William James + 40:
Issues in the investigation of implicature

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While never himself employing the term *pragmatics,* Paul Grice laid out the map for modern pragmatic theory in his William James lectures of 1967 by delineating

> …a distinction…within the total signification of a remark…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). (Grice [1967] 1989: 118)

While each of these varieties of implicature has undergone rigorous scrutiny from many directions over the ensuing four decades, our attention here will be focused on the non-conventional species, particularly the breed of conversational implicature. The complementary relation of conventional implicature has been maligned if not buried (cf. Bach 1999, Potts 2005) but may rise again; see Horn 2007b for an attempted revival.

I. "A general principle governing the use of language"

It has been recognized for millennia that 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, although the result may appear awkward or anomalous *(Some dogs are mammals).* For Aristotle, whatever holds of all dogs holds ipso facto of some (*Topics* 109a3), and this view largely 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 as basic: "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, given that the logical consistency of their conjunction, but 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 point out the undesirable consequences of 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 both to the vagaries 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)

The perceived upper bound *(=not all)* associated with the ordinary language assertion of *some* is attributed here to an implicit principle that would have to wait another century for explicit formulation. An early stab at it was taken by Strawson (1952: 178-9), who credited 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] MAXIM OF QUANTITY (Grice 1989: 26): "**Make your contribution as informative as is required (for the current purposes of the talk-exchange)**". (For a survey of related, and in some cases independent, formulations of the principle within mid-20th century philosophy of language, see Horn 1990.)

In neo-Gricean frameworks (Horn 1972, 1989, 2004; Gazdar 1979; Hirschberg 1985; Levinson 2000), the maxim of quantity—induced by unilateral entailment relations between lexical oppositions—motivates the establishment of quantity scales such as those in (1):

(1)

<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).

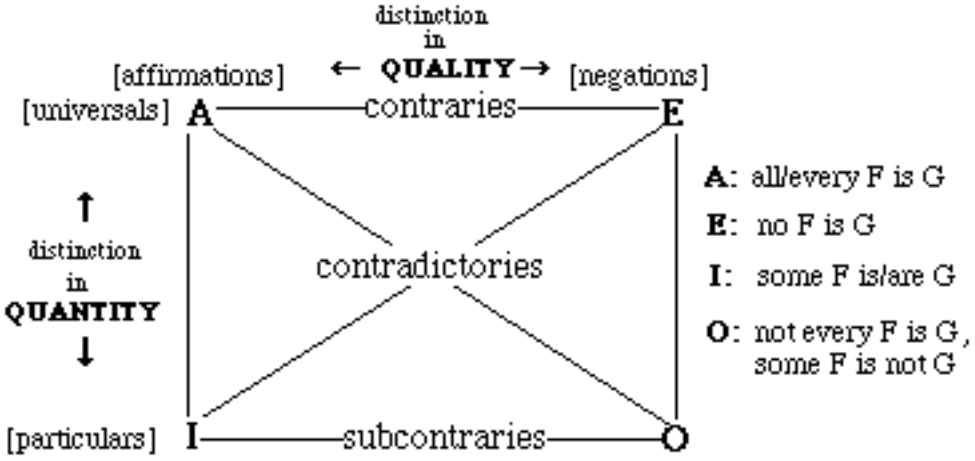
On this approach, scalar values are lower-bounded by their literal meaning ("what is said") and upper-bounded by quantity-based implicature. Thus the "one-sided" meanings delivered by the linguistic semantics may be pragmatically enriched to yield the "two-sided" understandings typically communicated:

(2) 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 ◊...'	'...◊ but not certain...'
d.	He's a knave **or** a fool.	'...and perhaps both'	'...but not both'
e.	It's **warm**.	'...at least warm...'	'...but not hot'

The alternative view on which each scalar predication in (2) is lexically ambiguous between one-sided and two-sided readings is ruled out by the Modified Occam's Razor principle (Grice 1989: 47): "Senses are not to be multiplied beyond necessity." (See Carston 2002 for a skeptical view of M.O.R. and Bontly (2005) for an empirically supported defense based on M.O.R.'s role in language acquisition.)

