ARE THERE NON-PROPOSITIONAL IMPLICATURES?

By Arthur Sullivan

Could there be an implicature whose content is not propositional? Grice's canon is somewhat ambivalent on this question, but such figures as Sperber & Wilson, Davis, and Lepore & Stone presume that there cannot be, and argue that this causes glaring failures within the Gricean programme. Building on work by McDowell and Buchanan, I argue that, on the contrary, the notion of non-propositional implicature is very much worth investigating. I show how the notion has promise to illuminate the content of many sorts of complex utterance—from the cases of verbal irony, metaphorical usage, slurring, insinuation, and (some kinds of) humour, to various others which involve expressive or evaluative content.

Keywords: implicature, proposition, pragmatics, Grice.

INTRODUCTION

Could there be an implicature whose content is not propositional? The following seeks to limn the precise range of a key piece of equipment in the study of language, investigating constraints on what can be communicated via this ubiquitous, prolific means.

It begins on a somewhat defensive note, but builds towards positive goals. Its impetus stems from discomfort with the following sort of move:

A: X is aptly explained as a kind of implicature (where 'X' might be metaphor, irony, slurring, humour, etc.)[1]
B: No, because X's communicative effects are not (simply) propositional

To me, this seems rather unimaginative of B, and to rest upon a rather uncharitable (wooden, inflexible) reading of Grice. Accordingly, one main task is

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[1] To cite a few illustrative examples: a recent defence of an implicature-approach to metaphor can be found in Arsenault (2020); Camp (2012) and Kapogianni (2016) do groundbreaking work on the idea that verbal irony involves a kind of implicature; Williamson (2009) and Nunberg (2018) develop different versions of implicature-approaches to slurring; that certain kinds of humour are well-explained via implicature is defended by Dynel (2017a).

to inquire into what validity there really is to this sort of response. Is there any such constraint built-in to the very idea of implicature? If so, precisely what is it?

Ultimately, I will reject B's response. I will argue that an utterance could fit well with Grice's notion of implicature, and yet what the speaker is implicating might not be propositional (in multiple pertinent senses of that latter protean term). This then leads us into some more positive goals: Perhaps this notion of non-propositional implicature might afford a useful conceptual geography, when it comes to various kinds of communicative effects whose relation to the semantics/pragmatics interface is controversial.

I will have more to say about the target notion of 'implicature' below, but for now the reader should assume Grice's (1989: 30–1) notion of conversational implicature:

> A [speaker] who, by (in, when) saying (or making as if to say) that P has implicated that Q . . . PROVIDED THAT (1) [the speaker] is to be presumed to be observing the conversational maxims, or at least the Cooperative Principle; (2) the supposition that [the speaker] is aware that, or thinks that, Q is required in order to make [their] saying or making as if to say P (or doing so in THOSE terms) consistent with this presumption; and (3) the speaker thinks (and would expect the hearer to think that the speaker thinks) that it is within the competence of the hearer to work out, or grasp intuitively, that the supposition mentioned in (2) IS required.

More succinctly: '[W]hat is implicated is what is required that one assume a speaker to think, in order to preserve the assumption [of cooperativeness]' (1989: 86). Below I will sometimes avail of the term 'implicatable' to mean: a substituend for Q in this characterization of implicature. So, then: Are non-propositional contents implicatable?[2]

Section I gives a preliminary exposition of implicature. Section II then hones the contours of our focal question about non-propositional implicatures, via consideration of reasons for and against the putative constraint that an implicature must be propositional. Section III investigates Grice's (1989: 39–40) claim that 'indeterminacy' is a feature of implicatures. In Section IV, I distinguish some pertinent senses of the term 'proposition', and accordingly different

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[2] Here is another passage which characterizes how I am thinking of 'implicature', from Grice's very latest work on the topic: '[A]n implicatum . . . is the content of that psychological state or attitude which needs to be attributed to the speaker in order to secure one or the other of the following results: (a) that a violation . . . of a conversational maxim is in the circumstances justifiable . . . , or (b) that what appears to be a violation . . . is only seeming, not a real, violation; the spirit, though perhaps not the letter, of the maxim is respected' (1989: 370). Also: I take it as uncontroversial that questions, commands, etc., are implicatable. While there may not be complete consensus as to exactly how the notion of propositional content fits with such varieties of illocutionary force, that is not the sort of question I am stalking here.

putative constraints when it comes to the prevalent presumption (illustrated above by B's response) that an implicature must be propositional. Section V is a foray into the expressive dimension, prompted by the circumstance that candidate non-propositional implicatures tend to traffic in expressive content. Finally, in Section VI, I call the question: Are there non-propositional implicatures?
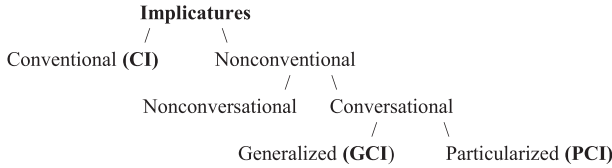
I. IMPLICATURE

We begin from Grice's (1989: 24–31) factorization: In making an utterance, a speaker can say (or make as if to say) something P, and implicate something else Q. For example: by uttering 'It's getting late', thereby expressing an observation about the time of day, one can (in context) implicate a desire for one's guests to leave soon. Or, again: a letter of reference may say nice things about the candidate's penmanship and punctuality, and (in context) implicate that the candidate 'is no good at philosophy' (1989: 33).[3]

Grice's painstaking work on the distinction between '... what our words say' vs 'what we in uttering them imply' (1986: 64) is among the most important legacies of 20th century philosophy of language, with promise to provide a compelling uniform explanation of a wide range of communicative phenomena. However, the study of language has progressed in various ways, since then. There have been many significant criticisms of Grice's theory of implicature, and issues have emerged regarding which the Gricean canon is ambivalent or inconclusive.[4] This present work is intended as a contribution towards the ongoing reconsideration and refinement of Grice's epochal work, which makes up a lot of contemporary research around the S/P interface.

