Is Semantics Really Psychologically Real?

Mihaela Popa
University of Geneva
popa.michaela@gmail.com

Abstract

The starting point for this paper is a critical discussion of claims of psychological reality articulated within Borg's (forth.) minimal semantics and Carpintero's (2007) character*-semantics. It has been proposed, for independent reasons, that their respective accounts can accommodate, or at least avoid the challenge from psychological evidence. I outline their respective motivations, suggesting various shortcomings in their efforts of preserving the virtues of an uncontaminated semantics in the face of psychological objection (I-II), and try to make the case that, at least for a theory of utterance comprehension, a truth-conditional pragmatic stance is far preferable. An alternative from a relevance-theoretic perspective is offered in terms of mutual adjustment between truth-conditional content and implicature(s), arguing that many "free" pragmatic processes are needed to uncover the truth-conditional content, which can then warrant the expected implicature(s) (III). I finally illustrate the difficulties their accounts have in predicting the correct order of interpretation in cases of ironic metaphor, i.e. metaphor is computed first, as part of truth-conditional content, while irony is inferentially grounded in metaphorical content (IV).

Keywords: psychological reality, minimal semantics, character*-semantics, truth-conditional pragmatics, metaphor, ironic metaphor.

I.   How Does Semantics Relate To Psychology?

Borg's semantic project aims at substantiating the claim that semantic facts depend on psychological facts. This can be established from two different perspectives: metaphysical (i.e. concerning what *determines* (or fixes) what the speaker means) and epistemic (i.e. concerning what is used by interpreters to *identify* what the speaker means). Thus, by expressing her allegiance to the Gricean project, Borg signs up for metaphysical dependence, although not in Grice's (1989) sense of explaining semantic content in terms of intentional

content, but rather in terms of a psychological module responsible for our linguistic/semantic competence (i.e. knowledge that underpins our understanding of linguistic meaning). From this perspective, facts about semantic content, like words/sentences meaning, ought to be determined via their relation to the mental states speakers express by uttering them. But the conditions for epistemic dependence, according to which "the route to a correct semantic theory runs via an account of the [mental] contents of language-users," don't seem easily met by Grice's or Borg's account. E.g. Grice's assumption that in understanding an utterance the literal sentence meaning is *prior* to speaker meaning is not psychologically confirmed. The same challenge seems to apply to Borg's account, insofar as she takes the minimal content to be prior to, and independent of, speaker meaning. So her attempt of using psychological facts about linguistic competence in semantic theorizing is vulnerable, until a way out for conforming to psychological evidence is articulated. This challenge is taken up in Borg's (forth.), but before assessing the success of her enterprise, a few words about the foundations of her "Minimal Semantics."

Borg's semantic minimalism rests on three main claims. (i) There are "minimal contents (propositions/truth-conditions)" that are "maximally free from contextual effects and provide the literal meanings of sentences;" (ii) Minimal contents are not speech-act content, i.e. what is communicated by a speaker who utters those sentences; (iii) Semantic content is delivered by a modular/computational language faculty. This conception of semantic content entails that there can be no appeal to the intentional states of current speakers at the semantic level. In so doing, it assumes that all (declarative) sentences have semantically determined truth-conditions that are context-dependent when, but only when, obvious context-sensitive elements like demonstratives and indexicals are present. Borg's motivation is, clearly, to provide an explanation of semantic content as being permeable to contextual features in highly constrained ways, by using only well-established syntactic and semantic machinery based on standard linguistic assumptions.[1]

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[1] Minimalists, like indexicalists (Stanley 2000), hold that all pragmatic processes involved in the determination of an utterance's truth-conditions are linguistically driven and controlled by the conventional meaning of words. They amount to *saturation*—i.e. the provision of contextual values for indexicals, morphemes of tenses, genitives and the like—conceived not as a *purely* contextual process but, rather, as being triggered by a linguistic *rule*. Since the process occurs just in case the sentence/expression sets up a slot to be contextually filled in, it is thereby *mandatory*: in *every* context in which the sentence/expression is uttered, the given contextual ingredient has to be provided, and can never be dispensed with. In confining pragmatics to saturation in this way, indexicalism and minimalism subordinate pragmatics to linguistic meaning in the determination of truth-conditions: in grasping the truth-conditions of an utterance

I have, however, my doubts that the semantic assumptions on which Borg rests her minimal semantics can deliver the intuitive truth-conditional content of an utterance, i.e. what is communicated as part of the explicit content in normal conversational contexts. By delivering a truth-conditional content that is minimal (i.e. it excludes all pragmatic/defeasible inferences from semantics), her account seems committed to attributing truth-conditions to sentences that seem to fall short of having them, suggesting that they express weak existential, or "liberal" propositions. E.g. suppose Jack and Jill are in a rush, preparing to go to the cinema. Jill has reached the front door, but Jack has just stepped out of the shower. They say:

    a. Jill: Let's go
    b. Jack: I'm not ready

Intuitively, Jack speaks truly: he isn't ready (to leave for the cinema)! Minimalists deny this, however: according to Borg, the truth-conditions of (b) are that Jack is not ready *for something (or other)*[2]—which is false, since, having stepped out of the shower he is now ready to start dressing.[3] The truth-conditions posited as part of her minimalist analysis turn out, therefore, to be very different from the truth-conditions normal interpreters would ascribe to the utterance, and take the speaker to have intuitively said. The difficulty, apart from making wrong predictions about the intuitive truth-conditions, is that such minimal contents cannot be, as Borg acknowledges, objects of speech-acts (assertions, questions, commands) falling under speaker's intentions. This makes it difficult to see how her account explains the inferential relations between semantic and pragmatic information.