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

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



Scalar implicature provides a natural account of the asymmetry of the Square of Opposition. The facts of this asymmetry are laid out in tabular form in (4):

(4) Lexicalization and the "three-cornered" square
(cf. Horn 1972: Chap. 4; Horn 1989: §4.5, Horn 2006: §5)

	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 (=all¬/¬some)	never (=always¬)	neither (of them) (=both¬/¬either)	neither...nor (=[both...and]¬)	nor (=and¬)
O:	*nall α, *neveryone (= some¬/¬all)	*nalways (= ¬always)	*noth (of them) (= either¬/¬both)	*noth...nand (= [either...or]¬)	*nand (= 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 (see above references) 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 (see 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 all 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 like that of Carston (1988) and Koenig (1991), were ratified and extended in much recent work including Horn (1992), Geurts (1998) and Bultinck (2004). But, crucially, what's sauce for the cardinals is not necessarily sauce for 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 that disjunction that I must be asserting if my reply negates the proposition that "50%-99% of the students passed" as it does 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 would have had to 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" in response to "Did 10 of the students pass?" might 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.

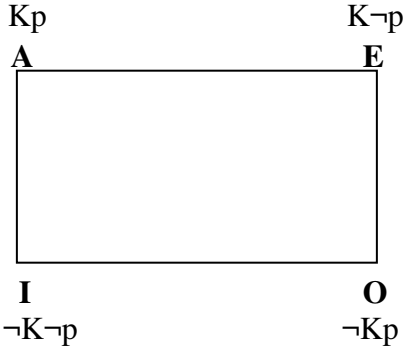
In addition to the linguistic evidence summarized in Horn (2006: §4) and other work, a now considerable body of empirical work has confirmed that the acquisition and processing of cardinals differs along a variety of parameters from that of other scalar values; note especially the studies in Papafragou & Musolino (2003) and Hurewitz et al. (2006), and also Papafragou & Schwarz 2003 for empirical challenges to Ariel's findings on *most*. Thus, while pride of place must be given to the important work of Carston, the behavior of cardinals must somehow be distinguished from that of their inexact scalar cousins. It is not

obvious to me 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.

If (non-cardinal) scalar assertions are upper bounded by scalar implicature, just what is it that a speaker quantity-implicates against? There is a major split on this issue between weak and strong treatments. Gazdar (1979) and Levinson (1983, 2000) are strong epistemic theorists, taking a speaker who asserts *p(i)* to implicate that she knows ¬p(j) where j>i. For weak theorists, following Mill (1867) above, this implicature is a two-stage process: in telling you some of the students in the class are freshmen, I directly implicate that I don't know/believe all of them are; it's only if I assume that you assume my full knowledge of the situation (e.g. that I've looked through all the pre-registration forms) that I will implicate, and you will be licensed to infer, that I know not all of them are freshmen. (This last step embodies what Geurts 2007 has called the Competence Assumption.)

Weak epistemic theorists include Soames (1982), Hirschberg (1985), Horn (1989), Sauerland (2004), and Geurts (2007). But which weak treatment is warranted? Hirschberg takes the utterer of *p(i)* to implicate a disjunction: either the speaker knows the stronger proposition doesn't hold or doesn't know whether or not it holds (1985: 79-80). When S affirms that p(i) holds, "S believes that higher p(j) are false or S does not know whether higher p(j) are true or false" (p. 81). But this disjunction—S either knows p is false or doesn't know whether or not p is true—in fact reduces to the proposition that S does not know (for a fact) that p(j) is true, the position adopted in Horn 1989: Chapter 4. Essentially, Hirschberg takes S's implicature to be the disjunction (K¬p) v (¬Kp & ¬K¬p). This amounts to the claim that either nobody won or somebody-but-not-everybody won, equivalent in turn to the claim that not everybody won, since a disjunction of the **E** vertex of a logical square with the conjunction of the **I** and **O** vertices is equivalent to **O**, i.e. the contradictory of **A**:

(5)



(**I** v **E**, as a disjunction of contradictories, is true by definition.) This result is intuitively correct: In saying it's warm, I implicate that I don't know for a fact that it's hot. If you believe I know the actual temperature, you will strengthen this to infer that I'm communicating that (I know) it isn't hot, but since there's no guarantee of my epistemic security, this can't be a first-order implicature.