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[3] Following Grice (1989), I use 'utter' broadly, to mean a particular use of a linguistic expression (by a speaker, in a context). And so, for example, an utterance could be made by writing or signing (even by pointing, gesturing, etc., given appropriate contextual setup) in addition to by speaking. Implicatures were first discussed in print in Grice (1961). Prior to that, they are alluded to in Strawson (1952: 179), wherein he attributes to Grice the view that certain alleged divergences between logical constants and their ordinary language counterparts are attributable to 'pragmatic rules' and hence 'irrelevant to logic'. I take Grice's (1957) IBS ('intention-based semantics') programme to not be essential to Grice's factorization—though of course the two are well tailored to work together. IBS is an influential approach to the theory of meaning, while Grice's factorization applies to how meaning (however characterized) relates to other things communicated (implied, hinted suggested, etc.) Kripke (1977) and Potts (2005) provide examples of well-known research that works within the confines of Grice's factorization, but are not invested (either positively or negatively) when it comes to IBS.

[4] The post-Gricean literature on the topic is vast and complex. Influential developments include Horn (1984), Sperber & Wilson (1986), Bach (1999), Levinson (2000), Potts (2005). Cf. Borg (2022) for a useful overview.

Grice (1989) distinguishes various subkinds of implicature:

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                     Implicatures
                   /           \
    Conventional (CI)      Nonconventional
                            /     \
               Nonconversational   Conversational
                                   /      \
                    Generalized (GCI)      Particularized (PCI)
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Conventional implicatures **(CIs)** are 'determined' by 'the conventional meanings of the words used' (e.g. 'but', 'or' (1961: 127,132)); whereas conversational implicatures are 'a certain subclass of nonconventional implicatures' which are 'essentially connected with certain general features of discourse' (1989: 25).[5] The distinction between generalized **(GCIs)** and particularized **(PCIs)** depends on whether 'a certain form of words in an utterance would normally . . . carry such-and-such an implicature'—e.g. the suggestion of unfamiliarity in 'X walked into a house' (1989: 37). With a case of a PCI, 'an implicature is carried by saying that P on a particular occasion in virtue of special features of the context', and 'there is no room for the idea that an implicature of this sort is normally carried by saying that P' (1989: 37).

I will focus on the case of PCIs, for at least two reasons. The first is that the strongest cases of non-propositional implicatures are to be found here—in the murky, heavily context-dependent waters of PCIs, as opposed to the more conventional, drier grounds of CIs or GCIs.[6] I will not try to argue for this first point, now; it will emerge as the work proceeds.

Secondly, for present purposes, the notion of a PCI is just cleaner and easier to work with, as compared to the notions of CI or GCI. These latter cases invite questions that are quite difficult per se, and in any case orthogonal to this project. As for CIs, specifically, this very notion of 'a condition which is part of what the words . . . *mean* without being part of what the words *say* . . . ' (Grice 1989: 361) seeks to straddle the S/P interface in a way which might not, ultimately, be tenable (cf. Bach 1999). As for lexically isolated implicatures in general, they are extremely difficult to distinguish from senses or entailments; and

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[5] Beyond remarking that conversational implicatures are a 'subclass of nonconventional implicatures' (1989: 25), and acknowledging that other maxims may generate implicatures (1989: 28), Grice does not have much to say about implicatures which are neither conventional nor conversational. Cf. Haugh (2015) for extensive discussion.

[6] This is so even if some CIs might involve expressive content (e.g. 'alas', 'boche'). Note that I am NOT claiming that CIs are NEVER, IN ANY SENSE indeterminate—on the contrary, cf. Potts (2007: 666 *ff*). Rather, the characteristic indeterminacy of an implicature is more starkly evident in the case of a PCI—as in Grice's (1989: 24) opening example:
A: How is C getting along in his new job?
B: Oh, quite well; he likes his colleagues, and hasn't been to prison yet.
There are various, quite distinct things B might be trying to get across, via the utterance of that final conjunct; in general, this not so (or at the very least, decidedly less so) for the cases of CIs and GCIs.

that nuanced work is typically done differently in different theoretical frameworks. Taxonomic challenges which these notions bring in their train include:

(i) Precisely how are implicatures distinguished from presuppositions? And where, exactly, do 'scalar implicatures' belong? (Cf. Potts 2015; Schlenker 2016)

(ii) Do sentences have implicatures, as some influential theorists sometimes seem to think? (Cf. Grice 1989: 43–4; Levinson 2000: 137–42). Or is it rather the case that implicatures arise from the act of uttering a particular expression in a particular context?

(iii) Are all implicatures pragmatic? Or could there be a *semantic* implicature?

As long as we stick to (paradigmatically pragmatic) PCIs in posing our question about non-propositional implicatures—i.e. to cases in which a one-off implicature is generated by the act of saying (or making as if to say) a certain thing in a particular context, and so 'there is no room for the idea that an implicature of this sort is normally carried by saying that' (1989: 36)—we avoid the need to have to stray into such difficult preliminaries.

So, confining our focal question to PCIs allows us to steer clear of some thorny complexities. Further, our focal question will turn out to pertain more squarely to PCIs anyway. Accordingly, we set aside implicatures which may be lexically isolated, and focus on those which are 'essentially connected with certain general features of discourse' (1989: 26). Could what is pragmatically conveyed with PCI be non-propositional, in some significant, interesting sense of that latter term?

A final framing note: There are at least two different ways to read our focal question about non-propositional implicatures:

The **empirical-descriptive** question: Are there cases in which what is communicated by an utterance plausibly includes pragmatically conveyed non-propositional content?

The **theoretical-modelling** question: Does the Gricean framework have the resources to model the implicature of such pragmatically conveyed non-propositional contents?

It is important to distinguish these questions, to ensure that grounds for an answer to one of them are not erroneously taken to settle the other one. For instance, it could be argued that the conjunction of a YES to the empirical-descriptive question and NO to the theoretical-modelling question is a characteristic motivation for relevance theory (from Sperber and Wilson (1986) to Carston (2002) and onwards). However, in what follows I am attempting to motivate well-grounded YES answers to both questions.[7] The case by such

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[7] This prompts the question: Am I defending Grice, or rather re-fashioning his concept of 'implicature'? I am certainly defending a reading of Grice, but (apart from contesting a certain uncharitable reading of Grice attacked by some of his critics) I do not try to establish that this

critics of the Gricean programme that the answer to the theoretical-modelling question is NO will turn out to rest on the putative constraint under scrutiny here (i.e. to be an implicature, it must be propositional).

