as far as I [can] see, a derivation of it. One has to produce an account of how it could have arisen and why it is there. And I am very much opposed to any kind of sloppy use of this philosophical tool, in which one does not fulfill this condition. [Grice (1981), p. 187; cfr. Neale (1992), p. 527]

> The presence of a conversational implicature must be capable of being worked out; for even if it can in fact be intuitively grasped, unless the intuition is replaceable by an argument, the implicature (if present at all) will not count as a conversational implicature; it will be a conventional implicature. [Grice (1989), p. 31]

The information conveyed by conversational implicatures (both particularized and generalized) has to be calculable; there should be a straightforward way to make explicit the inference from what is

said and the conversational maxims to the implicated content [vid. Neale (1992), p. 536]. No inference of this sort can take us to the conventionally implicated content.

2.1 Conventional implicatures and presuppositions.

Grice thought that Criterion 1 was unnecessarily strong to differentiate conventional implicatures from presuppotitions, and he showed how a specific conceptual shortcut could be enough to make the distinction sound. At the time Grice introduced the notion of conventional implicature, the common view on presuppositions included the assumption that a claim carrying a presupposition loses its truth-value if what is presupposed turns out to be false [vid. e. g. Strawson (1950), p. 330, and Strawson (1952), 175]. Grice found there the flesh he needed to draw this distinction in a much simpler way:

> … even if the implied proposition were false, i.e., if there were no reason in the world to contrast poverty with honesty either in general or in her case, the original statement could still be false; it would be false for example if she were rich and dishonest. One might perhaps be less comfortable about assenting to its truth if the implied contrast did not in fact obtain; but the possibility of falsity is enough for the immediate purpose [Grice (1961), p. 127; cfr. Neale (1992), p. 522]

We will call this less ambitious claim Criterion 2 for a non-reductionist view on conventional implicatures:

> Criterion 2. The proposition expressed by a normal utterance of a sentence S, some of whose components trigger a conventional implicature, can be declared false even in contexts where what is conventionally implicated does not hold.

Conventional implicatures were to be distinguished from presuppositions due to the fact that a claim judged to be false could still have a truth-value even if the implicated material conventionally associated with it turned out to be inappropriate in the end.

Good times for Criterion 2 did not last, though, and a few years later Strawson recognized that some assertions would be taken as false even though the presuppositions they carried were false [Strawson (1952), p. 226; Strawson (1964); cfr. Reimer and Bezeuidenhout (2004), p. 263], a position that has become standard in the literature. Could the information triggered by PbH cases be a presupposition, i.e. an example of what Yablo calls "non-catastrophic presuppositional failure" (Yablo forth.)?

(a) The king of France is bald.

(b) I had breakfast with the king of France this morning.

(a) is considered to lack a truth-value, because there is no such thing as the king of France, while France being a republican state would not necessarily prevent us from claiming that (b) is false. The difference between (a) and (b) has been studied with the aid of the topic/focus distinction. A piece of information is part of the *topic* of an utterance if it belongs to the background assumptions shared by the speaker and the audience at the moment when the utterance is produced, whereas every piece of new information, usually highlighted by linguistic means, belongs to the *focus*. One of the most recent applications of this methodology is that proposed by Atlas [Atlas (2004)]. He distinguishes between occurrences of noun phrases that trigger an existence presupposition and those that do not:

> S–G Condition: The existence of a reference for an NP is presupposed in making a statement only if the NP is a topic NP (where 'NP' is a meta-variable ranging over proper names and simple definite descriptions).

It is difficult to see how this solution would apply to PbH cases, since the additional information in those cases does not involve the existence of any individual and the process itself is triggered by a connective, rather than a noun phrase.

A similar problem is found when evaluating Von Fintel's approach [Von Fintel (2004)] to this kind of presuppositions. He takes both (a) and (b) to lack a truth-value. The appearance of falsity

in cases like (b) is explained by appealing to pragmatic factors. In these examples, even though one of the singular terms in the sentence may have no reference, there is an *independent foothold for rejection*, a contextually salient entity whose properties are in principle sufficient to impart the impression of falsity to the main claim. It's not apparent what kind of contextually salient entity could help in PbH cases.

Obviously, these difficulties arise only because these methods have been devised to give an explanation of the existential presuppositions carried by noun phrases. The hypothesis that the additional information in PbH cases could be a presupposition whose failure is a non-catastrophic one cannot be discarded just because those proposals –specially conceived for noun phrases– cannot be extended to other kinds of expressions. Needless to say this cannot be taken to be evidence for a reductionist view either. One may acknowledge the existence of non-catastrophic presuppositional failures, along with the vast majority of philosophers and linguists, and still preserve some reasonable doubts about the project of including conventional implicatures as a sub-class of presuppositions.

