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[Special Lecture]

Implicature Revisited: Problems and Prospects in Neo-Gricean Pragmatics

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Over 40 years ago Paul Grice inaugurated modern pragmatics by distinguishing what is implicated from what is said within a general theory of cooperation and rationality. While since challenged, the Gricean framework, with appropriate emendations, remains the most natural and explanatory approach for motivating constraints on negative incorporation, the behavior of scalar predicates, negative strengthening, and other linguistic phenomena. Recent arguments for an enriched conception of propositional content and for the grammaticization of scalar implicature and against the existence of conventional implicatures as non-truth-conditional aspects of encoded meaning are summarized and critiqued.

Keywords: conventional implicature; conversational implicature; pragmatic enrichment; scalar predicates; square of opposition; what is said

Without employing the term 'pragmatics', Paul Grice laid out the map for modern pragmatic theory in his William James lectures—delivered at Harvard in 1967 and published exactly 20 years ago. A year after unveiling the central concept of implicature, Paul Grice (1968) published one of these lectures, a study of the relation of word meaning to utterer's meaning situated within his overall framework for speaker meaning (Grice 1968: 225; cf. also Grice 1989: 118):

> The wider programme...arises out of a distinction I wish to make within the total signification of a remark, a distinction between what the speaker has said (in a certain favored and maybe in some degree artificial, sense of 'said'), and what he has 'implicated' (e.g., implied, indicated, suggested, etc.), taking into account the fact that what he has implicated may be either *conventionally* implicated (implicated by virtue of the meaning of some word or phrase which he has used) or *non-conventionally* implicated (in which case the specification of implicature falls outside the specification of the conventional meaning of the words used).

It is now somewhat poignant to read Grice's footnote on the first page of this paper—"I hope that the material in this paper, revised and re-arranged, will form part of a book to be published by Harvard University Press"—given that 21 years would elapse before

that book would appear in print, and posthumously at that. Actually, the notions of conventional and non-conventional (specifically conversational) implicature, as defined here and as mapped by the familiar diagnostics of cancelability and detachability, had already been introduced several years earlier without the labels introduced above but already depicted as distinct varieties of (non-logical) implication (cf. Grice 1961: §3 and discussion in Horn 2004), and in some ways represented the culmination of a pre-Gricean legacy not always recognized or understood.

While each genus of implicature has undergone rigorous scrutiny from many directions, both sympathetic and critical, over the four ensuing decades, our attention here will be focused primarily on the non-conventional species, particularly the dominant breed of conversational implicature. Conventional implicature has been attacked (Bach 1999) and radically reconfigured (Potts 2005) but is on the rise again; see Horn 2007b, 2008 for one attempt at rehabilitation. I return to conventional implicature in the final section of this paper.

1. Quantity and its reflexes

Conversational implicature arises from the shared presumption that S and H are interacting to reach a shared goal. A speaker S saying *p* and implicating *q* counts on her interlocutor's ability to compute what was meant (by S's uttering *p* at a given point in the interaction) from what was said, based on the assumption that both S and H are rational agents. Speakers implicate, hearers infer; a hearer may recover an implicature, but to implicate is not to infer (cf. Horn (to appear a) for some complications). Nevertheless, S's assumption that H will draw the appropriate inference is what makes implicature a rational expectation. The governing dictum is the Cooperative Principle: "Make your conversational contribution such as is required, at the stage at which it occurs, by the accepted purpose or direction of the talk exchange" (Grice [1967] 1989: 26). This principle is instantiated by a set of general maxims of conversation:

(1) QUALITY: Try to make your contribution one that is true.
   1. Do not say what you believe to be false.
   2. Do not say that for which you lack evidence.

   QUANTITY:
   1. Make your contribution as informative as is required
      (for the current purposes of the exchange).
   2. Do not make your contribution more informative than is required.

   RELATION: Be relevant.

   MANNER: Be perspicuous.
   1. Avoid obscurity of expression.
   2. Avoid ambiguity.
   3. Be brief. (Avoid unnecessary prolixity.)

4. Be orderly.

Of these, the maxim responsible for the most spillage of linguistic ink is the first submaxim of quantity. It has been recognized for millennia that while assertions based on the particular, existential, or weak scalar operator *some* can express true propositions even when the stronger value *all* is known to hold, the result *(Some dogs are mammals, It is possible that 2+2=4)* will tend to appear awkward or even anomalous. For Aristotle, whatever holds of all dogs holds ipso facto of some (*Topics* 109a3), a view that prevailed until the mid-19th century, when Sir William Hamilton of Edinburgh posited a semantic distinction between two senses of *some,* the indefinite *(at least some)* and the semi-definite *(some but not all)*, with the latter meaning—incompatible with *all*—as the basic one: 'Some, if not otherwise qualified, means some only—this by presumption' (1860: 254). On this reading of the particular, the statements *Some men are bald* and *Some men are not bald* are not only (as for Aristotle) compatible ("merely verbally opposed"), given that their conjunction is logically consistency, but are in fact indistinct: 'In reality and in thought, every quantity is necessarily either all, or none, or some. Of these the third...is formally exclusive of the other two' (Hamilton 1860: 261).

Hamilton's lifelong nemesis Augustus De Morgan was quick to attack this approach. While acknowledging the existence in 'common language' of Hamilton's "presumption" whereby *some* conveys *some not (not all),* De Morgan defended the standard practice of relegating this inference to an extra-logical domain. For both De Morgan and his fellow anti-Hamiltonian John Stuart Mill, the delimiting of *some* is subject to the effects of context and speech level and to the speaker's epistemic state (as signaled by the added emphases below):

> There are three ways in which one extent may be related to another...: complete inclusion, partial inclusion with partial exclusion, and complete exclusion. This trichotomy would have ruled the forms of logic, **if human knowledge had been more definite**. (De Morgan 1858: 121)
>
> No shadow of justification is shown...for adopting into logic **a mere sous-entendu of common conversation** in its most unprecise form. If I say to any one, 'I saw some of your children today', he might be justified in inferring that I did not see them all, **not because the words mean it**, but because, if I had seen them all, it is most likely that I should have said so: **even though this cannot be presumed unless it is presupposed that I must have known whether the children I saw were all or not**. (Mill 1867: 501)

Note in particular the last sentence of Mill's passage, alluding to the two-stage process involved in the computation of implicature recovery, built into the rationality- and cooperation-driven Gricean model but not directly captured in competing theories (e.g. those of Chierchia and his colleagues).

