Navigating the semantics/pragmatics border lands

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1 Overview

2 Position statements

These statements concern whether phenomena traditionally attributed to pragmatics are actually part of the semantics in some sense. One might summarize them as follows: everyone agrees that there are exceptions to the traditional (Gricean) account, but people vary widely in how important and pervasive they regard the exceptions as being. Neo-Griceans minimize their importance, whereas grammarians maximize their importance.

Chierchia et al. (To appear:27)

> More specifically, the facts suggest that SIs [scalar implicatures —CP] are not pragmatic in nature but arise, instead, as a consequence of semantic or syntactic mechanisms, which we've characterized with the operator, O. This operator, although inspired by Gricean reasoning, must be incorporated to the theory of syntax or semantics, so that — like the overt operator *only* — it will find its way to embedded positions.

Horn (2006)

> If I have been successful, I will have shown that — to paraphrase Mark Twain's cable — the reports of the death of the neo-Gricean paradigm have been greatly exaggerated. To be sure, it has become clear in the post-GAPP [Golden Age of Pure Pragmatics –CP] era that much of the excitement in the study of meaning these days transpires in the unstable borderlands between what linguistic content provides and what post-semantic inference accounts for. Classical Gricean implicature must be exploited enough — but not too much.[1]

Geurts' (2009) abstract

> The Gricean theory of conversational implicature has always been plagued by data suggesting that what would seem to be conversational inferences may occur within the scope of operators like *believe*, for example; which for bona fide implicatures should be an impossibility. Concentrating my attention on scalar implicatures, I argue that, for the most part, such observations can be accounted for within a Gricean framework, and without resorting to local pragmatic inferences of any kind. However, there remains a small class of marked cases that cannot be treated as conversational implicatures, and they do require a local mode of pragmatic interpretation.

Stiller et al. (2011)

> Our data rule out the simplest version of both the Gricean counterfactual theory and the linguistic alternatives theory. Instead, they point the way towards an account in which linguistic and social factors are integrated probabilistically with world knowledge.

See also Chierchia 2004; Bach 1999b, 2006b.

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[1]In a similar spirit, Horn (1978:216) concludes, "The verdict, then, on the matter before us, as set forth in the prospectus of this study — is NR a syntactic, semantic, or pragmatic phenomenon? — is YES".

3 Basic distinctions and divisions

Phenomenon	Examples	Grice 1975	Horn 2006	Sperber and Wilson 2004	Bach 1994	Levinson 2000
Underspecification	strong enough (for X)	Said	Said	Explicature	Impliciture	Presumptive
Numeral upper-bounds	(exactly) three	GCI	Said	Explicature	Impliciture	Presumptive
Ordering with *and*	e_1 and (then) e_2	GCI	CI	Explicature	Impliciture	Presumptive
Lexical scalar inference	or (not both), some (not all)	GCI	CI	Explicature	Impliciture	Presumptive
Particularized inferences	Do you read *Time*? (No) I read *LI*.	CI	CI	CI	CI	CI

Table 1: CI = 'conversational implicature'; CGI = 'generalized conversational implicature'. In the examples, the pragmatic meaning is inside parentheses.

On "what is said (in the favored sense)"   It is not easy to impose the said/implicated distinction on tab. 1. Sperber and Wilson conceive of the basic distinction differently, whereas Bach subscribes to the basic distinction but argues that implicitures fall into neither category (see also Bach 2006b:§8). For Grice and Horn, the distinction works as I've given it here. For Levinson, everything in the table falls outside of what is said in the favored Gricean sense.