Some support for the idea that PbH cases carry conventional implicatures instead of presuppositions could come from the analysis of some of the tests usually recommended to spell out presuppositions. Karttunen analyzed the behavior of embedded presuppositions and distinguished between *presupposition holes*, operators easily outscoped by presuppositions, and *presupposition plugs*, operators that block the *projection* of the presupposition [Karttunen (1979)]. It is commonly assumed that most presuppositions should behave in a similar way when embedded under these operators [vid. Geurts (1999), Von Fintel (2004), and Potts (forth.)].

One of the classic *presupposition holes* is negation. If a normal utterance of a sentence S presupposes p, then a normal utterance of $\neg S$ should presuppose p as well.

(c) John is taking his girlfriend to Eurodisney on Saturday.

(d) John is not taking his girlfriend to Eurodisney on Saturday.

(e) John has a girlfriend.

Both (c) and (d) presuppose (e). The presupposition is said to be *projected out* of the embedding operator. PbH cases cannot be added to the presuppositional lot by means of this test. Consider the following examples:

(f) Sue's not poor but honest.

(g) Sue's not poor, but honest.

(h) She's not "poor but honest".

(i) There's a contrast between being poor and being honest.

(j) There's a contrast between being rich and being honest.

A felicitous utterance of (f) can only be interpreted as (g) or as (h). (g) carries the conventional implicature made explicit in (i), instead of that of (j), while (h) introduces a quotational element that is not straightforwardly associated with the speaker committing himself to the contrast between being poor and being honest[2]. Even so, this is not definitive evidence for a non-reductionist view. 'But' could be included in the list of *positive polarity items*, expressions that produce ill-formed sentences when they fall under the scope of negation. Evidence concerning PbH cases under negation would not, then, offer unquestioned support for the general thesis that conventional implicatures should be distinguished from presuppositions.

Besides, the additional information in PbH cases regularly outscopes other *presupposition holes*, like 'it's possible that':

(k) It's possible that Sue is poor but honest.

A speaker who utters (k) under normal circumstances is committing himself, in some way or another, to (j).

Potts seems to be a bit luckier with his analysis of some *presupposition plugs* (Potts forth.). Presuppositions are not supposed to be able to outscope operators like '*x* believes that':

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[2] We prefer to remain neutral here about what the nature of this "quotational intrusion" might be.

(l) Peter believes that John is taking his girlfriend to Eurodisney on Saturday.

(m) John has a girlfriend.

(n) Peter believes that John has a girlfriend.

By saying (l), the speaker is not necessarily committing himself to (m), but only to (n). If the speaker believes that Peter has taken John's sister to be his girlfriend on a particular occasion –and the speaker thinks that the audience is aware of this confusion– he may well say (l) to talk exclusively about Peter's belief state. His saying (l) obviously does not convey (m), but only (n). The presupposition is not projected out of the belief operator[3]. Potts maintains that conventional implicatures, on the other hand, 'routinely project out of attitude operators' [Potts (forth.), p. 8]. Even though Potts avoids what he calls 'textbook examples' of conventional implicatures, PbH cases can be shown to share this feature:

(o) John believes that Sue is poor but honest.

At first glance, by uttering (o) in a normal context, we are definitely committing ourselves to some degree of incompatibility between being poor and being honest. If we wanted to free the speaker who utters (o) from the assumption that there is some contrast between being poor and being honest, we would have to fine-tune the context in a very specific way, as in (p):

(p) John was so biased by his skewed views on the connection between morals and wealth that it took him years to come to believe that Mary was in fact poor but honest.

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[3] Contexts can be found where the utterance of (l) seems to presuppose (n) instead of (m). If the speaker believes 1) that Peter does not know that Mary is John's girlfriend, 2) that Peter thinks than John is taking Mary to Eurodisney on Saturday, and 3) that the audience knows that the speaker believes 1), then his use of (l) would only presuppose (n). Still, what really matters here is where to place the existential commitment, and we don't think that the ascribee can be freed from this. (Thanks to Mikhail Kissine on this point).