A different kind of criticism is mounted by Recanati (2004) with his 'availability principle' (i.e. language-users have conscious intuitions about what is said, i.e. the intuitive truth-conditions), who aims at showing that the availabil-

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hearers need to go beyond the conventions of language, but their so doing is still governed by the conventions of language.

   [2] *Pace* Borg, Bach (2006) argues that there is no need to make the case that sentences that intuitively seem not to express propositions in fact do so; they are simply incomplete, and their semantic contents are sub-propositional "propositional radicals" (what Récanati 2004 calls "semantic schemata"). Propositionality of the minimal content is not the real issue, however.

   [3] However, indexicalists can agree with what the intuitive truth-conditions of (b) are: that Jack is not ready to go to the cinema. But having agreed with this, they deny that the pragmatic processes that yield them are free, as truth-conditional pragmatics predicts (see III). So, for example, Stanley holds that (b) contains an unarticulated constituent: at the level of logical form; it is not "ready" that occurs but "ready for …," i.e. the logical form contains a slot that must be filled in contextually.

ity constraint, if correct, leads one to give up minimalism. Clearly, speakers/hearers do not consciously entertain minimal contents in conversational exchanges, for such contents lack in the informativeness or relevance that would make them objects of intentional acts. Hence, they cannot, and should not, be equated to the utterance's truth-conditions. Moreover, they cannot function as the right basis for generating implicatures. So one either needs to postulate an intermediate, pragmatically enriched content which can inferentially warrant the implicature(s) (e.g. Bach's notion of "impliciture," or relevance theorists' notion of "explicature"),[4] or explain how speaker meaning is derived directly from minimal contents, eluding thus a level of intuitive truth-conditions. As far as I am aware of, Borg's account does neither.

A more specific concern for minimalism, as Borg acknowledges, is that doesn't fit psychological evidence. Since psychological facts are important for semantic theorizing, given her commitment to the metaphysical dependence, her theory faces serious difficulties. In particular, in cases of ellipsis, metaphors, and scalar implicatures, which are problematic for Gricean models, speaker meaning is grasped without the recovery of a minimal content. More specifically, non-sentential assertions (e.g. 'To Bill' as an answer to the question 'Who did you give the ball?') by which the speaker communicates a complete proposition at the level of speaker meaning even though she does not produce a complete sentence, the grasp of that speaker meaning *cannot* itself depend on a prior grasp of minimal content. In many cases of (conversational) metaphors the speaker's meaning is directly and locally accessed,[5] without first retrieving a minimal content (the literal sentence meaning), and only upon realizing a contextual incompatibility, then retrieve the speaker's metaphorical meaning. Further, if cases of scalar implicature (i.e. when a speaker opts to use a weaker or stronger item on a given scale and thereby pragmatically conveys that the alternative terms on the scale do not hold, e.g. 'some A's are B's' convey that 'some *but not all* A's are B's') were calculated by first deriving the minimal content, the hearer would need to evaluate what the speaker's words say against some contextually-specified level of informativeness in order to exclude more informative alternatives, after having established no other reason for the use of the less informative term (e.g. speaker's ignorance or indifference).

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[4] For a neo-Gricean motivation of doing so, see Soames (2008) who argues that in understanding numerals the Gricean conversational maxims help determine what is *asserted* by narrowing the class of possible enrichments to those that most effectively advance the conversation. Such enriched proposition embodies the speaker's primary intention to *assert*, and therefore contributes to the utterance's truth-conditions.

[5] See Bezuidenhout (2001), Carston (2002), Recanati (2004), Sperber & Wilson (2007), Colston & Gibbs (2002).

If the empirical evidence for these phenomena is correct, this seems to suggest that pragmatic effects can occur at locally (word/phrase-level), as well as globally (sentence-level). Yet this runs counter the predictions from minimalism. Borg is confident that this is not a problem for her account, because what underpins the semantic competence of language-users, and which explains why they are in a position to recover speaker meaning at all, is tacit knowledge of a theory of meaning which trades in sentence-contents. My worry with such a response is that it merely saves the phenomena, rather than engaging with the real processes of speaker meanings retrievals through which interpretation is *actually* arrived at. What Borg takes to compensate the vulnerability of her minimalist theory to the psychological challenge does not really engage with criteria of theoretical/explanatory adequacy, and hence is not sufficient to grant her account the desired epistemic dependence of semantic content on psychological content.