Definition 1 (Explicature; Carston 2004:635)**.** "An assumption communicated by an utterance U is EXPLICIT [hence an "explicature"] if and only if it is a development of a logical form encoded by U. [Note: in cases of ambiguity, a surface form encodes more than one logical form, hence the use of the indefinite here, "**a** logical form encoded by U"]"

Definition 2 (Impliciture; Bach 1994:125)**.** "[...] the two ways in which a speaker can, independently of using any ambiguous or indexical expressions and without speaking figuratively or indirectly, mean something without making it fully explicit. The first way arises whenever an utterance, even after disambiguation and reference fixing, does not by virtue of linguistic meaning express a complete proposition. When a sentence is in this way semantically underdeterminate, understanding an utterance of it requires a process of completion to produce a full proposition. The second way occurs when the utterance does express a complete proposition (possibly as the result of completion) but some other proposition, yielded by what I call the process of expansion, is being communicated by the speaker. In both cases the speaker is not being fully explicit. Rather, he intends the hearer to read something into the utterance, to regard as if it contained certain conceptual material that is not in fact there. The result of completion and/or expansion is what I call conversational impliciture."

Explicature vs. impliciture   The differences seem to be small and only partially related to the relevant phenomena (Bach 2006a; Carston 2004:650)

Definition 3 (Presumptive meaning; Levinson 2000:22)**.** "What it [the standard Gricean picture –CP] omits is a third layer, what we may call the level of *statement-* or *utterance-meaning* (see Atlas 1989:3–4), or, as I will prefer below, *utterance-type-meaning*. This third layer is a level of systematic pragmatic inference based *not* on direct computations about speaker-intentions but rather on general expectations about how language is normally used. These expectations give rise to presumptions, default inferences, about both content and force; [...]"

Generalized vs. particularized   Levinson was inspired by Grice's (1975:56) distinction, which prefigures the idea that GCIs are present by default.

The grammaticized view   Chierchia et al. (To appear) discuss only numerical upper bounds and lexical scalar inferences, which they argue are part of what is said. They would likely be sympathetic to extending it to ordering with *and*. They clearly draw the line short of particularized inferences. My hunch is that they would regard underspecification as a complex mix of ellipsis phenomena, presuppositions, and implicit LF-only material.

4 Common sources of evidence for various positions

This section reviews the phenomena people tend to invoke when arguing about whether a meaning is a conversational implicature or something else.

The form of the tests Basically all of the tests/observations have the same underlying logic:

  i. We choose an operator (morpheme, word, construction) *A* that is uncontroversially part of what is said.

 ii. We check to see whether *A*'s semantic arguments include a given meaning *M* when the expression conveying *M* seems to be in the scope of *A*.

   a. If yes, *M* is part of what is said.

   b. If no, then there is a lot of work to be done to determine its status (it could be presupposed, conversationally implicated, conventionally implicated, connotative, . . .).

User beware I provide illustrative examples but no guarantees regarding consistent behavior. It's necessary to test all the constructions you study to make sure they pattern together with respect to the phenomena you care about.

A note on judgments The judgment marks (and lack thereof) are culled from the literature. I'm not necessarily endorsing them.

4.1 Cancellation

General assumption If a meaning is cancellable, then it is not part of what is said.

(1) Underspecification

   a. Jack and Jill are married {to each other}.   (Bach 1994)

   b. Jack and Jill are married, but not to each other.

(2) Numerical upper-bounds

   a. These three, in fact four, flexible records seem to be rare Goodson Records.

   b. i have had three, maybe four nosebleeds in the past 24 hours

(3) Generalized conversational implicature

   a. Guzman to miss some, maybe all of season [. . .]

   b. Some, in fact all, of the most magical things in my life happened way outside my comfort zone [. . .]

(4) Ordering with *and*

   a. Dinner and a movie . . . but not in that order.

   b. I'd buy a thoroughbred horse and a new car, (but maybe not in that order)!

Concerns In addition to the concerns raised in the previous class about the theoretical status of cancellability, one might worry that examples like (1) do not involve cancellation, but rather the exclusion of certain kinds of resolution in favor of others. On this view, nothing is cancelled, and thus underspecification can be left on the 'what is said' side even if we decide to adopt the strong view of cancellation above.