By saying (p), the speaker is putting some distance between his own values and John's with respect to the connection between wealth and morals, so that (i) cannot be attributed to him. The information conveyed by this PbH case does not outscope the belief operator[4]. Examples like (p) should not undermine Potts's conclusion, though. Presuppositions get systematically blocked by *presupposition plugs*, while PbH cases *do not necessarily* behave this way, which is enough to make Potts's point that conventional implicatures and presuppositions are independent phenomena.

To sum up, although conventional implicatures and presuppositions partially share the range of their logical features, relevant differences can be also found, especially if we take a look at several projection phenomena. This should be enough to motivate the distinction between those two notions, but we think that Criterion 1 can be defended independently, and that should provide extra support for the non-reductionist thesis.

2.2 Conventional implicatures and what is said. Support for the non-reductionist in two steps.

Step one. A case study.

Grice's acknowledgement of the difficulties one may come across in defending Criterion 1 should not dissuade us from looking for some arguments to support it. At bottom, there is this basic intuition of what should distinguish what is conventionally implicated from what is said –and from what is presupposed. Here is a glimpse of how some intuitive support for Criterion 1 could be achieved. Imagine the following context: Sue comes from a family with a very low income that has a high esteem for traditional moral values. Sue's father, in particular, holds very conservative views on the relationship between morals and wealth. After a series of break-ins in their neighborhood, Sue is arrested and charged with burglary. At the trial, Sue's father, a respected member of the community, is called to the witness stand and says:

(q) Sue would never do something like this. She is poor but honest.

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[4] Please note that this example also provides some evidence against Rieber's proposal, according to which 'Sue is poor but honest' is to be analyzed as 'Sue is poor and (I suggest that this contrast) she is honest' (Rieber 1997, 54).

The question to be addressed here is not whether the father believes that there's some contrast between being and poor and being honest. He clearly does. This information is conveyed by conventional means, and there is a priori no way to stop this process. We should try and establish what is the *strength* of this process, what is the role that this piece of information is playing in the communicative exchange. In this context, none of the members of the jury, no matter how strong their liberal values, could undermine the truth of Sue's father's testimony simply because his statement somehow conveyed that he thought that a contrast could be taken for granted between being honest and being poor. It simply does not matter for the truth of what he says. It would be absurd to suppose that a member of the jury could argue for the falsity of what Sue's father said by claiming that there's no contrast between being poor and being honest. What is conventionally implicated has no effect whatsoever on the truth evaluation of what is said.

Kent Bach has recently argued against this conclusion [Bach (1999)]. The intuition Grice appeals to in order to preserve the independence of conventional implicatures from other layers of meaning is 'illusory, essentially depending on the false assumption that a sentence can express only one proposition' [Bach (1999), p. 365]. He provides a test to determine what belongs to the realm of what is said, and conventional implicatures happen to satisfy it:

> (IQ test): An element of a sentence contributes to what is said in an utterance of that sentence if and only if there can an accurate and complete indirect quotation of the utterance (in the same language) which includes that element, or a corresponding element, in the 'that'-clause that specifies what is said. [Bach (1999), p. 340]

Any complete indirect report of a PbH case, in the same language, should include the word 'but', and that shows that the information conventionally implicated is to be regarded as part of what is said.

Of course, the key here seems to be Bach's conception of what counts as being "an accurate and complete indirect quotation". If a liberal member of the jury, in our trial example, wants to highlight Sue's father's statement, while establishing the facts of the case, and utters (r), in which sense should we say that he is not making "an accurate and complete" report of Sue's father's claim?

(r) Sue's father said that she was poor and honest.

In other words, would it be legitimate, in this context, to try and correct this report by uttering (s)?

(s) No, what he said was that Sue was poor but honest.

What could possibly be the purpose of such an utterance in this context? If a member of the jury is interested in the truth of what Sue's father said as a piece of evidence for the case, and she does not share Sue's father's traditional values, it is only natural that she would report what he said by uttering (r). In which sense is she making an *inaccurate* or *incomplete* report of what the jury heard in the courtroom? Why should someone object to her by means of (s)?

Step two. Conventional implicatures and inference-markers.