Her explanation of the minimal content as output of a semantic module impervious to any contextual information is dubious if that content is equated with the truth-conditions of an utterance, because is many cases there is a gap to be bridged between the minimal content and the utterance's truth-conditional content. Even granting that the minimal content delivered by such module is only a schematic input that needs to be fleshed out or adjusted so as to function as communicated (speaker-meant) content, the question arises as to its psychological role in comprehension.[6] Borg's attempt to engage with the psychological reality issue is commendable, but her claim that there are structures in the brain representing the basic elements of minimal theory (semantic rules determining sentence meanings from word meanings and syntactic structures), and that the deductive processes determining sentence meaning are supposedly mirrored by interactions between those structures within our brain, is less palpable as to what exactly it amounts to.

Be that as it may, the question arises as to the consistency between such empirical predictions and her minimalist postulates. For example, Borg's acknowledgment that pragmatic and semantic processes run in parallel, the former operating on sub-sentential clauses before the semantic interpretation of the sentence is complete, and furthermore, allowing hearers to stop semantic processing whenever they have enough evidence to grasp whatever the speaker is trying to convey, before the semantic module delivered any sentence-content,

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[6] Relevance theorists and Récanati (2004) hold that the minimal content plays no role in understanding an utterance, and has no psychological reality. Récanati objects that even when we hear a sentence that is semantically incomplete we do not seem to calculate its semantic content and entertain a literal minimal content. Rather, we proceed directly to what the speaker means.

seems to me biting the bullet in favour of a truth-conditional pragmatics (TCP) (see III). What's more, conceding the idea advocated by relevance theorists of a "mutual adjustment" between semantic and pragmatic information, combined with the idea of a semantic *module* seem to make an odd marriage. On any characterisation of modularity, the essence of a modular system is that it operates in accordance with its own dedicated (domain-specific) system of rules and/or procedures, and, on the widely accepted Fodorian definition, the language system is encapsulated from extralinguistic context, including perceptually available information and beliefs about speaker intentions. So there is a real predicament for those who recognize that (i) pragmatics is involved not only in specifying the correct truth-value (when the utterance expresses a truth-evaluable proposition), but also in determining a truth-evaluable proposition that can be ascertained as part of speaker meaning (hen the utterance does not express one, even after disambiguation and reference assignment have taken place), and who at the same time want (ii) to maintain an uncontaminated semantics that delivers the utterance's truth-conditions. One straightforward possibility of remedying this difficulty is to argue that, if semantics is bound to deliver truth-conditions, it needs pragmatics in its rescue, or otherwise to give up to (ii).

My qualms with minimal accounts, such as Borg's, concern not the task of semantics, which I take it to be that of providing an explanatory account of the growth of our knowledge of meaning and applying it to indefinitely many novel utterances,[7] but their disavowing that the relations between semantics and semantic competence are independent of language-users' intentions, and hence of pragmatics, which, as we saw, leads to wrong predictions about the intuitive truth-conditions of utterances. Some semanticists recognize that many semantic facts require pragmatics to be explained. They either opt for (i) an open-ended semantics whose rules of language are materialized in "free variables" at deep syntactic structures (indexicalists), thus allowing for flexibility beyond the usual building-block combinatorics of a closed compositional system, or (ii) for a thin-semantics restricted to encoded linguistic meaning of words/sentences, as illustrated by Carpintero (2007a,b) who allows required pragmatic information

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[7] The motivation for keeping free (non linguistically-driven) pragmatics away from determining truth-conditions stems from an ambition to provide a systematic explanation of the contribution to truth-conditions in terms of precise semantic constraints: only rule-governed/convention-bound interpretations of terms in accord with those terms' standing meanings are allowed when uncovering the truth-conditions of the utterance. Minimalists' concern with TCP is that context-sensitivity of the kind TCP envisages undermines the possibility of a systematic account for meaning, and makes it difficult to explain how, given the finiteness of our cognitive resources, we ever come to learn and use a language. We think that such worries are unwarranted, and suggest in III that there are constraints for communicated content, either explicit or implicit.

to contribute at an intermediate level of "*what is asserted*," corresponding to the utterance's truth-conditional content.

II. Is Rational Reconstruction Psychologically Real?

Carpintero (2007a) defends a character*-semantics restricted to the conventional meaning or character* of expressions/sentences. Aware that Grice's account is not up to the task in delivering what it promised, namely a level of content that is part of speaker meaning, and which is obtained only through semantic consideration of the conventional meaning of words, plus their mode of combination, Carpintero takes the proper object of semantics to be the conventional meaning of linguistic expressions/sentences, thereby rejecting the notion of (truth-conditional) content responsible for the relations holding, in virtue of meaning, between linguistic expressions and the world, as being the proper object of semantics. Like relevance-theorists and Recanati, he recognises that the intuitive truth-conditions of utterances are jointly determined by semantics and pragmatics, which I take to be a safe bet to ensure a neat divide between semantic and pragmatics.