II. ON THE PIP

I will use the abbreviation '**PIP**' (i.e. propositional-implicature presumption) to designate the prevalent notion that the content of an implicature must be propositional. The PIP undergirds B's move characterized above in the Introduction. If the PIP is warranted, then the inference from the premise that 'X's communicative effects are not (simply) propositional' to the conclusion that 'X is not aptly explained via the notion of implicature' looks to be pretty solid. So: What are some of the reasons for, and against, the PIP?

In general, the PIP is an implicit presumption, not justified via argument. For the most part, it seems to be consistent with what Grice has to say on the matter—although I know of no place where Grice explicitly discusses whether there can be non-propositional implicatures, when discussing specific cases of implicature he tends to give a (concrete, truth-evaluable) propositional gloss of its content.[8] After all, implicatures are units of communicated content, and one of the core jobs for a proposition is precisely to serve as equivalence classes of such. Furthermore, it seems natural to read Grice's use of 'P', 'Q' in his (above-cited) definition of 'implicature' as propositional variables. For an example of a friend rather than foe of Grice who clearly seems to endorse the PIP, consider the following excerpt from Soames (2008: 531–2):

> [A] conversational implicature is a piece of information conveyed, over and above what is said . . . [I]n order for a proposition Q to count as conversationally implicated, the conclusion that the speaker believes or accepts Q, and is inviting his hearers to do the same must, in principle, be derivable by an argument . . . from information available to speaker-hearers . . .

Evidently, Soames holds it to be definitional that implicatures are propositions. In any case, I am certainly not denying that there are considerable grounds in favour of the PIP.

However, it is in the hands of Grice's critics that things get dodgey. I will begin from an articulation of the 'the PIP is a big problem for Griceans' charge made by Sperber & Wilson (1987: 705–6); then I will generalize from it. Compare the following two conversations:

reading is the consensus or optimal one. Ultimately, I care more about a significant, useful notion of 'implicature' (which is obviously inspired by Grice's epochal work) than in an exercise in hagiography, dedicated to defending the precise letter of everything Grice ever said.
   [8] 'For the most part' because, as we will see, it may be open to Grice to hold that expressive content can be both implicatable and non-propositional. There is also the matter of exactly what Grice means by 'indeterminacy'—i.e. there is some tension between the PIP and the claim that implicatures are typically indeterminate.

[1] A: Let's go to a movie tonight!
    B: I have a math test tomorrow.
[2] A: What are you planning to do today?
    B: I have a headache.

The cases are in many ways similar: B's response is not immediately relevant, but the presumption of cooperativeness points A in the direction of a PCI. However, only [1B] is a relatively pristine paradigm case of implicature, with [1Q] $\approx$ 'I can't, because I have to study'. (I employ '$\approx$' with respect to the content of an implicature, since some degree of indeterminacy is one of the marks of the concept (Grice 1989: 39–41).) Some such proposition would save the presumption that B is being cooperative, with that otherwise wayward response; and B can reasonably expect A to identify it.

In contrast, the issue with [2B], according to Sperber & Wilson, is that there is no such proposition to fit the bill. Sure, there is something in the neighbourhood of an implicated message—i.e. something that would save the presumption that B is being cooperative with that otherwise wayward response, and that B can reasonably expect A to identify—but it is way too ungainly to be a substituend for a propositional variable. ([2Q] $\approx$ 'Any plans that I had previously made for today are (at least currently) (to some extent or degree) in jeopardy'.) Sperber & Wilson (1987: 706; similarly at 2012: 15–6, among other places) conclude that in such cases, there is no implicature, and that this is a damning limitation of a Gricean approach (which thereby 'fails to capture the import' of this 'quite ordinary utterance'[9]). But that is to beg precisely the question being stalked here. This is to impose rather stringent constraints on exactly what is implicatable.

As for where else one encounters the notion that the PIP spells big trouble for implicature-based analyses: a familiar case might be the notion that Davidson (1978) refutes Gricean approaches to metaphor, merely by pointing out that what metaphors communicate is not propositional; and a recent instance might be Diaz-Legaspe, Liu & Stainton (2020) pressing the case that the 'descriptive ineffability' of a slur (i.e. the difficulty of finding a synonymous paraphrase) poses a major problem for any and all implicature-approaches to slurring. Or, again, one of the stock responses to implicature-based theories of humour or of verbal irony is that these phenomena cannot possibly be explained via implicature, simply because the communicative effects of humour or irony need not be propositional. Similar lines of reasoning are familiar in various criticisms of Grice's work on implicature, running from Sperber & Wilson (1986: ch.1) through Davis (1998: ch.3) and on to Lepore & Stone (2016:

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[9] They continue: 'What pragmatics needs—and relevance theory provides—is a precise account of these vaguer effects'.

parts II, III).[10] If there could be non-propositional implicatures, then these arguments attack a straw target.

On the contrary, there is some precedent in the literature for the idea of a non-propositional implicature. Consider, for example, McDowell (2006: 46–7):

> A Gricean implicator can intend that her audience take her to have a belief in a general area rather than a belief individuated by having some particular proposition as its content . . . what is implicated can be unspecific. There is no obvious connection between communicative intentions, in the Gricean sense, and the specificity of content.

Or, again, Buchanan (2013: 720):

> [T]here are cases where it is clear a speaker has conversationally implicated something by her utterance, but where there is no particular proposition . . . that we can plausibly take the speaker to have meant, or intended to communicate.

This might point to a better overall account of what is going on with [2]— as well as metaphorical usage, some kinds of irony, humour, slurring, etc. (Especially as compared to the drastic alternative described in note 10.) At the very least, the idea is worth further exploration. To some extent, then, the aim of what follows is to dive down into the well that is gestured at by McDowell and Buchanan, and to see what benefits may lie in its underexplored depths.

Next, to help focus the discussion, I lay out a couple of other prima facie candidate examples of non-propositional implicatures, in addition to [2] above. Consider Grice's (1989: 37) case of the reviewer who writes:

[3] Ms. X produced a series of sounds that corresponded closely with the score of 'Home Sweet Home.'

Grice presents this as an example of a PCI achieved by flouting a maxim of manner. By 'select[ing] that rigmarole in place of the precise and nearly synonymous "sang"', the reviewer 'indicate[s] some striking difference between Ms. X's performance and those to which the word 'singing' is usually applied'. This is a clear case of PCI; in context, negative evaluation of Ms. X's performance comes across loud and clear. But: is what is implicated propositional? What exactly is the content the uptake of which would count as successfully identifying what the reviewer is trying to get across?