Truth-conditional pragmatics (TCP), unlike other semantic and pragmatic approaches to meaning, practices strict observance of the Gricean theses we presented in the first section. Its proponents believe that meaning is a function of the intentions of the speakers and that distinct central aspects of meaning should receive differentiated attention. TCP and the Gricean approach essentially differ in the way they develop the thesis of centrality. The role of context in the determination of what is said was, for Grice, twofold: reference fixing and elimination of ambiguities. TCP, on the other hand, makes a stronger interpretation of (M), resulting in what its proponents call The Principle of Availability, the idea that what is said by an utterance corresponds to the 'content of the statement as the participants in the conversation themselves would gloss it' [Recanati (2001), p. 79-80]. In order to arrive at the intuitive content of a statement from the conventional meanings of the words, it is not enough to fix the reference and eliminate ambiguities. That is why *primary pragmatic processes* are postulated, as a way to specify how the context can help to overcome the informational gap between what the participants in a conversation think that they are saying and the conventional meanings of the words they are using. These

primary pragmatic processes include reference fixing and disambiguation, but also several *optional* processes [vid. Recanati (2000), Recanati (2002), and Recanati (2004), ch. 2].

All this has been emphasized many times in the disputes between TCP and the so-called *neo-Griceans*. There is another, much less highlighted, difference between TCP and the original Gricean approach, and it concerns the treatment of conventional implicatures. Under TCP –at least in an understanding of this position that makes it distinct from radical contextualism– the result of the computation of the conventional (linguistic) meanings of the words we use is the input for the primary pragmatic processes that determine what is said. Conventional meanings systematically determine what is said in this way. Grice made explicit that, even if *formality* (features associated with the linguistic meanings of the expressions we use) is a criterion for centrality, certain portions of information could still be *formal* and not *dictive* (extraneous to what is said) [vid. Grice (1989), pp. 359 and ff.].

In what follows we will present a harmless way in which TCP could accommodate this Gricean intuition. If there is a case for the independence of conventional implicatures, as we have been arguing throughout the previous sections, theories about meaning that do not challenge this assumption explicitly, like TCP, should find a way to include *formal but not dictive meanings* into their overall picture.

a) Conventional implicatures and truth-conditions.

We think that Grice was essentially right: there are pieces of information that are linked to the conventional meaning of the words we use and that should be distinguished from what is conversationally implicated, what is presupposed, and what is said. The reason is that the information attached to these words is *neither implicated nor propositional*. As part of the linguistic meaning of some of the words used, it is not inferred, but automatically understood; and it does not convey truth-conditional content but some kind of indication as to how to understand the utterance (as Austin suggests in the text below).

A non *ad hoc* explanation of the correctness of the Gricean intuition can be given by changing slightly the Gricean paradigm and its sequels and looking at the account of logical constants known as 'logical expressivism'. *Logical expressivism* comprises different theses. In particular, it covers a (negative) semantic thesis, which can

be completed by a (positive) pragmatic thesis. The (negative) semantic thesis is that logical words do not *describe*, and therefore do not affect truth-conditional content. Its Gricean counterpart is that conventional implicatures produced by inference markers give rise to some information that, although formal, is not dictive. The (positive) thesis, one of the many possible ways of implementing the (negative) semantic thesis, is that logical markers serve the purpose of expressing inferential relations between contents, to which the speakers lend support. These inferential relations fall into two basic categories, permissions to follow the inferential path represented by the concepts used in the propositional contents assumed as premises, and inferential vetoes, i.e., the rejection of an inferential path that the speaker assumes might be followed by her audience.

Let us take a fresh look at the kind of information conveyed by conventional implicatures, using some contemporary apparatus provided by inferential pragmatism. The pragmatist tradition in philosophy, from Ramsey on, including Wittgenstein, Austin and Searle, accepts that not every word has as its primary task to describe how things are. Austin defended this pluralist view in his 1962 Lectures:

> It has come to be seen that many specially perplexing words embedded in apparently descriptive statements do not serve to indicate some specially odd additional feature in the reality reported, but to indicate (not to report) the circumstances in which the statement is made or reservations to which it is subject or the way in which it is to be taken and the like. To overlook these possibilities in the way once common is called the "descriptive" fallacy. [Austin (1962), p. 3]

Among the words that should not be understood as describing some 'specially odd additional feature in the reality reported' we count logical connectives and related expressions. This choice places our analysis in the realm of logical anti-realism, for it follows from it that there are no logical facts. At this point we go along with Grice himself. His analysis of conventional implicatures makes him a logical anti-realist. The kind of logical anti-realism appropriate for words such as 'but', 'so' and 'therefore' is logical expressivism: the thesis that this kind of logical words have *expressive*, as opposed to *descriptive*, meaning.