4.2   Denials

General assumption   In dialogue, direct denials are appropriate only if they target only what is said.

(5)   Underspecification

      A: Are Jack and Jill married?

    B1:   No, not to each other.

    B2:   Not to each other!

    B3:   Yes, but not to each other.

(6)   Numerical expression

      A: Do you have two children?   (Horn 1992; Breheny 2008)

    B1:   No, three.

    B2:   [?]Yes, (in fact) three.

(7)   Ordering with *and*

      A: Did they fall in love and get married?

    B1:   No, they got married and (then, luckily) fell in love.

    B2:   No, not in that order.

    B3:   Yes, and in that order!

(8)   Generalized scalar implicature

      A: Do you have two children?   (Horn 1992; Breheny 2008)

    B1:   No, three.

    B2:   [?]Yes, (in fact) three.

Changing positions   Based on these contrasts, Horn (1992, 2006) concludes that the upper-bound meaning for numerical expressions is not a conversational implicature (cf. Horn 1972). See also Breheny 2008.

On the nature of denial   Denial is a discourse-level, inter-agent phenomenon that strongly favors targeting the main assertion of the preceding utterance. For example, denying backgrounded material often requires special devices ('Hey, wait a minute . . . '). Absent a theory of how the main assertion aligns with different kinds of content, we should proceed carefully. For relevant discussion, Shanon 1976; von Fintel 2004; Gillies and von Fintel 2011; Potts 2008; Roberts et al. 2009; Clifton and Frazier 2010.

Obligatory scalar implicatures?   Chierchia et al. (To appear:§4) argue that some scalar implicatures are obligatory. Numerical cases are their central example. One can imagine their frustration if the neo-Gricean response is simply to reclassify them (something that, in fairness, Bach (1994) and Sperber and Wilson (1995) did long ago).

4.3 Morphosyntactic negation

General assumption   Morphosyntactic negation can reverse the truth values only of what is said.

Major caveat for metalinguistic negation   Horn (2006): "When it is the upper bound that appears to be negated (*It's not possible, it's CERTAIN*), a range of syntactic, semantic and intonational evidence indicates the presence of a METALINGUISTIC or echoic use of negation, in which the negative particle is used to object to any aspect of an alternate (actual or envisaged) utterance, including its conventional and conversational implicata, register, morphosyntactic form or pronunciation (Horn 1989: Chapter 6)."

Illustration   In propositional logic, negating the inclusive disjunction $\vee$ yields a connective with the force of *nor*, whereas negating the exclusive disjunction $\bar{\vee}$ yields a connective with the force of *neither or both*:

	p	q	$p \vee q$	$p \bar{\vee} q$	$\neg(p \vee q)$	$\neg(p \bar{\vee} q)$
w_1	T	T	T	F	F	T
w_2	T	F	T	T	F	F
w_3	F	T	T	T	F	F
w_4	F	F	F	F	T	T

(9)   Disjunction (a generalized conversational implicature)

    a.   Sam didn't take syntax 'r phonetics.

    b.   Sam didn't take syntax OR phonetics — he took both.

    c.   Sam didn't take syntax {'r/OR} phonetics — he took neither or both.

(10)   Underspecification

    a.   Jack and Jill aren't married {to each other}.

    b.   Jack and Jill aren't married — each is married to someone else.

    c.   Jack and Jill aren't married — both plan to remain single forever.

(11)   Numerical expressions

    a.   Neither of us has three kids — we each have just one child.

    b.   Neither of us has three kids — she has two and I have four.   (Horn 2006)

(12)   Ordering with *and*

    a.   They didn't get married 'n' fall in love — they're technically still just dating.

    b.   They didn't get married 'n' fall in love — they fell in love first.