On his view, descendent from the Kaplanian distinction between content and character (i.e. a function from contexts of use to content), the character* is semantically incomplete, i.e. it consists of a rule assigning a contextual value to some expression, but is not its semantic value, and hence, it merely serves to constrain the truth-conditional content and help determine it in context. I fully agree with Carpintero's proposal of restricting the semantics to the determination of sentence-character* corresponding to what is literally said, thus treating an enriched what is said, or *what is asserted* (as benefiting from pragmatic contribution) outside of semantics' scope. I also agree with his idea that language-users have intuitions of characters*, and are consciously aware of how characters* are saturated and freely enriched.[8] What I disagree with is (i) his claim that this is in tension with Recanati's phenomenological availability constraint (since Recanati could argue for a local availability by which language-users are consciously aware of the move from the linguistic meaning of some words to their modulated meanings) but I'm not concerned with this issue here; and (ii) his explanation of such intuitions in terms of rational reconstruction.

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[8] This claim has been advanced by Carston (2007) as an objection to Recanati's account of primary processes (corresponding to the utterance's truth-conditional content) as being non-inferential and insensitive to speaker's intentions. E.g. in cases in which the supplementation of the intended referent is sensitive to speaker's intentions.

To understand the sense in which Carpintero claims his characters* to be psychologically real, we'd have to make a long detour through Peacocke's (1986: 101) conception of 1,5 level of explanation (which states the information on which, in his terms, "the algorithm draws").[9] For simplicity, here's how Carpintero (2007a: 50) adverts to Peacoke's concept as giving the explanatory force of a semantic theory:

> "The proponent of a view about the semantics-pragmatics divide such as the one I am advancing says that characters* are psychologically real in that sense [cf. Peacocke]. In particular, the *subpersonal* mechanisms responsible for the production and interpretation of intelligible speech acts should "draw upon" the information that the semantic theory packages into the relevant characters*[…]. This is compatible with Recanati's views on primary pragmatic processes: the actual processes involved in giving rise, in real time, to what he counts as *what is said* can be characterized as inferences, but they are merely inferences at the subpersonal level, in which "what is literally expressed" (the character*, on the present view) plays no role as a premise in a conscious inference. The present point is that *the same applies to secondary processes in actual cases*."[10]

Be that as it may, I have my reservations as to how Carpintero's *character*-semantics is psychological real, in that the characters*' psychological reality in virtue of our conscious intuitions of the subpersonal inferences from characters* to saturated and freely enriched contents is not warranted in the psychologically relevant sense, i.e. having intuitions of such inferences as they occur in the actual process of interpretation, rather than supporting rational reconstructions. Although I sympathize with Carpintero's divide of semantics-pragmatics, I remain discontented with his explanation of linguistic understanding in terms of rational reconstruction.

The motivation for a rational reconstruction in the face of the challenge from psychological evidence is forcefully defended by neo-Griceans like Bach (2001)[11] and Soames (2008). Soames' explanation of the comprehension process consists in offering an idealized model of conversation where an ideally rational

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[9] Related to language understanding, Peacocke (1986: 113) argues that the informational content of the language-users subpersonal states at level 1,5 "*is* sufficient to determine the meaning of all the sentences they understand."

[10] I am a bit unclear whether the assessment of Recanati's primary processes as being underpinned by inferences, be they subpersonal, is Carpintero's interpretation of how Recanati's primary processes should be conceived of, since on Recanati's view, they are merely associative. I feel the need of an explanation as to how such inferences are derived without relying on a premise of "what is literally expressed" (this was precisely the reason why Recanati rejects an inferential account of primary processes). But that's of no importance here.

[11] In response to the psychological objections, Bach (2001: 24; 2006: 67) distinguishes between the character of the information available to the hearer in the process of identifying

agent would correctly interpret an utterance if the judgments at which he arrives about what was asserted and implicated matched those of competent speakers who associate semantic content with the sentence, and explicitly employ Gricean and other pragmatic rules. The difference between an idealized model and whatever is really at work psychologically involves the model's use of semantic content as input to interpreting utterances, but this is not a feature of our cognitive architecture. Soames rightly contends, I think, that our linguistic competence doesn't require having "psychologically robust representations which carry all and only the information semantically encoded by our sentences." What is important is that speakers/hearers have substantial uniformity regarding the salient information extracted from utterances in various contexts, namely that conclusions about what has been asserted and implied are inferred using this information. The model is validated if these conclusions match those of real speakers in real speech-situations, and the success of the reconstruction would be evidence that the semantic and pragmatic theories it contained were correct. Therefore, by offering a rational idealization that *could* track the psychologically real processes of ordinary speakers, neo-Griceans hope to invest in a theoretical adequacy claim without addressing directly the challenge from empirical evidence.

I argue, against their skepticism, that hypotheses about the psychologically real processes involved in determining the truth-conditional content and implicatures of utterances are not only necessary in accounting for specific cases of language-use (IV), but they can be naturally construed within a TCP paradigm like that endorsed by relevance-theorists (RT).