Mill's allusion to a tacit principle which requires the speaker to use the stronger *all*

in place of the weaker *some* when possible, and which invites the hearer to draw the corresponding inference when the stronger term is eschewed, has been echoed by others in his own time—

> Whenever we think of the class as a whole, we should employ the term All; and therefore when we employ the term Some, it is implied that we are not thinking of the whole, but of a part as distinguished from the whole—that is, of a part only. (Monck 1881: 156)

—and in Grice's (e.g. Doyle 1951, Fogelin 1967: 20–22; see Horn 1990 and Chapman 2005: Chap. 5 for more on the chronology).[1] An early stab at formalizing Mill's principle is due to Strawson (1952: 178–9), who credits this 'general rule of linguistic conduct' to 'Mr H. P. Grice': 'One should not make the (logically) lesser, when one could truthfully **(and with greater or equal clarity)** make the greater claim.' Grice's own 'first shot' (1961: 132) at this 'general principle governing the use of language' was that 'One should not make a weaker statement rather than a stronger one **unless there is a good reason for so doing**', later refashioned as his first submaxim of quantity (Grice 1989: 26): 'Make your contribution as informative **as is required (for the current purposes of the talk-exchange)**.' Note in particular the role of the boldfaced codicils above, which recognize the interplay of quantity with other factors, including clarity, quality (truthfulness) and relevance, represented by competing maxims in (1).

Given the "sous-entendu of common conversation" posited by Mill exactly a century earlier, Grice's contribution—beyond securing the naming rights to the relation in question—was to ground its operation within an plausible account of speaker meaning and of the interaction of tacit principles derived from assumptions of the rationality and mutual goals of the interlocutors. In particular, Grice's first quantity maxim is systematically exploited to yield upper-bounding SCALAR IMPLICATURES associated with relatively weak scalar operators, those configurable on a scale defined by unilateral entailment as in *<all, most, many, some>*. What is **said** in the use of a weak scalar value like those boldfaced in (2) is the lower bound *(...at least...);* what is **implicated**, in the absence of contextual or linguistic cancellation, is the upper bound *(...at most ...)*. What is **communicated**, ceteris paribus, is the "two-sided reading" that combines what is said with what is implicated. Thus in (2d), "If we assert that a man who has acted in

[1] The implication from the use of *some* to 'not all' cited by Mill and Monck is a two-way street, as recognized by Sapir (1930: 21):

> 'Not everybody came' does not mean 'some came', which is implied, but 'some did not come'. Logically, the negated totalizer [*not every*] should include the totalized negative [*none*] as a possibility, but ordinarily this interpretation is excluded.

While Chierchia (2004: 58) argues that implicatures in negative contexts like Sapir's "appear to be generally somewhat weaker and flimsier than their positive counterparts", others (e.g. Horn 2006, 2009) have disputed the existence of any such asymmetry.

a particular way must be either a knave or a fool, we by no means assert…that he cannot be both" (Mill 1867: 512)—but this "exclusive" understanding of the disjunction may well be communicated.

(2)		1-SIDED READING →	2-SIDED READING
a.	Pat has **3** children.	'at least 3'	'exactly 3'
b.	You ate **some** of the cake.	'some if not all'	'some but not all'
c.	It's **possible** she'll win.	'at least possible'	'possible but not certain'
d.	He's a knave **or** a fool.	'…and perhaps both'	'...but not both'
e.	It's **warm**.	'at least warm'	'warm but not hot'

The alternative view on which each scalar predication in (2) is lexically ambiguous between one-sided and two-sided readings falls afoul of Grice's (1989: 47) Modified Occam's Razor: "Senses are not to be multiplied beyond necessity." Scalar implicature was introduced and formalized in work by Horn (1972, 1989), Gazdar (1979), Hirschberg (1991), and Levinson (2000); cf. also Katzir (2007) and Geurts (2010) for insightful recent discussions of certain problems arising in the implementation of the central notions involved and Bontly (2005) for a defense of Modified Occam's Razor as a heuristic in acquisition.

In neo-Gricean frameworks (Horn 1972, 1989, 2004; Gazdar 1979; Levinson 2000), the maxim of quantity—canonically[2] induced by unilateral entailment relations between lexical oppositions—motivates the establishment of quantity scales such as those in (3):

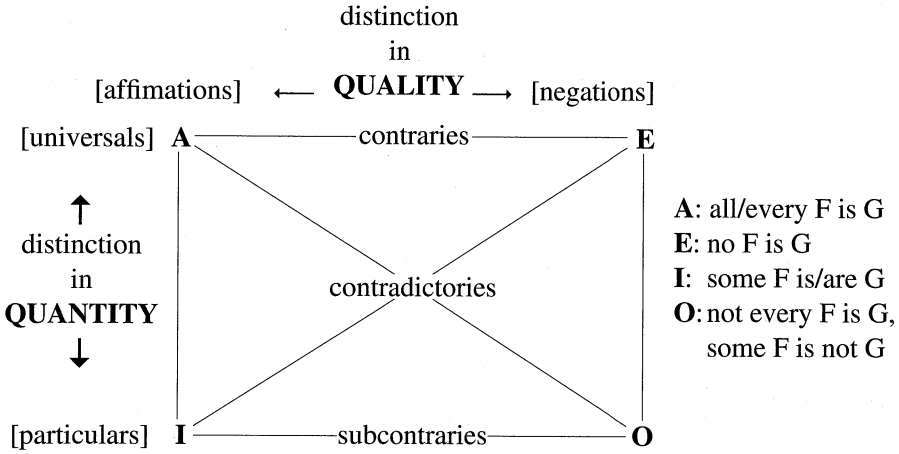
(3)		
	<all, most, many, some>	*<no(ne), few/not many, not all>*
	<always, usually, often, sometimes>	*< never, rarely, not always>*
	<certain, likely, possible>	*< freezing, cold, cool, lukewarm>*
	< and, or >	*<excellent, good, OK>*
	<the, a>	*<thumb, finger>*

Based on such scales, the speaker's assertion of a relatively weak value Q(uantity)-implicates that she was not in the epistemic position to have asserted any stronger value (to its left) within the same scale. This accounts for the role of context in the cancellation and reinforcement of the upper bound of scalar predications allows for generalizations across operator types (quantifiers, binary connectives, deontic and epistemic modals, non-embedding predicates), while obviating the need to invoke any lexical ambiguity for the relevant operators (e.g. inclusive vs. exclusive disjunction).

[2] As stressed by Hirschberg (1991) and Geurts (2010), entailment-based scalar implicature represents just one variety of quantity implicature. The prevalence of ad hoc (non-lexically generated) scales and the implicatures derived therefrom must also be dealt with in any comprehensive pragmatic theory.