Grice's gloss of the implicature goes: 'The most obvious supposition is that Ms. X's performance suffered from some hideous defect.' However, that strikes me as unduly precise and concrete. Rather, the reviewer may have been animated by the thought that the performance suffered from multiple

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[10] Lepore & Stone go to such audacious, iconoclastic lengths as to claim that 'we have no use for the category of conversational implicature' (p.6); 'the category of conversational implicature does no theoretical work' (p. 83).

defects, each of which was less than hideous; or that while there was nothing particularly awful about the performance, the whole just somehow failed to measure up; etc. Could the implicature be more amorphous than Grice's gloss suggests—merely conveying negative evaluation, unspecific of subvariety or degree? If so, then perhaps we have here a non-propositional implicature.

Another candidate case comes from the post-Gricean literature on verbal irony:

[4] I love children who keep their rooms clean.
(said by a parent upon entering a teenager's disastrous room)[11]

This too broadly coheres with the Gricean (1989 : 30–1) schema for a PCI—while prima facie uncooperative, there seems to be an available Q which the speaker is trying to get across post-semantically, which would span the glaring gap between the words tokened and the ambient context. Granting that: Is the implicature propositional? Does what is being hinted at or suggested here have precise, specific identity conditions?

Again in this case, there is some inclination to hold that the implicature might well be too ungainly and indeterminate to be counted as propositional. What is conveyed—the uptake of which counts as grasping what the speaker is trying to get across—is just vague negative evaluation (annoyance, likely frustration, perhaps anger). So, while some of the analyses of [4] canvassed by Dynel (2017b: §3) include concrete derivations of a specific propositional implicatum, on that very ground they strike me as unsatisfactory (cf. note 13). With [4], as with [2–3], while it lends itself to a PCI-treatment, there may simply be no precise implicatum to be derived—no specific proposition which the speaker is trying to get across. Hence, in what follows I will take [2–4] as putative candidates for non-propositional implicatures.

This is not the place for a comprehensive treatment of the global battle between a broadly Gricean approach to linguistic communication and some of the post-Gricean alternatives. The scope of what follows is much narrower: Could there be a PCI whose content is not propositional? In addition to being a worthwhile question in its own right, the question is also of interest for its relevance to those wide-ranging, global debates, since some sweeping allegations against a Gricean approach seem to rest upon the PIP. On the contrary, I aim to motivate the view that a better overall theory can be built upon a more nuanced, flexible version of Grice's factorization, which admits of non-propositional implicatures.

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[11] The case is introduced by Gibbs & O'Brien (1991), and is subsequently taken up by several others–cf. Dynel (2017b: §3) for comparative discussion of various analyses of it.

III. THE QUESTION OF INDETERMINACY

What can we say, in general, about features which distinguish these putative non-propositional implicatures [2–4], setting them apart from paradigmatic PIP cases—in which it is easier to identify a clear and distinct proposition which 'is required that one assume a speaker to think, in order to preserve the assumption [of cooperativeness]' (Grice 1989: 86)? Two suggestions are that the content of these implicatures is: (i) indeterminate, and (ii) expressive. (ii) will be considered in Section V; next I turn to suggestion (i).

Although a kind of indeterminacy is one common mark of the species (Grice 1989: 39–41), determinacy can vary in degree, from case to case.[12] [1] provides an example of a relatively determinate implicature; another might be the following case of [5]:

[1] A: Let's go to a movie tonight!
    B: I have a math test tomorrow.
[5] A: Is Betty coming?
    B: Her car broke down.

In such paradigmatic-PIP cases, the contents of B's implicatures are relatively precise and concrete ([1Q] ≈ 'I can't'; [5Q] ≈ 'She isn't'). Rather unlike the cases of [2–4], there is a specific, determinate proposition which would save the presumption that the speaker is being cooperative, and which the speaker can reasonably expect the hearer to be able to identify.

Of course, there can be shades of grey, and cases about which there is reasonable disagreement. Consider, for example, Grice's (1989: 33) infamous letter:

> Dear Sir, Mr. X's command of English is excellent, and his attendance at tutorials has been regular. Yours, etc.

Grice presents this as a relatively determinate PIP case (Q ≈ 'Mr. X is no good at philosophy'). In contrast, Heck (2006: 24*ff*) takes the implicature here to be rather indeterminate, and in fact uses this case to illustrate what he calls the 'problem of specificity' for implicatures. That is, according to Heck, there are a number of distinct, equally plausible candidates for Q (i.e. 'Mr. X is not yet sufficiently well-prepared for this position', 'Mr. X lacks expertise in the pertinent area of specialization', etc.) I would enter two points, in response. The first is that Heck's more specific candidates for the implicature may be un-implicatable because, unlike Grice's gloss, the writer cannot reasonably expect the reader to be able to identify those exact, specific contents. Recall

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[12] Relevance theory is quite explicit on this point, holding that implicatures exist on a gradient scale from 'strong' to 'weak', depending on the determinacy or specificity of their content—cf. Sperber & Wilson (1986: 194–200), Carston (2002: 157–8), Sperber & Wilson (2015: 120–2).

that condition (3) at Grice (1989: 31) says that a conversational implicature must be 'within the competence of the hearer to work out'; it is not at all clear that Heck's candidates meet this condition.[13] Secondly, Heck's 'problem of specificity' ambiguously straddles what I will next distinguish as 'epistemic' vs 'metaphysical' senses of 'indeterminacy'.

Here is what Grice (1989: 39–40) says about the determinacy of implicatures:

> Since, to calculate a conversational implicature is to calculate what has to be supposed in order to preserve the supposition that the Cooperative Principle is being observed, and since there may be various possible specific explanations, a list of which may be open, the conversational implicatum in such cases will be a disjunction of such specific explanations; and if the list of these is open, the implicatum will have just the kind of indeterminacy that many actual implicata do in fact seem to possess.