III. Truth-Conditional Pragmatics

RT's lexical-pragmatics is a species of *truth-conditional pragmatics* (TCP), i.e. the doctrine that pragmatic processes that are "free" (not linguistically driven) play a crucial role in determining the truth-conditions of an utterance. TCP holds that an utterance's truth-conditions are not wholly encoded in the sentence uttered (even allowing for the reference assignment and disambiguation Grice acknowledges); rather, a contextual adjustment is needed. TCP claims that there is a gap between (a) the content generated by the linguistic meaning of a sentence when values are assigned to indexicals or free variables occurring within it, and (b) the utterance's truth-conditions. It holds that the linguistic

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speaker meaning (including the truth-conditions), and how this information is exploited in on-line processing.

meanings encoded by sentences are highly schematic: they fall *very* far short of determining the truth-conditional content, and many "free" pragmatic processes are needed to uncover this content. In contrast to Borg's minimal semantics, the semantics approved by relevance-theorists, but also by other species of TCP (Recanati 2004, Bach 2006), need not deliver anything fully propositional; the output of linguistic processing falls well short of answering to ordinary speaker-hearer intuitions about the truth-conditional content of utterances.

The TCP embraced by relevance-theorists conceives of speaker meaning as being composed of the truth-conditional content (explicature) and implicature(s). Moreover, it posits precise constraints on the derivation of the truth-conditional content: (i) it is a pragmatic development of the encoded linguistic meaning, and (ii) it must provide inferential warrant for the implicature. The device that regulates these constraints is a mechanism of mutual adjustment from which it follows that a hypothesis about an implicature can both precede and shape a hypothesis about the truth-conditional content. Specifically, the hearer's hypotheses about implicatures, formed on the basis of his expectation of relevance in a conversational situation, can influence the development of the logical form into truth-conditional content, and his retrieval/construction of contextual assumptions. Hence, in function of what he takes the speaker as having implied, he might be able to reason a way to a decision about what she might have said/asserted. Thus, assumptions about the truth-conditional content and assumptions about implicatures are derived in parallel and mutually adjusted to each other until they stabilize in a logical argument with determinate contents: implicatures are logically grounded in the truth-conditional content together with relevant contextual assumptions. This process can involve several (re)adjustments to each of the various kinds of assumptions involved, with hypotheses about any one or combination of truth-conditional content, implicature, and contextual assumptions affecting hypotheses about any of the others.

Such a process is predicted to be inferential through and through. Whereas the implicature is warranted by following logically from the truth-conditional content and contextual assumptions, the two latter receive their inferential warrant in different ways. In virtue of the mutual adjustment, they can be confirmed by 'backwards' inference: if the conclusion—implicature—seems a promising hypothesis about the speaker meaning (answering the hearer's question), and the entire interpretation is consistent with the expectations of relevance raised by the utterance, then the hearer has good reason to adjust the premises so that they warrant that conclusion. Hence, the contextual assumptions get their inferential warrant entirely from backwards confirmation, i.e. by fitting into a valid argument together with other assumptions that are in play. On the other hand, the truth-conditional content is inferentially warranted both from the linguistic meanings of constituents, and from backwards confirmation by fitting

into an argument where together with contextual assumptions it justifies the implicature. Specifically, the relation between the literal meanings of words and their semantic value is explained via local pragmatic processes of adjusting (e.g. narrowing, broadening) word meanings into modulated meanings such that they feed directly onto the utterance's truth-conditional content. This process of 'free' pragmatic modulation involves backwards inferences: when a contextual implication is derived, the hearer treats it as a potential implicature of the utterance, which may in turn help adjust some word's meaning into a modulated meaning, thus shaping the truth-conditional content which then can warrant the expected implicature.

Hence, on this view, what speakers *say* (as part of what they want to communicate directly and explicitly) by uttering a sentence in a context incorporates the pragmatically adjusted meanings, which are not merely indirectly or implicitly conveyed, as they are for Griceans/neo-Griceans. This is the case with loose talk, metaphorical, metonymical and even hyperbolic utterances. Whereas Griceans/neo-Griceans treat such cases as instances where the hearer understands the speaker to have explicitly said one thing but to have meant something else instead, relevance-theorists and philosophers defending TCP propose an explanation according to which the contextual meanings of words communicated in such cases are pragmatic developments of semantically encoded meanings. Importantly, those local pragmatic processes that determine the relevant contextual meanings are not, however, entirely unconstrained, as critics have pointed out. They are, in effect, enriched or loosened on the basis of the conventional meanings of words, and are tailored in such a way so as to fit the expectations of relevance set by the utterance in the context in which it is uttered. The upshot is a level of content that accords with speakers/hearers intuitions of what has been said, and what makes the utterance true. Hence, an adequate theoretical notion of 'what is said' is one that is grounded in pragmatic considerations about what speakers *do* in making their utterances, specifically what mental states they want to be taken as defending.