The neo-Gricean approach to the subcontraries allows us to reconstruct Aristotle's notion of 'merely verbal' opposition between **I** and **O** vertices of the Square of Opposition as a relation of mutual quantity implicature.

(4) Square of Opposition (Apuleius and Boethius, after Aristotle):



Scalar implicature provides a natural account of the lexicalization asymmetry of the Square of Opposition, an asymmetry displayed in tabular form in (5):

(5) Lexicalization and the three-cornered square

	DETERMINERS/ QUANTIFIERS	QUANT. ADVERBS	BINARY QUANTIFIERS	CORRELATIVE CONJUNCTIONS	BINARY CONNECTIVES
A:	all α, everyone	always	both (of them)	both...and	and
I:	some α, someone	sometimes	one (of them)	either...or	or
E:	no α, no one	never	neither (of them)	neither...nor	nor
	(=all¬/¬some)	(=always¬)	(=both¬/¬either)	(=[both...and]¬)	(=and¬)
O:	*nall α, *neveryone	*nalways	*noth (of them)	*noth...nand	*nand
	(= some¬/¬all)	(= ¬always)	(= either¬/¬both)	(= [either...or]¬)	(= and¬/¬or)

Although *some* does not contribute the same semantic content as *some not (not all),* the use of either of the two values typically results in communicating the same information in a given context, 'some but not all'. The relation of mutual quantity implicature holding between positive and negative subcontraries results in the superfluity of one of the two for lexical realization, while the functional markedness of negation (see Horn 1989 for extensive documentation) predicts that the unlexicalized subcontrary will always be **O** rather than **I**. I have argued (Horn 1972: Chap. 4; 1989: §4.5; to appear b) that this pragmatic account of the "three-cornered square" is more general and more explanatory than the rival theories that either dismiss the asymmetry as uninteresting or restrict it to the determiners and quantificational operators while bypassing other operator types (e.g. connectives, adverbs, and modalities) along with intermediate values that can be mapped

onto the Square of Opposition.

The neo-Gricean position on scalar predicates has been vigorously challenged by Relevance theorists (e.g. Carston 2002, 2004, 2005 and work reviewed therein), who take scalar predications to involve not lexical but propositional ambiguity, with the pragmatically enriched two-sided meanings constituting 'explicatures'. While the standard neo-Gricean line (Horn 1972, 1989; Levinson 2000) treats the cases in (2) homogeneously, there is considerable evidence that this analysis is not actually tenable for number words, as in (2a). Rather, such predications are semantically underspecified, rather than assigned the weak, 'at least n' values by linguistic means; the propositional content is filled in only through reference to the context of utterance. Arguments for this position, originally given in work by Carston (1988) and Koenig (1991), are ratified and extended in later work including Horn 1992, Geurts 1998, Bultinck 2005, and Breheny 2008. But crucially, this result for the cardinals does not automatically extend to the other scalar values.

Thus, while Ariel (2004, 2006) disputes an implicature-based account of the upper bound of *most*-statements (i.e. the move from *most F are G* to 'not all F are G') in part on the basis of a putative parallel between *most* and the cardinals regarding the status of the upper bound, I have argued (Horn 2006: §4) that *most* is crucially distinct in behavior from the cardinals and that its meaning, like that of *some,* should be assigned the standard neo-Gricean account (unilateral semantics cum upper-bounding scalar implicature). The strongest evidence for such a distinction is the fact that a simple negative answer to a general scalar question, as opposed to one involving a cardinal value, always returns a 'less than' meaning, since this context selects descriptive and not metalinguistic negation. If you ask me whether most of the students passed, my negative response commits me to the proposition that 50% or fewer passed, not to the disjunction that either 50%-or-fewer passed or else all of them did. Yet it is just such a disjunction that I must be asserting if my reply negates the proposition that '50%-99% of the students passed' as on Ariel's semantic-upper-bound account. On the other hand, if you asked me whether 10 students passed and I knew that 15 did, I must first determine whether you were asking me if at least 10 passed or exactly 10 passed before knowing whether to answer positively or negatively; a simple 'No' response to 'Did 10 of the students pass?' would commit me to either 'Fewer than 10 passed' or 'Either fewer or more than 10 passed', depending on the context. Similarly, I would report that 'I am surprised that most of the students failed' only if I had expected at least half of them to pass, while my report that 'I am surprised that 5 students failed' is consistent with either a more pessimistic or more optimistic expectation.[3]

[3] In recent work, Hackl (2009) has maintained that *most F are G* and *more than half of (the) F are G* have different, although logically equivalent, logical forms, a difference that has direct consequences for how these expressions are processed and verified. In fact, though, the differences between *most*

In addition to the linguistic evidence collected in Horn 2006 and other work, a now considerable body of empirical work has confirmed that the acquisition and processing of cardinals differs along a variety of parameters from that of other scalar values; note especially the studies in Papafragou and Musolino 2003 and Hurewitz et al. 2006, as well as Papafragou and Schwarz 2006 for empirical challenges to Ariel's findings on *most*. Thus, the behavior of cardinals must be distinguished from that of their inexact scalar cousins. It is not obvious how the unitary explicature-based program for all scalar operators is equipped to draw the necessary distinctions here, any more than is the approach in Levinson (2000: 87–90), which retains the original (Horn 1972) neo-Gricean line for both cardinal and general scalar predications.

2. The Manichaean model (and others)

Another challenge to the Gricean picture of implicatures involves the number and status of the maxims. Two decades after positing the schema in (1), Grice himself later acknowledged (1989: 371ff.) that the four macroprinciples (inspired by Kant) and nine actual maxims in his inventory were somewhat overlapping and non-coordinate. The number of maxims has been revised both upward (Leech 1983) and downward. The dualistic program of Horn (1984, 1989, 2007a) begins by following Grice's lead (1989: 371) in ascribing a privileged status to Quality, on the grounds that without the observation of Quality, or a convention of truthfulness as in Lewis 1969, no question of the observance of the other maxims can be considered (though see Sperber and Wilson 1986 for a dissenting view). The remaining maxims are subsumed under two countervailing functional principles whose role in communication and language change traces back to Paul (1889) and Zipf (1949). Here are some apposite citations regarding these complementary forces and their interaction:

> La parole est moitié à celuy qui parle, moitié à celuy qui l'escoute.
>
> (Montaigne 1580: 288)
>
> The more economical or more abundant use of linguistic means of expressing a thought is determined by the *need*... Everywhere we find modes of expression forced into existence which contain only just so much as is requisite to their being understood. The amount of linguistic material employed varies in each case with the situation, with the previous conversation, with the relative approximation of the speakers to a common state of mind. (Paul 1889: 351)
>
> The linguist must keep in mind two ever-present and antinomic factors: first, the requirements of communication, the need for the speaker to convey his message, and second, the principle of least effort, which makes him restrict his output of

and *more than half* found by the studies Hackl reviews do not mesh with those claimed by Ariel.