This leaves open both an epistemic and a metaphysical reading of 'indeterminacy'. If 'indeterminacy' is given an epistemic reading, then the idea is that it is often hard, and might even be practically impossible, for hearers to know whether they have correctly identified the intended implicatum. Even the most thoughtful, observant hearer may be stuck with a disjunction of specific guesses as to exactly what the speaker is trying to get across. That strikes me as perfectly correct, though not very bold.[14] If 'indeterminacy' is read metaphysically, however, a stronger claim results: namely, the implicated content (i.e. that which must be grasped in order to count as understanding what the speaker is trying to get across) could be irreducibly amorphous. It is not merely that the hearer is stuck with a disjunction of guesses; it is, further, that the implicator is not intending to implicate any such specific disjunct. What follows is largely focused on the contours, and the plausibility, of this stronger, metaphysical reading of 'indeterminacy'.[15] As we will see, a metaphysically indeterminate implicature could fail to be propositional, in multiple senses of that latter term.

Most of the discussion of 'the determinacy of an implicature' in the literature seems to be focused on epistemic indeterminacy, not metaphysical.[16] Consider, for example, Martinich's (1984: 11) discussion of a case from Charlie Chaplin's 'The Great Dictator', wherein a given utterance of 'This is a fine country'

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[13] This worry also applies to some of the (specific, propositional) analyses of [4], alluded to above in note 11.

[14] Grice's (1989: 24) 'he hasn't been to prison yet' clearly illustrates epistemic indeterminacy. Epistemic indeterminacy relates to other core features of conversational implicatures, such as cancellability and deniability (cf. Camp 2018; Sullivan 2017)). Hearers typically use abduction to figure out what speakers have implicated, and such non-demonstrative methods are inherently fallible.

[15] One place where there has been real engagement with the possibility of metaphysically indeterminate content is the burgeoning literature on the semantics of slurs and obscenities. There seems to be something particularly amorphous and shifty about the semantic potential of such terms. More on this in Section V.

[16] Cf. Davis (1998: 62*ff*), Haugh (2015: 122*ff*).

gets the protagonist in trouble with the police, but exonerated by the judge. A similar example (from my very own kitchen) runs as follows:

[6] A: Darn it! I think I just added too much coriander.
   B: You can't have too much coriander.

It was not immediately clear to A whether the excess coriander was being criticized (Q ≈ 'Supper is ruined') or lauded (Q ≈ 'Yum!') I take it that these cases (akin to 'This vacuum really sucks') involve the hearer having to choose between multiple possibilities, each of which may be perfectly determinate. As has been clear since 'he hasn't been to prison yet', an implicature may be epistemically indeterminate even if no relevant unit of content is metaphysically indeterminate (i.e. all of the candidate options might have crystal-clear truth-conditions).

Perhaps this epistemic/metaphysical distinction is not always so clear, though; consider Leech's (1983: 24) discussion of the following:

[7] If I were you, I'd leave town right away.

Even after pinning down pertinent contextual details, it is still open to read [7] as friendly advice, or as an urgent warning, or as a hostile threat, or etc. Leech does not claim, nor would I, that the speaker must have exclusively chosen one option—in this respect, this is rather unlike 'This vacuum really sucks', and more akin to [2–4]. The import of the utterance would in that case be indeterminate in multiple senses. For present purposes, that is fine—nothing which follows assumes that epistemic and metaphysical indeterminacy are exclusive.[17]

In any case, this distinction between epistemic and metaphysical senses of indeterminacy will prove crucial here. For now, just consider its impact on the key charge regarding [2] 'I have a headache'. If the challenge is merely one of epistemic indeterminacy (i.e. it is not clear to A exactly what B is implicating), then this poses no insurmountable problem for the Gricean programme. Right from the start (Grice 1961), that kind of indeterminacy has always been a feature of implicatures. So, presumably, the problem has to be that the putative implicature fails of some other, never explicitly specified, condition. Similar considerations apply to the cases of metaphor, irony, slurs, humour, etc.—if the charge is merely that they cannot be implicatures because of epistemic indeterminacy, then there need not be anything to trouble a Gricean here. (Again, 'he hasn't been to prison yet' is a textbook PCI, despite the fact that the hearer might be at a loss as to what the speaker is trying to get at.)

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[17] 'Insinuation' cases (e.g. the real estate agent tactfully hinting to potential buyers that they might not quite *fit in* to the neighbourhood, or the driver caught speeding hinting at a bribe) definitely instance epistemic indeterminacy, while possibly but not necessarily also instancing metaphysical indeterminacy. (Cf. Camp 2018; Garcia-Carpintero 2018 for discussions of insinuation.)

What exactly is this other condition, then, the failure of which renders un-implicatable 'the import of this quite ordinary utterance' (Sperber and Wilson 1987: 705)? In this task, there not much precedent—in that neither Grice nor his subsequent allies (e.g. Soames 2008), nor his critics (e.g. Davis 1998; Lepore and Stone 2016; Sperber and Wilson 1986, 2012) ever seem to dig in and excavate the precise contours of this key operative PIP presumption.

IV. DISTINGUISHING SOME SENSES OF 'PROPOSITION'

It is not easy to determine which sense of 'proposition' ought to be involved in the question of whether implicatures must be propositional. Above I claim that one of the core jobs for a proposition is to serve as equivalence classes for units of communicated content. That is fair enough, but not very precise. What, exactly, determines their identity conditions? Equivalence of what currency? Candidates include (but are not exhausted by): (i) truth-conditions, (ii) modal profile, (iii) literal meaning, (iv) cognitive significance. It is hardly news in the philosophy of language that these criteria do not cut up the pie in the same way.[18]

I call this point 'propositional fracture': it has gradually become clear that no one semantic entity can play all of the roles traditionally associated with the term 'proposition'. Propositional fracture had not yet hit home when Grice (1989: 30–1) used the propositional variable 'Q' as a stand-in for implicatable contents. So, even if Grice endorsed a version of the PIP, it is not clear which propositional desiderata he had in mind, first and foremost.

Among the many jobs propositions have been charged with, these two are fundamental:

(1) the meanings of sentences
(2) the bearers of truth or falsity.[19]

Accordingly, I will distinguish the following precisifications of the PIP:

(**PIP-1**): There cannot be a PCI whose content is not a sentence-meaning
(**PIP-2**): There cannot be a PCI whose content is not truth-evaluable

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[18] Cf. Frege (1892) for a case that cognitive significance comes apart from truth-conditions, and Kripke (1972) and Lewis (1986) for cases that some common conceptions of literal meaning are not duly sensitive references of modal profile. Work on indexicality (e.g. Kaplan 1977) further establishes senses in which literal meaning, modal status, truth-conditions, and cognitive significance can all come apart. Lewis (1986: 54) puts the general challenge as follows: '. . . the conception we associate with the word 'proposition' may be something of a jumble of conflicting desiderata. . .'.