IV. Ironic Metaphor

I argue that one of the reasons why rational reconstruction is unsatisfactory is that interpretation of ironic metaphor (IM), as in (1)-(3), gives the wrong predictions when allowing a different order of interpretation—irony first and then metaphor—which is predicted from a rational reconstruction perspective.

(1) Mary is the Taj Mahal.

(2) He is a towering figure.

(3) What a delicate lace work!

To explain why only a metaphor-first approach gives the right result, I argue for a psychological and logical *metaphor's priority thesis* (MPT), i.e. in cases of IM, the metaphor *is*/*has to* be computed before the irony. Grice (1989: 34) is the first to advocate logical MPT, when he claims that when interpreting a metaphor like "You are the cream in my coffee," the hearer has to reach first the metaphor 'You are my pride and joy' and then calculate an ironic interpretation 'You are my bane' on the basis of metaphor. Unfortunately, however, he does not give an argument for this claim, nor how the passage from metaphorical to ironical meaning is negotiated. We aim to remedy this omission. My strategy involves distinguishing weak from strong versions of both psychological and logical MPT, resulting in four versions of MPT.

Weak MPT: in *some* cases of IM, the metaphor is/has to be computed first.

Strong MPT: in *all* cases of IM, the metaphor is/has to be computed first.

In order of increasing strength they are: weak psychological MPT, weak logical MPT, strong psychological MPT, and strong logical MPT. I argue for each in turn.

The argument for weak psychological MPT is as follows. It is widely agreed that irony operates *globally* on propositional contents to determine new contents. But at least sometimes, metaphor operates *locally* on expressions (before the whole utterance is computed). Since local operations work prior to global operations, this supports psychological MPT in those cases in which the metaphoric interpretation is local, the irony swinging into play only after all interpretations involving words have been calculated.

The argument for weak logical MPT relies on a reasoning-by-absurdum which aims at showing that an irony-first approach is conceptually difficult or impossible. Consider the case in which (3) is used concerning a doctor's indecipherable scrawl. If irony has priority over metaphor, it seems difficult to pin down an appropriate contrary to the literal term, which then interpreted metaphorically yields the intended interpretation. Following Stern (2000: 236), I argue that there is no rational route to the literal term's opposite, without priory retrieving the metaphor. Now suppose that from a rational reconstruction viewpoint, an irony-first order of interpretation is available for (3). This can be represented in two-stages: a simple irony generally represented by means of a

negation operator as in (3'a), which then requires replacing the literal meaning of 'lacework' with a metaphorical one as in (3'b).

(3') a. That's NOT lacework.
    b. That's NOT *beautiful/crafted* (handwriting).

However, the irony-first interpretation seems to miss its target: it may not apply to the intended referent (doctor's handwriting), as when we wrongly understand (3) to comment on some expensive curtains the cat just ripped to shreds. If such a situation is salient in context, then there is no need for a metaphoric reinterpretation; the interpretation stops at the first-stage with a simple irony, and the ironic metaphor is lost.

The problem seems to be rather a matter of *scope*: if irony is construed as an operator of negation taking in its scope only the literal meaning of the expression, then the result cannot be the intended irony, as part of an IM understanding. Some might argue that it is in the nature of rational reconstruction to take the irony-first interpretation further, replacing the literal meaning within the scope of negation with a metaphorical meaning. However, if one is to understand the irony in relation to the doctor's handwriting, it is essential to have already computed the metaphor, since it is this that gives him access to the intended referent. Since referents have to be established for determining the utterance's truth-conditional content, and since irony builds on such content, then weak logical MPT follows straightforwardly.

The difficulty of an irony-first approach is even more patent in (1), where the irony necessarily builds on the metaphor: since what is literally said involves a category mistake which makes it difficult to maintain a plausible literal interpretation, one could hardly avoid a metaphoric interpretation. But then the irony-first reversing the literal meaning of the utterance is pointless, because it merely yields a banal literal truth 'Mary is NOT the Taj Mahal.' I therefore conclude that it is difficult to retrieve the intended irony, unless metaphor is already computed. A similar argument is given by Bezuidenhout (2001) who shows that metaphors launched from irony are difficult, if not impossible. The conclusion she draws is that when other interpretations are present, metaphor must *precede* them. Consequently, cases of "once-removed metaphors" (i.e. metaphors launched from irony or cases of indirection like indirect requests) are simply difficult, if not impossible. I agree with her conclusion, but I go even further in putting this constraint on the account of the difference between metaphor and irony. While irony takes scope on some propositional content, reversing the literal meaning of the sentence uttered, metaphor takes a sub-sentential scope, pragmatically adjusting the literal meaning of an expression. This suggests that the scope operated by metaphor ought to have been effected

before the irony takes scope on the whole sentence, leading therefore to an order of interpretation of the form Irony$Metaphor$ <P> rather than MetaphorIrony<P>.