> energy, both mental and physical, to the minimum compatible with achieving his ends. (Martinet 1962: 139)
>
> The speaker always tries to optimally minimize the surface complexity of his utterances while maximizing the amount of information he effectively communicates to the listener. (Carroll and Tanenhaus 1975: 51)
>
> Maximize meaning, minimize means.
>
> —maxim of graphic designer Abram Games (1914–1996)

In the Manichaean model (Horn 2007a), implicatures may be generated by either the Q Principle (essentially 'Say enough', generalizing Grice's first submaxim of Quantity and collecting the first two 'clarity' submaxims of Manner) or the R Principle ('Don't say too much', subsuming Relation, the second Quantity submaxim, Relation, and Brevity). The hearer-oriented Q Principle assures the sufficiency of informative content, exploited to generate upper-bounding (typically scalar) implicata. The R Principle is a correlate of Zipf's principle of least effort dictating minimization of form, exploited to induce strengthening implicata; it is responsible for euphemism, indirect speech acts, neg-raising, and meaning change (Horn 2007a).

While Q-based implicatures do not strengthen the force of an assertion, R-based implicatures do. These include the ascription of the ability to perform some action implicating the successful performance of that action *(Dana was able to solve the problem)*, the 'perfection' of a sufficient *if*-condition to a necessary and sufficient *iff*-condition *(If you mow the lawn, I'll give you $5)*, and the conventionalized narrowing of a word's extension from a set to a salient or prototype member or subset, including the use of vague expressions as euphemisms for what one would prefer to leave unsaid. (Compare the "inference to the best interpretation" invoked by the I[nformativeness] heuristic of Levinson 2000.)

In accord with the DIVISION OF PRAGMATIC LABOR (Horn 1984), a relatively unmarked form—briefer and/or more lexicalized—will tend to become R-associated with a particular unmarked, stereotypical meaning, use, or situation, while its periphrastic or less lexicalized counterpart, typically more complex or prolix, will tend to be Q-restricted by implicature to those situations outside the stereotype, for which the unmarked expression could not have been used appropriately (as in *kill* vs. *cause to die,* or *mother* vs. *father's wife*). Formalizations of the division of pragmatic labor have been undertaken within bidirectional optimality theory and game-theoretic pragmatics; cf. e.g. Blutner 2004, van Rooij 2009, and references cited therein.

Evidence for a Manichaean pragmatics is provided by the mirror image principles of (R-based) synonymy avoidance and (Q-based) homonymy avoidance as factors in language acquisition and linguistic change, as well as by the complementary processes of linguistically motivated Q-based narrowing (*rectangle* +> 'non-square', *finger* +> 'non-thumb', *friend* +> 'non-lover') and socially motivated R-based narrowing (*drink* +> 'alcoholic drink', *temperature* +> 'fever', *friend* +> 'lover').

Related to lexical narrowing, and also motivated by social considerations—in particular, those relating to euphemism and respect for negative face as described in Brown and Levinson 1987—is the R-based strengthening of negative expression. In Bosanquet's words (1911: 281), 'The essence of formal negation is to invest the contrary with the character of the contradictory'. Speakers across a wide range of languages tend to weaken the force of their intended negative judgments, counting on hearers to fill in the intended stronger negative evaluation. In English, the resultant contrary negatives in contradictory clothing include affixal negation, litotes, and 'neg-raising' instantiated in (6a–c) respectively; cf. Horn (1989: Chapter 5) for extensive discussion.

(6) R-based negative strengthening

(a) *contrary readings for affixal negation* (conventionalized/lexicalized strengthening)

He is unhappy.	(stronger than ¬[He is happy])
She was unfriendly.	(stronger than ¬[She was friendly])
I disliked the movie.	(stronger than ¬[I liked the movie])

(b) *litotes/understatement in simple denials* (online/non-conventionalized strengthening)

He's not happy with it.	(stronger than ¬[He's happy with it])
I don't like *natto*.	(stronger than ¬[I like *natto*])
I'm not optimistic that φ.	(stronger than ¬[I'm optimistic that φ])

(c) *neg-raising effects* (strengthened understanding as a convention of usage)

I don't believe it'll snow.	(≈ I believe it won't)
I don't want you to go.	(≈ I want you not to go)
It's not likely they'll win.	(≈ It's likely they won't)

In each case a general, formally contradictory negation is strengthened to a specific, contrary understanding; where the constructions differ is in the degree of conventionalization of this strengthening inference. Since Aristotle, it has been recognized that affixal negatives conventionally strengthen to contraries, whence the readings in (6a). In litotes, I say that I don't like *natto* (6b), or that I'm not exactly thrilled with your advice, precisely to avoid acknowledging my antipathy directly; at the same time, I count on your willingness to fill in my intended R-strengthened (contrary) interpretation rather than simply taking me at my (contradictory) word. In an embedding environment, this same practice is responsible for the neg-raising effect seen in (6c), where a negative operator with semantic scope over certain predicates of opinion, desire, or likelihood is understood as if it had lower-clause scope. The contrary meaning ('x disbelieves that p', 'x believes that not-p') is sufficient but not logically necessary to establish the truth of the contradictory ('x does not believe that p'), yet it is treated as if it were necessary—not surprisingly, since it represents the inductively salient case that makes the contradictory true and since there may be social constraints against direct expression of the stronger contrary (cf. Horn 1989, 2000).

Carston (2002: Chap. 3; 2005) rejects the distinction between R-based and Q-based implicature as illusory, on the grounds that "there is a strengthening of communicated content from 'at least some' to 'just some'" (Carston 2005: 314–15) that is entirely parallel to e.g. the strengthening of not believing that p to believing that not-p. One question arising here is the extent to which relevance theory is truly unitarian itself, given the trade-off between processing effort and contextual effect: "Human cognitive activity is driven by the goal of maximizing relevance: that is...to derive as great a range of contextual effects as possible for the least expenditure of effort" (Carston 1995: 231). We have also noted empirical grounds to distinguish Q-based and R-based processes. But in any event, does the upper-bounding effect of Q-based, in particular scalar, implicature amount to strengthening, as maintained by Carston (and by Chierchia 2004)? Does a scalar implicature, by upper-bounding an assertion, in fact strengthen it? And what exactly do we mean by 'strength'?