[19] Others include: (3) the objects of the attitudes (i.e., the content of a belief, desire, etc.); (4) the referents of 'that-' clauses; (5) that which stays common among changes in illocutionary force; (6) that which stays common among interlinguistic translations; (7) that which stand in logical relations (e.g. premises and conclusions of inferences). Arguably, some of these are re-descriptions of one or another the above core jobs.

Turning back to the earlier examples, in what sense or senses might certain otherwise-putative-implicatures (e.g. 'headaches', metaphor, irony, etc.) be denied that status? Should the 'import' be denied implicature-status because it is (PIP-1) not a sentence meaning? Or (P1P-2) not truth-evaluable? If either of those are the specific charge, then: What, exactly, is the justification for limiting the range of implicature in precisely that way?

Perhaps an answer might lie in some of the specific suggestions which have already emerged, as to why certain otherwise-putative-implicatures might pose problems for a Griean approach. I will consider three such: (i) disjunctionality (Grice 1989: 39–40); (ii) vagueness (Sperber and Wilson 1987: 705–6, 2012: 15–6); and (iii) non-specificity (Heck 2006: 24).

(i) disjunctionality: Grice (1989: 39–40) says that, sometimes, an implicature is disjunctive—in that the best guess of a reflective, attentive hearer, as to what the speaker is trying to get across post-semantically, is: 'P or Q or . . . '. However, disjunctionality is not grounds for denying 'propositional' status. One might query whether it should be called a disjunction of propositions or a disjunctive proposition, but either way, 'Either it is raining or the picnic is still on' is robustly propositional. Surely, that some content is disjunctive does not preclude it from involving sentence-meanings (PIP-1), nor from being truth-evaluable (PIP-2). So, there is no evident path between disjunctionality and B's PIP-based move characterized at the outset.[20]

(ii) vagueness: Sperber & Wilson (1987: 705–6) seem to suggest that the critical problem with [2] 'I have a headache' is the 'vagueness' of the operative communicative effect. That is why the Gricean approach 'fails to capture the import' of this 'quite ordinary utterance' (and, presumably, part of why relevance theory is to be preferred, as it provides 'a precise account of these vaguer effects').

Presumably, Sperber & Wilson are not using the term 'vague' in the sense of heap-ish lack of precise boundaries. This latter sense of 'vague' is one of the cases (similar to others mentioned in note 18) where (PIP-1) and (PIP-2) may diverge. That is: with a case like 'X is bald', say, the claim that its content is a sentence-meaning is stronger than the claim that it is truth-evaluable; that latter question is handled differently by different theories of vagueness (cf. Raffman 2014). So, due to the presence of vagueness, an otherwise putative-propositional-content could arguably fall short of propositionality in this sense: it may not be truth-evaluable.[21] However, that can hardly be a distinctive

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[20] The idea that the disjunctionality of implicature poses a serious challenge for Grice seems to be a part of Davis' (1998) case that the theory massively underdetermines the data. It also seems to be a part of Sperber & Wilson's (1986, 2015) notion that a weak implicature involves an 'array of propositions'. Note that none of these authors distinguishes between epistemic and metaphysical indeterminacy.

[21] That is, it is not implausible to classify 'X is bald' among the category of perfectly respectable sentence meanings which nonetheless fall short of determining truth-conditions (which might

problem for the Gricean programme—we all have to deal with vagueness, one way or another. If the only critical issue with 'I have a headache' is shared with 'X is bald', then there would not be much here to trouble us.

What Sperber & Wilson mean by 'vagueness' is probably better understood in terms of their distinction between 'strong' and 'weak' implicature (cf. notes 12, 20). Note, for example, that Grice's catty reviewer ([3] above) is one of their paradigm cases of a weak implicature, as are the 'poetic effects' associated with metaphorical usage (1986: 195). A weak implicature is one whose communicative effects are non-specific. So, then: Would a weak implicature thereby fail to be propositional? Is that a way for the PIP to get any purchase?

(iii) non-specificity: Consider again McDowell's (2006: 46–7) above-cited response to Heck's 'problem of specificity'. McDowell claims that an implicature 'can be unspecific', 'in a general area' rather than 'having some particular proposition as its content'. Surely he is right about the 'unspecific', 'general' part—there is no threshold of richness-of-detail a unit of content must cross in order to be implicatable. An implicature can be as unspecific and general as any other unit of communicable content. But, again—turning to our larger ongoing question—of course the same is true of propositions: i.e. there is no precise upper-bound to how specific and particular a proposition must stay, past which point it is no longer propositional. It can be daunting to evaluate exceedingly unspecific assertions—say, 'Renewable energy is good for the economy', 'Progressive taxation creates a more just society'—but surely there are still (appropriately complex) (PIP-1) sentence-meanings involved, and (PIP-2) truth-conditions at stake. Therefore, putative-implicatures do not fail of propositionality due to non-specificity (or weakness), either. None of these considerations seems to afford a good solid reason why an otherwise-putative-implicature should be denied 'propositional' status.

Let us take stock. Our focal question is: Could there be an implicature whose content is not propositional? There are those who presume that the Gricean programme is committed to a NO answer to that question, and that this exposes a damning flaw. The specific business of this present section is: Post-propositional fracture, there are several different things one might mean by 'proposition'. We distinguished two fundamental ones, and correspondingly have distinguished these two putative constraints:

(PIP-1): There cannot be a PCI whose content is not a sentence-meaning
(PIP-2): There cannot be a PCI whose content is not truth-evaluable

We have not found any precise, well-grounded reason why a Gricean should be committed to either of these. There are suggestions that the disjunctionality, vagueness, or non-specificity of an otherwise-putative-implicature might pose

also include cases of indexicality ('The weather here now is fine'), semantic underdetermination ('She is ready'), predicates of personal taste ('Fish sticks are tasty'), etc.)

issues for the Gricean programme; however, since a unit of content could be disjunctive, vague, or unspecific, while still being a truth-evaluable sentence-meaning, such considerations hold little promise to ground any such regulative usage of the PIP. So: we have as yet no decisive reason to impose any such specific constraints on substituends for 'Q' in Grice's (1989: 30–1) definition of a PCI.[22]

If we junk the PIP, then a more nuanced and sophisticated notion of implicature becomes available. Such things as metaphorical usage, verbal irony, and certain kinds of humour might fit rather well with Grice's (1989: 30–1) schematic definition of a PCI—i.e. a prima facie uncooperative utterance, which (on reflection) can be seen as a deliberate attempts to pull off a communicative effect, via a sophisticated move within Grice's framework. There is an available Q, which would save the presumption of cooperativeness, and which captures what the speaker is really trying to get across. However, in such cases, Q ≠ exactly one discrete, determinate, sentence-sized truth-evaluable unit of content. It is not merely epistemically indeterminate, but may be ungainly, amorphous, metaphysically indeterminate.[23]

V. THE EXPRESSIVE DIMENSION

Above, I mentioned two distinctive features of our candidates for non-propositional implicatures, [2–4]: not only are these implicatures relatively indeterminate, they also seem to involve expressive content. It will prove worthwhile to attend to this aspect of the situation next.