To buttress the argument, think of an analogous argument concerning the ironic use of idioms. For instance, a quasi-metaphorical idiom '*don't give up the ship*' used to communicate that one should persevere in the face of adversity, when it is used in the context of someone giving up, it functions ironically, but only if it is first understood as metaphor for perseverance. Similarly, the idiom '*burying the hatchet*' refers to declaring an end to hostilities, or peace, but when it is used in the context of someone NOT making peace, it will function ironically. Other examples of this sort are '*locking the barn door after the cows have fled*,' '*striking gold*,' '*it's a gold mine*,' etc.

One way of tackling the strong logical MPT, i.e. in *all* cases of ironic metaphor, the metaphor *has to* be computed first, is to admit that irony and metaphor require different mechanisms of interpretation; if they were similar in nature, we would expect more freedom, and hence inversion, in the order of interpretation. A first characterization of this difference comes from relevance theorists for whom metaphors are used *descriptively* to represent a possible/actual state of affairs, while ironies are used *interpretively* to (meta)represent another representation (a possible/actual utterance/thought) that it resembles in content. A more convincing reason for strong logical MPT is, perhaps, the necessity of distinguishing an extra-level of meaning beyond the speaker's meaning *qua* content, which is imposed by the order of processing of the two figurative meanings.

The argument for strong logical MPT relies on a first claim that the correct standard interpretation of an IM, such as (2) is closer to that of

the associated simple irony	
Utterance	He is important
Ironical meaning	He is not important

than it is to that of

the associated simple (negated) *metaphor*	
Utterance	He is not a towering figure
Metaphorical meaning	He is not important

Although the content is the same in both cases, the associated irony captures the speaker's attitude of contempt towards his colleague who thinks he's achieved some important discovery (whereas nobody shares that opinion), which is lost with the associated negated metaphor. Despite metaphor's richness, the

speaker's attitude is not part of the metaphorical content; the speaker is merely interested in pointing out some similarity, or with the negated metaphor that there is no such similarity. That IM is closer to irony than to metaphor leads to a further claim that this fact is correctly predicted by strong logical MPT, on which the order of interpretation is

> *Metaphor-first proposal*
> Utterance   He is a towering figure
> Metaphor: He is important
> Irony: He is not important

but is not correctly predicted by, the irony-first approach, on which the order of interpretation is

> *Irony-first proposal*
> Utterance   He is a towering figure
> Irony: He is not a towering figure (He is short/diminutive)
> Metaphor: He is not important

Although an irony-first proposal seems *prima facie* plausible from a rational reconstruction viewpoint, on which irony, even if not relevant, is remedied by metaphoric reinterpretation, this strategy fails to deliver the intended interpretation. Even though the two approaches—metaphor-first and irony-first—deliver the same content, there is something more than speaker meaning *qua* content that accounts for their difference. This is related to the order of processing of the two figurative meanings. If the hearer goes with irony-first, there is no way to capture the speaker's attitude, as this concerns in fact the colleague's inflated opinion of his important career, as delivered by the metaphoric interpretation, rather than the literal one concerning his height. It seems that the intended interpretation of IM goes beyond speaker meaning *qua* content; it has to factor in the *route* by which the two figurative meanings are reached at. Therefore, it is the metaphor-first approach that correctly predicts the target of the ironical attitude, namely a metaphoric claim that is merely pretended or echoed, thus supporting strong logical MPT.

The argument for strong psychological MPT consists in looking at hypotheses about the metarepresentational inferences involved in understanding IMs. A first hypothesis is that the metarepresentational inferences required in IMs are *reduced* as compared to those required for understanding simple ironies. Colston & Gibbs (2002) explain this hypothesis by metaphor's capacity for muting the ironical meaning, thus attenuating the speaker's critical attitude characteristic of irony. However, it is unclear how the metarepresentational

inferences are reduced in processing IMs, unless metaphor is treated as expressing its content directly, without going through a metarepresentational premise of the form 'The speaker believes that (P).' Yet, two further hypotheses are available.

H1: understanding IM *enhances* the degree of metarepresentational inferences as compared to processing irony alone. The metaphorical formulation of another's thought, or another's metaphorical thought which the speaker is echoing in IM is expected to increase the inferential steps: *{The speaker believes that [X believes that (X believes that ((P))]}*. This possibility is in tension with the claim that metaphor is processed as part of what is said, since the utterance should be first interpreted literally, then metaphorically, and then ironically. This possibility is dismissed, though, given the low ratings for understanding metaphors.

H2: understanding IM requires *the same* amount of metarepresentational inferences as processing simple ironies. Adding a metaphor to a speaker's ironic utterance should not complicate the metarepresentations the hearer has to infer; there should be no consequential difference between echoing a metaphorical thought or formulating metaphorically another's thought with IM, and echoing a literal thought with simple irony, since both thoughts are expressed directly. The fact that the hearer has to think about the speaker's thoughts about another's thoughts to understand irony, or about her thoughts about another's metaphorical thoughts to understand IM should not increase the range of second-order inferences. This shows, I think, that the metaphorical formulation of another's thought or someone else's metaphorical thought that the speaker is echoing in IM has the same contribution as any other literal thought: both contribute to the utterance's truth-conditional content. Furthermore, since it is another's metaphorical thought that is ironized, then metaphor is clearly part of the metarepresentation that needs to be computed for understanding the irony, as part of IM, thus supporting strong psychological MPT.