In fact, while R-based implicature increases both the informative content and rhetorical strength (positive or negative) of the assertion, what is communicated as a result of Q-based upper-bounding, while it is more specific and hence **informationally** stronger than the unbounded utterance, is not **rhetorically** stronger than what is said (i.e. the basic utterance without the implicature). Thus, while *some* is consistent with *all, some but not all* (let's call it *some*|) is inconsistent with *all.* Thus *some*| *F are G,* while unilaterally entailing *some F are G,* yields a more specific but not a stronger positive assertion.

Further, as Michael Israel (p.c.) points out, a statement with *some* is clearly stronger than one with *some*| in the terms of Ducrot's argumentation theory (cf. e.g. Anscombre and Ducrot 1983). Thus, a sentence like (7a) represents a stronger argument for the (underlined) conclusion than does the more specific but rhetorically weaker (7b).

(7) a. I've already graded some of the exams, so it's time for a break.
b. ?I've already graded some, but not all, of the exams, so it's time for a break.

Compared with the dualistic framework sketched above, the richer framework of Levinson 2000 posits an interaction of Q, I (≈ R), and M (Manner) heuristics. Levinson's reconstruction of the division of pragmatic labor involves not Q but M, given that *some* differs from *all* in informative content whereas *kill* differs from *cause to die* in complexity of production or processing. As Levinson concedes, however, the Q and M patterns are closely related, since each is negatively defined and linguistically motivated: S knows (consciously or tacitly) that her failure to use a more informative and/or briefer form will lead H to infer that S was not in a position to have used that form. Unlike Q implicature, R/I-based implicature is not negative in character and is socially rather than linguistically motivated, typically yielding a culturally salient stereotype (Levinson 2000; cf. also Huang 2006 for a useful overview).

3. Pragmatic intrusion and 'what is said'

Recent years have seen the formulation of a partial consensus regarding semantic underspecification and pragmatic enrichment, a consensus that agrees in rejecting the conception bequeathed by Grice that the pragmatics can be simply "read off" the semantics, while disagreeing on the conclusions to be drawn for the Gricean notion of "what is said". For Grice, what is said is the complement of what is implicated (= what is meant — what is said), but there are different ways of conceptualizing the area between the said and the meant (or, for the hearer, between the said and the interpreted). Situating what is said along this spectrum is itself controversial; what is said for Recanati (2001), Ariel (2008), and the relevance theorists is enriched by pragmatically derived material (hence constituting an explicature). Levinson, on the other hand, responds to the apparent need to accept "pragmatic intrusion" into what is said by allowing conversational implicatures to have truth-conditional consequences for the propositions in question, contra Grice.

When we turn from the relatively straightforward cases of reference fixing and ambiguity resolution countenanced by Grice himself to the more problematic phenomena of completion and saturation or free enrichment (cf. Bach 2001, Recanati 2001, 2004, Carston 2002, and references therein, as well as the relevant chapters in Horn and Ward 2004), there is now a general consensus on accepting what Bach (2005: 15-16) terms the 'contextualist platitude':

> Linguistic meaning generally underdetermines speaker meaning. That is, generally what a speaker means in uttering a sentence, even if the sentence is devoid of ambiguity, vagueness or indexicality, goes beyond what the sentence means.

Thus, the speaker uttering the non-bracketed material in each example in (8) may well communicate the full sentences indicated, enriched by the bracketed addenda. As seen from the cancelability diagnostics on display in (9), however, this process is pragmatic in character, even though its result is the computation of truth-conditionally relevant propositions that are not directly expressed.

(8) a. I haven't had breakfast {today}.
b. John and Mary are married {to each other}.
c. They had a baby and they got married {in that order}.
d. Robin ate the shrimp and {as a result} got food poisoning.
e. Dana is ready {for the exam}.

(9) a. John and Mary are married, but not to each other.
b. They had a baby and got married, but not necessarily in that order.

The demarcation of the explicit is no trivial matter; recall the subtitle of Carston 2002, "The Pragmatics of Explicit Communication." A faithfully Gricean theory (cf. Bach 2001, Borg 2004) can accept neither Levinson's picture of implicatures as benign-

ly informing literal content (what is said) nor the notion of explicature as applied by Relevance theorists. Rather, the pragmatically enriched proposition communicated in such cases is distinct from what is said as defined in Gricean terms. (See Horn 2009 and Terkourafi 2009 for arguments for the utility of what Jennifer Saul has called an "austere" conception of what is said).

Bach (2001) observes that once we give up the "OSOP" (One Sentence, One Proposition) presumption, we can recognize that a given sentence may express not only more than one proposition but fewer than one. What is said in cases like *Dana is ready* may constitute not a truth-evaluable proposition but a propositional radical. Filling in such a radical or completing it within a given context to yield e.g. *Dana is ready to write a dissertation* yields not what is said (which is tightly constrained by the actual syntax) or an explicature (since there is nothing explicit about it), but rather an impliciture, a proposition implicit in what is said in a given context as opposed to a true implicature, a proposition read off what is said (or the way it is said). Similarly, scalar implicatures are reborn as scalar implic-i-tures. What Grice failed to recognize, argues Bach, is the non-exhaustive nature of the opposition between what is said and what is implicated.

Bach includes "Scalar 'implicatures' are implicatures" as #9 in his inventory of misconceptions about implicature: since a speaker uttering "Some of the boys went to the party" means not two separate things but just one thing, i.e. that some but not all of the boys attended, this enriched proposition is an impliciture (built up from what is said), not an implicature. But it should be borne in mind that on the Gricean account (e.g. in Horn 1972, 1989), the scalar implicature here is "Not all of the boys went to the party"; this combines with what is said ("Some...") to yield what is communicated ("Some but not all..."). Thus the impliciture in this case incorporates the scalar implicature rather than supplanting it.

One recurrent issue for a globalist account of conversational implicature is the existence of examples in which implicatures licensed by a subexpression seem to affect the truth-conditions of the larger expression in which they are embedded, as in celebrated example from Cohen (1971) of conjunctions within conditional protases, where (10a, b) are intuitively assigned distinct truth conditions based on the temporal asymmetry of the conjunction within their antecedents.

(10) a. If the old king dies and a republic is declared, I'll be happy.
b. If a republic is declared and the old king dies, I'll be happy.

Analogous cases noted by Wilson and Carston involve comparatives and negations:

(11) It is better to meet the love of your life and get married than to get married and meet the love of your life.

(12) a. He didn't drive home and drink 3 beers; he drank 3 beers and drove home.

b. Driving home and drinking 3 beers is better than drinking 3 beers and driving home.