In PbH cases there are two propositions, two Fregean thoughts, connected by a syncategorematic expression, 'but'. Propositions, Fregean thoughts, assertions, statements, truth-conditions, all these notions belong to the same family, and are inter-definable. The words that connect the two sentences do not contribute a component to the proposition, do not affect the asserted content, though, they do not describe any aspect of the described reality, they have no effect whatsoever on the utterance's truth-conditions. The two thoughts in the classic PbH cases we have been dealing with are: 1) Sue is poor, and 2) Sue is honest. The truth conditions of the complex conjunctive sentence derive from the truth conditions of their constituents, *syncategoremata* adding nothing to them because they do not contribute a new component to the two thoughts expressed. But all this does not imply that they are meaningless. They are nothing but. The contribution of 'but' to the result of the speech act is conveying some information about the speaker's –or the ascribee's– mental world, namely, that she would be inclined to infer in different circumstances, or assumes her audience is inclined to infer in these circumstances, that because Sue is poor, she must be dishonest. This information is an aspect of the speaker's meaning.

b) Inference markers.

Grice links most conventional implicatures with a very specific class of 'discourse markers', as Fraser [Fraser (1990)] calls these words. Rieber calls the expressions that produce conventional implicatures 'discourse connectives' [Rieber (1997), p. 51]. We will call them 'inference markers', for they are words that indicate either that an inference is licensed, or that it is vetoed. Many, if not all, of the words that Grice considers as producing conventional implicatures are inference markers in this sense. In particular, 'but' is an inference marker, although the truth-conditional equivalent of 'but' is not; 'but''s use as inferential marker is what 'but' adds to 'and'. Thus, inference markers will be, within the scope of this paper, those natural language counterparts of logical connectives ('but', 'even' as &-counterparts) and of logical relations ('so', 'therefore' as |— - counterparts) of which Grice affirms that they produce conventional implicatures.

Our view on this kind of expressions is inspired by the pragmatist tradition. Two main paradigms in philosophy of language are now competing about the meaning of run-of-the-mill concepts: truth conditional semantics and inferential semantics [vid. Brandom

(1994), ch. 2]. The difference between them is that, whereas truth-conditional semantics makes *truth* the basic notion to define meaning, inferential semantics considers *inference* a more basic one, from which the very notion of truth can be derived. According to inferentialism, every concept has inferential meaning. A concept's inferential meaning is determined by the correct material inferences in which it appears. Both truth-conditional semantics and inferential semantics are proposals about how ordinary concepts signify. Our proposal about inference markers does *not* rest on the claim that they have inferential meaning, which, according to inferential semantics every concept has, but rather on the idea that their function is just to make salient inferential links among propositions. If we favor the inferentialist picture, there is a way of distinguishing the different tasks performed by the two kinds of concepts, run-of-the-mill and logical. Gentzen's account of logical constants cannot account for it, for in an inferential theory every concept has inferential meaning[5]. With our characterization of inference markers we obtain the appropriate distinction.

Brandom, Peirce, Prior, Sellars drew the distinction between premises of an argument and principles of reasoning, a distinction necessary to avoid Carroll's paradox, as both Frege and Bolzano already knew. But to avoid the paradox, it is necessary not to turn principles of reasoning into propositional contents.

Sellars, Brandom and Prior admitted two basic inferential relations, implication and negation. The two relations correspond to the two basic inferential movements, permissions and vetoes. Negation, which is the basic operator for vetoes, is an aspect of the meaning of 'but'. 'But' acquires its characteristic features both from the conjunction –the truth-functional aspects– and from the negation –the veto-aspect. 'And' is not an inference-marker, for this reason it does not produce conventional implicatures, although it produces

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[5] We might be sympathetic with the general Gentzenian account of logical constants, although our proposal makes a different point. Gentzen, and Prawitz after him, identified the meaning of logical constants with the inferential rules that govern them in natural deduction systems. We are not discussing the meaning of logical constants in formal calculi, however; we are rather interested in the analysis of some natural language words. There is another reason that distinguishes Gentzen's account from our point here: the fact that a term can be defined by introduction and elimination rules does not automatically make a logical term out of it. Thus having inferential meaning, suitable for being presented as a set of rules, does not demarcate the class of logical terms and, a fortiori, the class of inference-markers. Gentzen's line of thought does not explain, and was not intended to explain, why 'but', as opposed to 'and', produces conventional implicatures.

conversational implicatures. 'But' is an inference-marker due to its meaning-connections to 'no', rather than its meaning-connection to 'and'.

In PbH cases, the speaker is rejecting, or blocking, a possible inference (that he supposes common, or that he would maintain in other circumstances, or that he knows his audience would probably draw) from 'being poor' to 'being dishonest'.