One common oversimplification in early philosophy of language is the presumption that the chief business of linguistic communication is descriptive—i.e. the fundamental use of language is for the speaker to describe states of affairs, which descriptions are thereby made available for consumption by hearers. Perhaps this oversimplification is the kind of 'frictionless plane' methodology which is a useful fiction at an early stage in many fields of inquiry, or perhaps it is a deep, pernicious mistake; but in any case, many canonical classics—from

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[22] There is more in Section V regarding exactly what it might mean for a unit of content to fall short of being a sentence-meaning, or truth evaluable (i.e. Could an implicature be ineffable?) For more extensive discussion, cf. Grzankowski & Montague (2018).

[23] To illustrate: (1) The catty reviewer in [3] is observing the Cooperative Principle; (2) the supposition that they are trying to implicate negative evaluation (of some subvariety or degree) is required in order to interpret their utterance as Cooperative; and (3) they think that it is within the competence of the hearer to work that out. Or, again: (1) The frustrated parent in [4] is observing the Cooperative Principle; (2) the supposition that they are trying to implicate some vague blend of annoyance and frustration is required in order to interpret their utterance as Cooperative; and (3) they think that it is within the competence of the hearer to work that out.

Frege (1892)[24] to Kripke (1972)—are naturally read as solely addressed to this project of understanding descriptive content.

Criticisms of this descriptive-oversimplification are of course hardly news—cf. Wittgenstein (1953: §23). There may be multiple different non-descriptive dimensions to what is semantically expressed with an utterance. One case in point concerns the distinction between descriptive and expressive subcomponents, along the following lines:

[Kaplan (2004)] That damn Kaplan got promoted.
(descriptive) Kaplan got promoted
(expressive) ≈ I disapprove of him and his promotion

[Potts (2005)] I have to look after Sheila's damn dog while she is away.
(descriptive) I am obligated to care for Sheila's dog
(expressive) ≈ I am negatively inclined to this situation

These are complex waters into which we are wading. Much work would be required in order to rigorously employ this notion of expressive content, let alone to chart what other sorts of subcomponents of content there be, in addition to the descriptive and the expressive.[25]

The key present point is that both [3–4]—our candidates for metaphysically indeterminate, non-propositional implicatures—clearly involve something along the lines of expressive commentary. The catty reviewer and the frustrated parent are making post-semantic moves in the expressive dimension. So, then: when it comes to our ongoing focal question about non-propositional implicatures, what is the relevance of this notion of expressive content? More specifically, consider these two questions:

(**EC-1**): Is expressive content implicatable?
(**EC-2**): Is expressive content propositional?

If the answers to (EC-1) is YES while (EC-2) is NO, this would yield a considerable case for at least one sort of non-propositional implicature.

By this stage, I think that a quick YES answer to (EC-1) is warranted. For starters, surely approval or disapproval are conversationally implicatable. If [3: Grice's catty reviewer] is not enough for you, then how about these:

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[24] Frege discusses dimensions of content that go beyond the descriptive (1892: 73); but he sets them aside as logically irrelevant.

[25] For example: What exactly is the relation between 'expressive content' and 'evaluative content'? For, some of our candidates for non-propositional implicatures, as well as both [Kaplan] and [Potts] above, involve both expressive and evaluative content. I will not assume any strict conditionals linking these notions; rather, just that they can overlap. (Non-evaluative expressive content might be illustrated by, say, a simple: 'Wow!' Whether there could be content that is non-expressively evaluative might depend on your meta-ethics–'That was unjust!' could work for most.)

[6] A: Darn it! I think I just added too much coriander.
   B: You can't have too much coriander.
[11] Is that all? [child to parent upon seeing the size of her dessert portion]
[12] Now, that was a sonata! [one audience member to another, after a sublime
   performance]

To the extent that the notion of expressive content is intelligible, then such contents are available for post-semantic suggestion. ([6] illustrates that expressive implicatures can be just as epistemically indeterminate as PCIs generally.)

(EC-2) is a more difficult matter. Building on Section IV, let us split it into two questions:

(**EC-2/PIP-1**): Could an expressive content fail to be a sentence-meaning?
(**EC-2/PIP-2**): Could an expressive content fail to be truth-evaluable?

One example of specific engagement with the latter question can be found in Bach's (2007) review of Potts (2005). Bach argues that Potts's multidimensional semantic framework is not happily called 'multi-propositional' precisely because the expressive dimension traffics in non-truth-evaluable units. For example, consider Bach's case of:

[13] The blasted TV is broken again.

According to Bach, we could follow Potts in taking 'blasted' to involve an extra unit of content, on top of the descriptive claim about the TV being broken; but it is not one which is truth-evaluable. Bach's view is that (EC-2/PIP-2) gets a strong YES—(at least some) expressive contents are not truth-evaluable.

If this is correct, then we have a quick avenue into a categorical YES to our focal question: There can be non-propositional implicatures because expressive content is (i) implicatable and (ii) non-truth-evaluable. However, I will set that line of thought aside, for the notion that expressive content is non-truth-conditional is a controversial claim that I need not presuppose, in my ongoing quest for metaphysically indeterminate, non-propositional PCIs. While it would spell big trouble for the PIP, the bar for rejecting the PIP need not be set that high. I need not take on any onus to prove that expressive contents must be non-truth-evaluable.