(13)   Generalized scalar implicature

    a.   Neither of us liked the movie — we both hated it, in fact.

    b.   Neither of us liked the movie — she adored it and I hated it.   (Horn 2006)

4.4 Quantified environments

General assumption Downward entailing operators reverse entailments — weak items become strong and strong items become weak. Thus, for scalar items, upper-bounding conversational implicatures should be reversed (Levinson 2000) or disappear (Gazdar 1979; Chierchia 2004; Chierchia et al. To appear) when in these environments.

(14) Generalized scalar implicature: because the restriction to *every* is downward monotone, the (i) examples unilaterally entail the (ii) examples.

    a. i. Everyone who has children or ('r) pets is happy.
        ii. Everyone who has children and pets is happy.

    b. i. No one who has children or ('r) pets is happy.
        ii. No one who has children and pets is happy.

(15) Numerical expression: the facts are messy.

    a. i. Everyone who has two children receives tax benefits. (three or more → benefits)
        ii. Everyone who has two children received tax benefits. (three or more → benefits)

    b. i. No one who has two children received tax benefits. (three or more ↛ benefits)
        ii. No one who has two children receives tax benefits. (maybe: three or more → benefits)

Breheny (2008) argues based in part on these examples that numerical expressions entail their upper-bounds, but his situation semantics means that the domain of quantification can be expanded to give rise to the appearance of mere lower-bounding. (See also Kratzer 2003.)

4.5 Intrusive implicatures

General assumption If the arguments to truth-conditional operators include a meaning M, then M must be part of what is said. This is a more general version of the morphosyntactic negation test (sec. 4.3).

(16) Underspecification

    a. If Jack and Jill get married {to each other}, then their parents will have to see each other again.

    b. If Jack and Jill get married to other people, then they can avoid a messy reunion.

(17) Numerical expression

    a. Because he earns $40,000, he can't afford a house in Palo Alto. (Levinson 2000)

    b. Having three children is less work than having four.

(18) Ordering with *and*

    a. If they got married and had a child, their parents will be pleased, but if they had a child and got married their parents will not be pleased. (Levinson 2000; Horn 2006)

    b. It is safer to drive home and drink beer than it is to drink beer and drive home.

(19) Generalized scalar implicature

    a. It is better to eat some of the cake than it is to eat all of it. (Levinson 2000; Horn 2006)

    b. If some of my friends come to the party, I'll be happy — but if all of them do, I'll be in trouble.

    c. If you take phonology or semantics, you attend meeting A. If you take both, you attend meeting B.

(after Chierchia et al. To appear)

Really important cases These examples continue to play a central role in all of these debates. We will see them again in this class, especially on April 23. For discussion, see Levinson 2000; Horn 2006; Russell 2006:§2; Chierchia et al. To appear:§2.2.

4.6 Attitude reports

General assumption   If *M* forms part of an attitude report, then *M* has to be part of what is said (because it has to be included in the argument to the attitude predicate). (For related discussion in the context of conventional implicature, see Bach's (1999a) 'Indirect Quotation (IQ) test'.)

(20)   Underspecification

    a.   Sue: "Jack and Jill are getting married to each other."

    b.   Sue said that Jack and Jill are getting married.

(21)   Numerical expression

    a.   George believes that three Stanford linguists are spies.

    b.   George believes that exactly three Stanford linguists are spies.

(22)   Ordering with *and*

    a.   Sue: "Alonzo fell in love and got married."

    b.   Sue said that Alonzo fell in love and got married.

    c.   [#] Sue said that Alonzo got married and fell in love.

(23)   Generalized scalar implicature

    a.   i.   George believes that some of his advisors are crooks.
       ii. George believes that some but not all of his advisors are crooks.

    b.   i.   George ate some of the fries or the apple pie.
       ii. George ate some but not all of the fries or the apple pie, but not both.

4.7 Cross-linguistic lexicalization

General assumption   If one posits that a phonological form A has denotations A_i and A_j in language L, then one predicts that there will be a language L' in which A_i and A_j are expressed by distinct lexical items (Grice 1989; Horn 1989, 2006).

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