TCP's mechanisms for the derivation of what is said would remain untouched if they assumed our proposal on inference markers. TCP's proponents would have to drop the assumption that the conventional –linguistic– meaning of the expressions we use in order to make an utterance is, as a whole, the input for primary pragmatic processes. Is this a really harmful move? We do not think so. TCP does not stick dramatically to this assumption. Inference markers would not be the first group of expressions whose linguistic meanings are dispensed from the task of finding their way into the truth conditions; linguistic performatives unquestionably preceded them. If inference markers are considered bearers of non truth-conditional information, there is no need to force their linguistic meaning into what is said.

The truth of any claim containing an expression that carries a PbH-like conventional implicature is independent of the status of that implicature, since the information conventionally implicated is not truth-conditional. Once we abandon this hypothesis, Criterion 1 becomes an obvious corollary. If the information conventionally implicated in PbH cases is not truth-conditional, then the truth-conditions of the proposition expressed by the utterance of the sentence containing the conventional-implicature trigger cannot be modified as a result of consideration of the conventional implicature.

3   Conclusion

In this paper we have shown that the meaning of a certain group of expressions, inference markers, which are usually credited as conventional-implicature triggers, can be explained in a way that is both independent of any other levels of meaning –what is said, what is conversationally implicated, and what is presupposed– and compatible with one of the theories that best represent the Gricean spirit, as expressed by (M) and (C).

The expressivist treatment of inference markers, exemplified here through the analysis of PbH cases, is a way to motivate a non-

reductionist view on some conventional implicatures and a plug-and-play addendum for a vast range of theories of meaning.

References

Atlas, J. D. (2004), Descriptions, Linguistic Topic/Comment and Negative Existentials. *Descripions and Beyond*. M. a. B. Reimer, A. Oxford, New York, Oxford University Press**:** 342-360.

Austin, J. L. (1962), *How to do things with words*. Oxford, Clarendon Press.

Bach, K. (1999), "The Myth of Conventional Implicature." *Linguistics and Philosophy* **22**: 327-366.

Brandom, R. (1994), *Making it explicit: reasoning, representing, and discursive commitment*. Cambridge, Mass., Harvard University Press.

Fraser, B. (1990), "An approach to discourse markers." *Journal of Pragmatics* **14**: 383-395.

Geurts, B. (1999), *Presuppositions and Pronouns*. Oxford, Elsevier.

Grice, H. P. (1961), "The Causal Theory of Perception." *Proceedings of the Aristotelian Society* **35 (Supp)**: 121-152.

Grice, H. P. (1981), Presupposition and Conversational Implicature. *Radical Pragmatics*. P. Cole. New York, Academic Press**:** 183-198.

Grice, H. P. (1989), *Studies in the way of words*. Cambridge, Mass., Harvard University Press.

Karttunen, L., Peters, S (1979), Conventional Implicature. *Syntax and Semantics. Vol III: Presupposition*. O. a. Dineen. New York, Academic Press.

Neale, S. (1992), "Paul Grice and the Philosophy of Language." *Linguistics and Philosophy* **15**: 509-559.

Potts, C. (Forthcoming), "Into the Conventional-Implicature Dimension." *Philosophy Compass*.

Recanati, F. (2000), *Oratio obliqua, oratio recta: an essay on metarepresentation*. Cambridge, Mass.; London, MIT Press.

Recanati, F. (2001), "What is Said." *Synthese* **128**: 75-91.

Recanati, F. (2002), "Unarticulated Constituents." *Linguistics and Philosophy* **25**: 299-345.

Recanati, F. (2004), *Literal meaning*. Cambridge; New York, Cambridge University Press.

Reimer, M. and Bezuidenhout, A. (2004), *Descriptions and Beyond*. Oxford, New York, Oxford University Press.

Rieber, S. (1997), "Conventional Implicatures as Tacit Performatives." *Linguistics and Philosophy* **20**: 51-72.

Strawson, P. F. (1950), "On Referring." *Mind* **59**(235): 320-344.

Strawson, P. F. (1952), *Introduction to logical theory*. London, New York, Methuen; Wiley.

Strawson, P. F. (1954), "A Reply to Mr. Sellars." *The Philosophical Review* **63**(2): 216-231.

Strawson, P. F. (1964), "Identifying reference and Truth Values." *Theoria* **XXX**: 96-118.

Von Fintel, K. (2004), Presupposition and Truth-Value Gap. *Descriptions and Beyond*. M. a. B. Reimer, A. Oxford, New York, Oxford University Press**:** 261-296.

Yablo, S. (Forthcoming), "Non-catastrophic Presupposition Failure."