What about (EC-2/PIP-1)? Could there be an expressive content that is not a sentence-meaning? Certainly, expressive contents can come in sentence-sized units of communicable content (more or less along the lines of my Kaplan/Potts glosses, above). But need all of them? Might expressive content be ineffable? Here again we are wading into waters that are, on the one hand, complex and controversial, yet on the other hand, tangential to our main aims. Again, if there were ineffable expressive implicatures, then that could provide a categorical YES to our focal question: The PIP would be contradicted, if such things are at once (i) implicatable, and (ii) not sentence-meanings. But,

again: I need not presuppose any such controversial claim, merely in order to argue that the PIP is not essential to the Gricean programme. I assume that expressive content COULD BE propositional, but I need not go so far as to prove that it MUST BE.

To sum up this section: We detoured into the expressive dimension because expressive content is involved in our ongoing focal issue of non-propositional implicature: At least some of our candidates for metaphysically indeterminate implicatures involve rational, maxim-governed, post-semantic moves in the expressive dimension. Expressive contents can be unspecific of subvariety or degree, and so (arguably) may fall short of some criteria for 'propositional' status. After due consideration, I am assuming that expressive content is implicatable; whether expressive contents can be, or need be, propositional is rather more vexing. While they seem to come in sentence-sized units of communicable content, it is less clear that they must be truth-evaluable. Hence, the door remains open to an affirmative answer to the first, and a negative answer to the second, of the following:

(EC-1): Is expressive content implicatable?
(EC-2): Is expressive content propositional?

While there is some precedent in the literature for a categorical NO to the latter (i.e. expressive contents are non-truth-evaluable) I need not rest what follows upon that stronger claim.

VI. CALLING THE QUESTION

B's PIP-based response, characterized at the outset, could hardly be *refuted*. One can always insist that NO: Implicatures must be (fully, completely) propositional. However, one would thereby have an inflexible, impoverished notion of implicature, and correspondingly a rather limited, unworkable conception of Grice's framework as a whole (as do, for example, Davis 1998; Lepore and Stone 2016; Sperber and Wilson 1986, 2012). A comprehensive comparative evaluation of such anti-Gricean approaches vs the various neo-Gricean variations would require its own weighty book; I will not take up that task here now. But, more cautiously, I can recap the following: (i) The distinction between epistemic and metaphysical conceptions of 'indeterminacy' is significant; and so many of the argumentative moves made in this corner of the map might have to be rethought, and reevaluated, accordingly. (ii) Following McDowell (2006) and Buchanan (2013), there is a notion of the content of an implicature available which is more flexible and adaptable than those which one tends to find employed in anti-Gricean work. It allows for some amorphousness, or metaphysical indeterminacy, in the content of an implicature, and thereby de-fangs some of the arguments about 'the failure of the Gricean programme' to

capture 'the import of an utterance'.[26] (iii) This may well point to a promising way to capture the import of many sorts of complex, unspecific utterance—from the aforementioned cases of metaphor, irony, slurring, humour, and insinuation, to various others which involve expressive or evaluative content. Given the epochal promise of Grice's notion of an implicature, when it comes to affording a compelling uniform explanation of a staggeringly diverse range of communicative phenomena, the theoretical virtues of this move are not to be foregone lightly. (iv) Therefore, so much the worse for regulative uses of the PIP—i.e. 'if the requisite propositional content cannot be identified, then the phenomenon in question cannot be explained via implicature'.

On the contrary, something other than a discrete, truth-evaluable, sentence-sized unit of content could satisfy Grice's (1989: 30–1) definition of conversational implicature. In that sense, there can be non-propositional implicatures; and this points to a more flexible and generally applicable conception of implicature. Cases [2–4] provide plausible examples, as does the work cited in note 1. Such implicatures are metaphysically indeterminate—while they satisfy Grice's three conditions for a PCI, there is not exactly one precise, truth-evaluable unit of content the uptake of which counts as understanding the speaker. What the hearer needs to identify for communication to succeed is too amorphous to be counted as 'propositional'—in many pertinent senses of that term. It can have a definite colour or valence, without having specific identity conditions when it comes to subvariety or degree. These non-propositional implicatures tend to be expressive, evaluative; this notion has some promise to be a part of compelling accounts of various sorts of complex, disputed communicative phenomena.

Why insist that such things are implicatures? The fundamental reason is how well they fit with Grice's (1989: 30–1, 86,370; etc.) characterization of a PCI. There is something post-semantic at play, available to the hearer, the uptake of which is required for understanding the full import of the utterance. The total signification of the utterance is naturally factored into (compositional) semantic and (maxim-governed) pragmatic subcomponents, in a familiar way. The overall result is the desirable theoretical virtue of reflective equilibrium: a large measure of the beauty and power of Grice's factorization is its general applicability to a vast, broad range of cases, which fosters a presumption in favour of such an account of individual communicative phenomena; in turn, the compelling accounts of the target phenomenon which results reinforces the general grounds in favour of a Gricean approach.

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[26] Here are a few examples of work that is confluent, in this respect: (i) Reimer (2013) on the idea that Grice's views on metaphor and irony have been refuted by clinical or developmental data; (ii) Simons (2014) on the notion that embedded implicatures pose an insurmountable problem for the Gricean programme; and (iii) Borg (2022) on the idea that the importance of Grice's notion of implicature well survives the demise of certain specific features of Grice's original framework.

Returning now to the theoretical-modelling question: Does the Gricean framework have the resources to model the implicature of such pragmatically conveyed non-propositional contents? No new resources are required, once propositional fracture has been properly digested; the notion that there is a residual challenge here for Griceans is premised on the (vague, ambiguous, unjustified) PIP. That is, no new drastic overhauls of Griceanism would be required, in order to say that [3] the catty reviewer, [4] the frustrated parent, jokers, insinuators, poets, etc., are engaged in PCI (i.e. conveying things post-semantically, in a rational and maxim-governed way), but their implicatures (i.e. that the identification of which counts as understanding what they are trying to get across) are not propositional (in some specific sense of that protean term). The philosophy of language in general is well-past the presumption that discrete, sentence-sized, truth-evaluable units of content are needed to play all of the roles traditionally associated with the term 'proposition'. A broadly Gricean approach to pragmatics may well be better off without it, too.

There are solid reasons to believe that Grice's notion of conversational implicature is a great leap forward in our understanding of linguistic communication, whose full import is still being unpacked. They suggest that it is very much worth exploring such dynamic adaptations of the notion of an implicature, rather than abandoning it.[27]

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