Having argued that in IM, the metaphor is processed first, I argue that in such cases, metaphor is processed directly, i.e. as part of the utterance's truth-conditional content. I consider semantic arguments about the behavior of IM with respect to the embeddability criterion and its import to truth-conditions. Since metaphor is embeddable, but irony is not, it follows that IM is not embeddable in the scope of logical operators like the negation in (4a), or the antecedent of a conditional in (4b), or in the scope of a propositional attitude operator in (4c) without losing the irony.

(4) a. Mary is *not* the Taj Mahal, she's the Empire State building.
    b. *If* Mary is the Taj Mahal, then I'd love to have her as model.
    c. Steve *believes* that Mary is the Taj Mahal.

That IM is not embeddable in (4a-c) shows that irony takes scope over metaphor, suggesting that the metaphor is part of the utterance's truth-conditional content. A similar argument comes from responses to IMs, pertaining to the utterance's truth-conditions, as in (5a-b).

(5) a.? Sure she is. That's why I don't want to go out with her.
     b.? That's not true. She has a certain charm and is quite a sophisticated lady.

The reason why (5a-b) are failed attempts to respond to an IM is that while the speaker is willing to stick to the metaphorical meaning as being what she said/asserted, she cannot do that with the ironical meaning which is merely suggested. Even if the hearer picks a different metaphorical meaning than what the speaker had in mind she can reply by negative and switch to a different metaphorical reading. The consequence is that, if metaphor is truth-conditional and IM is not, and truth-conditions have to obtain before any implicature is generated from the saying of what is said, then metaphor *has to* be processed first as part of the utterance's truth-conditional content, and irony is processed afterwards as being grounded into the metaphorical content.

This result is not, arguably, what is predicted from the rational reconstruction adopted by neo-Gricean accounts, like Borg's or Carpintero's. First, a minimalist like Borg couldn't account for metaphorical meaning as being part of the utterance's truth-conditions. Second, even if Carpintero might accommodate metaphorical meaning as part of his intermediate level of "what is asserted," there remain concerns as to whether the metaphor-first order of interpretation can be predicted by his rational reconstruction. Even though this is not a crucial criticism of his theory, hopefully the data pertaining to IM interpretation will suggest further answers to the controversial matter of how to draw the borderline between semantics and pragmatics.

References:

Bach K. 2006. The Excluded Middle: Semantic Minimalism Without Minimal Proposition. *Philosophy and Phenomenological Research* 72: 435-442(8).

Bach K. 2001a. You Don't Say? *Synthese* 128: 15-44.

Bezuidenhout A. 2001. Metaphor and What is Said: a Defense of a Direct Expression View of Metaphor. *Midwest Studies in Philosophy* 25: 156-186.

Borg E. forth. Semantics and the Nature of Psychological Evidence. In S. Sawyer (ed.) *New Waves in Philosophy of Language*. Ashgate Press.

Borg, E. 2007. Minimalism versus contextualism in semantics. In: Preyer, G. & Peter, G. (eds.) *Context-Sensitivity and Semantic Minimalism*. Oxford: Oxford University Press. 339-359.

Carston R. 2008. Optional pragmatic processes or optiona covert linguistic structure? *UCL Working Papers in Linguistics* 20: 143-156.

Carston R. 2007. How Many Pragmatic Systems are there? In M.-J. Frapolli (ed.) *Saying, Meaning, Referring: Essays on the Philosophy of Francois Recanati*. Basingstoke: Palgrave-Macmillan. 18-48.

Carston R. 2002. *Thoughts and Utterances. The Pragmatics of Explicit Communication*. Oxford: Blackwell.

Colston H. L. & Gibbs R. 2002. Are Irony and Metaphor Understood Differently? *Metaphor and Symbol* 17(1): 57-80.

Garcia-Carpintero M. 2007. Recanati on the Semantics/Pragmatics Distinction. *Critica* 38: 35-68.

Garcia-Carpintero M. 2007b. Bivalence and What is Said. *Dialectica* 61(1): 167-190.

Grice H. P. 1989. *Studies in the Way of Words*. Cambridge MA, Harvard University Press.

Peacocke C. 1986. Explanation in Computational Psychology: Language, Perception and Level 1.5. *Mind and Language* 1: 101-123.

Récanati F. 2004. *Literal Meaning,* Cambridge, Cambridge University Press.

Soames S. 2008. Drawing the Line Between Meaning and Implicature—And Relating

Both to Assertion. *Nous* 42(3): 529-554.

Sperber D. & Wilson D. 2007. A Deflationary Account of Metaphor. In R. Gibbs (ed.) *Metaphor and Thought*. Cambridge University Press, Cambridge. 171-203.

Stern J. 2000. *Metaphor in Context*. Cambridge, MA: MIT Press.