Even if we follow King and Stanley (2005) in explaining away (12a) as an instance of metalinguistic negation (Horn 1989), this won't extend to the evidently parallel cases with conditionals and comparatives.

Some concessions to the localists appear inevitable, despite the efforts of diehards like King and Stanley (2005), whose response to the evident presence of what they term strong pragmatic effects is to massage the logical form of the original sentences to reveal independent semantic motivation for what would otherwise require localist pragmatic accounts. As stressed by Geurts (2009), the key issues are the plausibility of that independent motivation and the nature of the explanation it provides. One factor on which there is some agreement is the role of focal stress (Horn 2004, 2006; King and Stanley 2005). In the scalar-antecedent conditionals in (13), both Levinson and explicature theorists would build the stronger (bilateral) meaning (e.g. *some but not all, warm but not very warm*) into what is said.

(13) a. If some of my friends come to the party, I'll be happy—but if all of them do, I'll be in trouble.
b. If it's warm, we'll lie out in the sun. But if it's **very** warm, we'll go inside and sit in front of the air-conditioner.
c. If you're convicted of a felony, you'll spend at least a year in jail. And if you're convicted of murder, you'll be executed.
d. If you're injured, the paramedics will take you to the nearest trauma center. But if you're fatally injured, you'll be taken to the morgue.

But in each of these contexts, it's only when the stronger scalar is reached that the earlier, weaker one is retroactively adjusted to accommodate an upper bound into its semantics, e.g. with *some* being **re**interpreted as expressing (rather than merely communicating) 'some but not all' or *injured* 'non-fatally injured'.

The same issues arise for other applications of the pragmatic intrusion argument. Thus, Levinson (2000: 210) extends the argument from conditionals like (10) to *because* clauses, based on such examples as (14):

(14) a. Because he earns $40,000, he can't afford a house in Palo Alto.
b. Because he's such a fine friend, I've struck him off my list.
c. Because the police recovered some of the missing gold, they will later recover it all.

But Levinson's cases are heterogeneous. (14a) involves a cardinal, which as saw in §1 is indeed plausibly taken to involve an adjustment of what is said. In (14b), *such a fine friend* involves conventionalization of the sarcasm intended; compare *?Because he's so considerate, I fired him.* Finally, the *all* in the main clause of (14c) forces the reproc-

essing of the *some* in the first clause as 'some but not all', a reading triggered by the focal stress on *some*. Without the *all* or another context-forcing continuation and without focus, this narrowing is difficult or impossible to obtain.

In general, the distribution of such *because* clauses is quite constrained, in particular for the non-cardinal scalar cases in which the implicated upper bound is taken to be the reason for the truth of the second clause and in which no reprocessing is forced by the affirmation of a stronger value, whence the oddness of the examples in (15).

(15) a. Because the police recovered some *[i.e. only some]* of the gold, the thieves are expected to return later #(for the rest).
b. #Because it's warm out *[i.e. because it's warm-but-not-hot]*, you should still wear a long-sleeved shirt.
c. #Because you ate some of your *natto [i.e. and not all of it]*, you get no dessert.

Typically, both focus and contrast of scalar values are required, serving to convert a scale to a rank order of incompatibles.

More recently, it has been argued (Chierchia 2004, Chierchia et al. 2008) that the Gricean approach fails to generate the correct predictions for the way scalar implicatures project out of embedded environments such as the scope of propositional attitude operators like *believe* and *want*. Indeed, for Chierchia and his colleagues, such cases provide evidence for the position that scalar implicatures in particular are generated locally as part of the grammar and/or the conventional lexical semantics of weak scalar operators rather than being derived from general principles of rationality and conversation. However, Russell (2006) and Geurts (2009, 2010) argue that in fact the Gricean approach does work in such cases (given the operation of independently motivated pragmatic principles) and that the "grammatical" approach cannot explain the two-stage process involving the move from weak (primary) to strong (secondary) implicata via the Competence Assumption.

In particular, Geurts (2009, 2010) provides a broad survey of the landscape. Drawing a distinction between marked L[evinson]-type cases and unmarked C[herchia]-type cases of putative locality effects, Geurts (2009) argues that unlike the latter type, the Levinsonian contrast-induced narrowings represent true problems for a classical Gricean (or neo-Gricean) theory of implicature but that these can still be handled by allowing upper-bounding to enter into the reinterpretation of what scalar operators express, a reinterpretation that is itself pragmatic in nature. In his treatise on Q-implicatures, Geurts (2010) argues that the conventionalist alternative to a Gricean approach is not only stipulative but also empirically flawed in predicting the full range of implicature-related results.

Further, pace Levinson 2000, generalized conversational implicatures cannot be default inferences, both because they are not inferences—by definition an implicature is an aspect of speaker's meaning, not hearer's interpretation (cf. Bach 2001, 2006, Saul

2002)—and because they are not defaults. This last point is especially worth stressing in the light of much recent work in experimental pragmatics undertaken by Ira Noveck, Dan Sperber, Richard Breheny, and their colleagues (see e.g. Noveck and Posada 2003, Bott and Noveck 2004, Breheny et al. 2006, Katsos 2008) arguing that—contra "neo-Gricean theory" as they see it—children and adults do not first automatically construct implicature-based enriched meanings for scalar predications and then, when the "default" interpretation is seen to be inconsistent with the local context, undo such meanings and revert to the minimal implicature-free meaning. To the extent that the empirical work on the processing of implicature recovery can be substantiated and extended, this is a very interesting result, but any automatic enrichment or default interpretation accounts threatened by such work are not those of the actual Gricean tradition as presented in the differentiation between generalized and particularized implicature (Grice 1989: 37, emphases added).

> I have so far considered only cases of what I might call 'particularized conversational implicature'...in which an implicature is carried by saying that p **on a particular occasion in virtue of special features of the context**, cases in which there is no room for the idea that an implicature of this sort is normally carried by saying that p. But there are cases of generalized conversational implicature. Sometimes one can say that the use of a certain form of words in an utterance would **normally (in the absence of special circumstances)** carry such-and-such an implicature or type of implicature.

The classic distinction at issue here dates back to Grice 1961: §3—the particularized implicature in the "Gricean letter of recommendation" for a philosophy job candidate (*"Jones has beautiful handwriting and his English is grammatical"*) vs. the generalized implicature in the logical disjunction (*"My wife is in Oxford or in London"*, implicating I don't know which). Crucially, an implicature may arise in an unmarked or default context without thereby constituting a default or automatic inference.[4] Nor should this be surprising: I brush my teeth every morning unless I skip breakfast, but this does not render the procedure 'automatic' when I do brush—I still have to get out the toothbrush and do the work.

[4] Geurts (2010) argues against not only the 'strong' defaultism of Levinson and Chierchia, amounting to the automaticity of generalized conversational implicature, but even the 'weak' defaultism endorsed above. I regard this as an open question, pending the development of more refined empirical evidence. See also Bezuidenhout (2002), Jaszczolt (2005), and Geurts (2009) for more on defaults and their relation to implicature.

4. On conventional implicature

In addition to introducing the very successful product line of conversational implicatures, Grice (1967/1989) and his successors have assembled an apparently inchoate class of phenomena under the trade-name of CONVENTIONAL IMPLICATURE, representing a non-cancelable but truth-conditionally transparent component of speaker meaning whose success in the scholarly marketplace has been far more mixed that that of its non-conventional cousin.[5] While the coherence of this category has evoked much skepticism—Bach (1999) consigns it to the dustbin of mythology, while Potts (2005) undertakes a pyrrhic rehabilitation—Grice's admittedly sketchy account of conventional content that does not affect the truth conditions of the asserted proposition has a rich lineage. Frege (1879, 1892, 1897, 1918–19) describes a broader class of expressions that, while of linguistic interest, do not "affect the thought" or "touch what is true or false." While recent scholarship has tended to follow Dummett (1973) in dismissing Frege's positive proposals in this domain as constituting a confused and subjective notion of "tone", this mischaracterizes Frege's actual account of the relevant phenomena. For a range of constructions including discourse particles *(but, even,* Ger. *ja),* subject-oriented adverbs, evidential markers, epithets, and other "loaded" words, a refined version of the approach favored by Frege and Grice remains eminently plausible, as a number of linguists and philosophers have recently argued (Barker 2003; Potts 2007; Horn 2007b, 2008; Gutzmann 2008; Williamson 2009).

Further, such an approach can be fruitfully extended to a range of other natural language phenomena, including the familiar vs. formal second person singular ("T/V") pronouns of many modern European languages, slurs and epithets, discourse particles, evidential markers, and possibly the uniqueness/maximality condition on the use of definite descriptions. In addition, certain syntactic constructions can be productively analyzed along the same lines—in particular, the dialectal PERSONAL DATIVE, a nonsubcategorized pronominal appearing in transitive clauses that obligatorily coindexes the subject as exemplified in *I love me some datives* (truth-conditionally equivalent to, but not synonymous with, *I love datives*). In each case, linguistic evidence testifies to the presence of aspects of conventional content that are neither entailed nor in the scope of logical operators and that exhibit a property that Potts (2007) has termed descriptive ineffability, to which I return below.[6]

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[5] It should be borne in mind that implicatures—whether conventional or conversational—are propositions that have their own truth conditions. What unites them in their status as implicatures is that their truth conditions do not affect those of the larger sentence; this is the sense in which we can speak of their truth-conditional "transparency".

[6] On the other hand, linguistic diagnostics indicate that a range of other constructions—including non-restrictive relative clauses—that have been taken to display the behavior of conventional implicatures must be recognized (following Frege 1892 but *contra* Potts 2005) as involving dual dimensions

The category of conventional implicature poses a complication for the distinction between the categories of what is said and what is meant. It may be argued that expressions falling under this analysis represent a recalcitrant residue for Grice (who was concerned with delineating what is said and what is conversationally, and hence calculably, implicated) as they did for Frege (who was concerned with the thought, i.e. with sense and potential reference); for both, detecting a conventional implicature facilitates the real work by clearing away the brush. But Grice also undertakes to situate this relation within a map of what we refer to (though he does not) as the semantics/pragmatics divide. His contributions in this area, if not always accepted, are widely recognized, as in this passage from Davidson:

> It does not seem plausible that there is a strict rule fixing the occasions on which we should attach significance to the order in which conjoined sentences appear in a conjunction: the difference between 'They got married and had a child' and 'They had a child and got married.' Interpreters certainly can make these distinctions. But part of the burden of this paper is that much that they can do should not count as part of their linguistic competence. The contrast in which is meant of implied by the use of 'but' instead of 'and' seems to me another matter, since no amount of common sense unaccompanied by linguistic lore would enable an interpreter to figure it out. Paul Grice has done more than anyone else to bring these problems to our attention and help to sort them out.
>
> (Davidson 1986: 161–62)

But how, exactly, does this sorting work? If descriptive content, reflecting what is said, falls within semantics and if what is conversationally implicated (e.g. the 'for all I know, not both p and q' upper-bounding implicatum associated with the utterance of the disjunction "p or q" or the negative effect of the Gricean letter of recommendation) falls within pragmatics, where does conventional implicature fall? One standard view—impossible to confirm directly, since Grice never refers to pragmatics as such[7]—is that by falling outside what is said, the conventionally implicated is pragmatic (see e.g. Gutzmann 2008: 59). One argument on this side is terminological; in Kaplan's words (1999: 20–21),

> According to Grice's quite plausible analysis of such logical particles as "but", "nevertheless", "although", and "in spite of the fact", they all have the same

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of at-issue meaning rather than Fregean or Gricean implicatures.

[7] Of course, Grice *could* have referred to pragmatics. We need to be even warier of similar representations about Frege, as when Kaplan (1999: fn. 12) argues that Frege would have said that epithets "do not contribute to cognitive content and thus the study of their use belongs not to semantics but to pragmatics". Given that the semantics/pragmatics distinction postdated Frege by several decades, we cannot be certain just how Frege would have classified his *curs* or *nags*.

> descriptive content as "and" and differ only in expressive content...The arguments I will present are meant to show that even accepting Grice's analysis, the logic is affected by the choice of particle...If this is correct, then generations of logic teachers, including myself, have been misleading the youth. Grice sides with the logic teachers, and though he regards the expressive content as *conventional* and hence (I would say) semantic (as opposed to being a consequence of his conversational maxims), he categorizes it with the maxim-generated *implicatures.*

To be sure, conventional implicatures are implicatures. But then again, they are conventional; we are indeed dealing here, unlike in the maxim-based cases, with aspects of content.

Two decades after the William James lectures, Grice revisited the situation of these categories in his Retrospective Epilogue ("Strand Five": 1989: 359–65), where he differentiates central and non-central modes of meaning by invoking the two criteria of FORMALITY ("whether or not the relevant signification is part of the conventional meaning of the signifying expression") and DICTIVENESS ("whether or not the relevant signification is part of what the signifying expression says"). If, for example, a speaker says "p; on the other hand, q" in the absence of any intended contrast of any kind between p and q,

> one would be inclined to say that a condition conventionally signified by the presence of the phrase "on the other hand" was in fact not realized and so that the speaker had done violence to the conventional meaning of, indeed had misused, the phrase "on the other hand." But the nonrealization of this condition would also be regarded as insufficient to falsify the speaker's statement.
>
> (Grice 1989: 361)

Thus, formality without dictiveness yields conventional implicature.

The class of triggers for conventional implicatures arguably ranges over (but is by no means limited to) **discourse particles** (*but, even,* Ger. *ja, doch;* cf. Gutzmann 2008), **pronouns** (e.g. the "T/V" distinction in most Romance, Germanic, and Slavic languages), **expressives** (from slurs to honorifics to intensifiers), **evidentiality markers** (Aikhenvald 2004, Davis et al. 2007), **definiteness** conditions (implicating uniqueness or familiarity, depending on the theory), and **non-argument** (or **free**) datives (implicating some notion of intention, affectedness, and/or benefactive or adversative meaning; cf. Horn 2008).

As stressed by Barker (2003), conventional implicatures constitute part of **encoded** content but not part of **truth-conditional** content per se (differing in this respect from appositives and non-restrictive relatives); their falsity does not project as falsity of the expression to which they contribute. Instead, they contribute **use-conditional** meaning (Kaplan 1999, Gutzmann 2008). Besides the standardly invoked properties of detacha-

bility and non-cancellability, additional diagnostics include the tendency to project out of embedded contexts, the immunity to certain kinds of objection, and the DESCRIPTIVE INEFFABILITY or contextual variability of the content of the implicature (Potts 2007). Illustrations include the difficulty of pinning down the precise content of:

(16)
- the implicature of effort or difficulty associated with *manage*
- the source of the positive or negative assessment in the implicatures associated respectively with *deprive* and *spare* (cf. Wilson 1975)
- the nature of the contrast/unexpectedness implicated by *but*
- the characterization of the scalar conventional implicature associated with *even* (relative or absolute? unlikelihood or noteworthiness?)
- the nature of the expressive attitude embodied in racial and ethnic slurs and other epithets (Potts 2007, Williamson 2009)
- the precise notion of uniqueness or individuability associated with the use of definite/indefinite descriptions (cf. Horn 2007b, Horn and Abbott to appear)
- the appropriateness implicatures for *tu* vs. *vous* or other **T** vs. **V** 2nd person sg. pronouns within a given context in a given sociolinguistic co,mmunity of practice (**T** can be affectionate, presumptuous, comradely, or condescending; **V** can be polite, aloof, diplomatic, or hostile; cf. Brown and Gilman 1960, Greenhall 2007)
- the implicatures of intentionality or positive affect for personal datives in Appalachian English *("He found/?lost him a laptop")* and related affectedness implicatures (benefactive or malefactive) for non-argument pronouns in a variety of languages; cf. Horn 2008)

But what motivates (or permits) this property of ineffability? It is plausible that the edges of truth-conditional meaning should be discrete, while inconsistency in the mental representation of non-truth-conditionally relevant content is less pernicious. If you know generally that my use of *vous* rather than *tu* signals something in the range of formal respect, distancing, and/or lack of intimacy, my precise motives can be left underdetermined, but if you don't know whether I'm using a 2nd person or 3rd person pronoun, the indeterminacy would be more serious. Similarly, you will want to know whether I bought the car for myself or for my son, and hence to whom an indirect object pronoun refers, but whether or not you can figure out precisely why I affirm *"**I** bought **me** a car for my son"* rather than simply *"I bought a car for my son"*, no difference in argument structure or truth conditions will emerge.

For both Frege and Grice, but not necessarily for linguists "concerned", in Frege's words, "with the beauties of language", identifying the class of conventional implicature-licensing constructions—including a motley collection of scalar particles, speaker-oriented sentence adverbs and "modal particles", epithets and slurs, prosodic features, evidential markers, "affected" pronominals, and word order effects—serves largely to

isolate them in terms of what they are not: they do not affect the thought or the truth-conditionally relevant meaning of a given expression, and at the same time they can't be computed by general principles of rational interchange. For those of us working on phenomena situated along this borderland, this is what makes conventional implicature such an intriguing and open-ended realm of inquiry.

5. Concluding remarks

Grice's attempt to reconcile the logical elegance of the Russellians with the ordinary language insight of the Oxonians (see the valuable discussion in Chapman 2005) has won both converts and skeptics, often in the very same individual. Despite recent attacks on Gricean and neo-Gricean premises and modes of argumentation, the heart of his program for meaning—in particular, the positing of a systematic (if often underdetermined) range of implications deriving from the interaction of opposed maxims grounded not just in cooperation but in rationality retains its powerful explanatory force. The speaker's and hearer's joint (though tacit) recognition of the tendency to avoid unnecessary effort, and the inferences S expects H to draw from S's efficient observance of this tendency, are more explicable directly from rationality than from cooperation as such.[8] While Grice (1989: 28) recognizes that the maxims apply to cooperative ventures outside of language (baking a cake, fixing a car), cooperation is not a necessary condition, much less communication. It is plausible to take generalized forms of both Q and R Principles—"Do enough; Don't do too much"—to govern ANY goal-oriented rational activity: a person brushing her hair, a dog digging a hole to bury a bone. In this way, the maxim of quantity, in both its opposed (Q and R) subforms, is a linguistic instantiation of these rationality-based constraints on the expenditure of effort.[9] Of course, as Grice recognized, the shared tacit awareness of such principles to generate conversational implicatures is a central property of speaker meaning within the communicative enterprise.

We have surveyed some of the ways in which Grice's account of implicature leads to a simplification of the overall picture of meaning by transferring much of the burden of explanation from logical semantics to a general, independently motivated pragmatic theory that preserves the Modified Occam's Razor principle and provides an explanatory treatment of the relation between the subcontraries.

Since the ancient rhetoricians first distinguished between what is said and what is

[8] Cf. Kasher's principle of effective means (1982: 32), another minimax balancing act stipulating that "Given a desired end, one is to choose that action which most effectively, and at least cost, attains that end, ceteris paribus."

[9] Grice (1986: 83) proposes his own "Principle of Economy of Rational Effort"; for more on the central place of rationality in Grice's philosophy of language, see Davies (2007).

meant—or, as the French put it, between *ce qu'on* ***dit*** and *ce qu'on* ***veut dire***—those investigating the theory of meaning in natural language have focused on just where to draw the line separating the two and just how to draw the lines connecting them. My goal has been to look at some of the ways in which a minimally modified Gricean model might provide a natural and intuitively satisfying approach to phenomena within this domain.

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