Hirschberg (1985: Chapter 5) represents the content of the relevant scalar implicatures in the form "¬BEL (...)", with a strengthening of "¬KNOW" to "¬BEL". But this strengthening is not warranted, for the following reason: I can say "It's warm, and I believe it's hot", but not (without anomaly) "It's warm and I know it's hot": if I knew it was hot, I should have said so. But if I just believe it's hot, I can't really assert that it is without

violating the second quality maxim. I can only assert what (I believe) I know, not what I (merely) believe. What the utterance of *p(i)* implicates, ceteris paribus, is just that the speaker doesn't know that p(j), for any p(j) stronger than p(i).

In sum, the use of a weaker value **W** (e.g. *some, possible*) suggests that **for all the speaker knows** no stronger value—and especially not the strongest value **S**—on the same scale *(all, certain)* could have been substituted salva veritate. a's utterance of …**W**… implicates not $K_a\neg$(**S**), i.e. that a knows the stronger counterpart …**S**… is false, but only (ceteris paribus) that $\neg K_a$(**S**).

II. Implicatures and "strengthening"

In addition to the question of what is implicated, recent work has also addressed the issue of when what is implicated is implicated. In earlier work on the projection problem for implicatures, Gazdar (1979) argued that scalar implicatures (henceforth SIs) in particular are blocked in embedded contexts, based on the observation that a standard upper-bounding implicature like that from (the assertion of) (6a) to (6b) seems to disappear when the scalar predicate falls within the scope of a logical operator as it does in (7a), which does not implicate (7b).

(6) a. Paul ate some of the eggs.
b. [For all the speaker knows] Paul did not eat all of the eggs.

(7) a. It is not the case that Paul ate some of the eggs.
b. [For all the speaker knows] It is not the case that Paul did not eat all of the eggs.
[= He ate all of them.]

As observed by Hirschberg (1985), however, this cannot be a fact about embedded environments in general, since substituting e.g. "It is true that" for "It is not the case that" in (7a/b) will restore the implicature. On Hirschberg's account, SIs are blocked by overt negation alone. But while Gazdar's approach blocks too many implicatures, Hirschberg's blocks too few. Without fully making the case, I suggested (Horn 1989: 233-34) that SIs are blocked in downward entailing (DE) contexts. But, as Levinson points out, it is not really a matter of blocking the implicatures generated by the positive scale so much as predicting the implicatures induced by the inverse scale, given the scale-reversing properties of negation and other downward entailing operators described Fauconnier 1975: "[T]he apparent blockage is due to the fact that negatives reverse scales and so we get different implicatures, which themselves survive negation" (Levinson 2000: 254-55). Thus, in asserting that Paul didn't eat many of the eggs, I implicate (ceteris paribus) not that he didn't eat all of them (since the positive scale <*all, most, many, some*> will not be relevant here), but that he didn't eat none of them, i.e. that he ate some (since the scale <*none, not many, not all*> is now operative).

More recently, Chierchia (2004) has argued, based on the interaction of negation and disjunction in complex sentences, that SIs are computed locally by semantic composition rules rather than read off utterances globally and that they are hence part of the grammar, with semantic rather than "merely" pragmatic effects derived from general principles of rational interchange. According to Chierchia's analysis, the "suspension" of SIs in DE contexts and the licensing of NPIs in the same environments (cf. Ladusaw 1980) represent a parallel effect of strengthening.

I will not address the general issues posed by the compositionality problems raised by Chierchia (or by Fox 2006 in a related localist theory utilizing covert exhaustification); see Sauerland (2004), Spector (2006), Russell (2006), and Geurts (2007) for various alternative Grice-compatible approaches to the locality data, Reinhart (2006) for a mixed approach, and King & Stanley (2005) for a different route. (Geurts's paper is especially useful for its review of the similarities and differences among the various menu options.) But the basis for Chierchia's notions of "blocking" and "strengthening" are worth examining more closely, and it is to this examination that I shall proceed.

Cherchia's claim that DE contexts block, rather than reverse, implicature derives from his perception that while positive scales induce "direct" SIs, negative and DE contexts generate only "indirect" SIs, which "appear to be generally somewhat weaker and flimsier than their positive counterparts" (2004: 58). Thus, there is an asymmetry not acknowledged in the standard neo-Gricean account, which predicts—on the basis of the scales in (1)—a parallel between the positive case in which the assertion of (8a) will (ceteris paribus) implicate (9a), resulting in the communication of (8b), and the negative case in which the assertion of (9a) will (ceteris paribus) implicate (8a), resulting in the communication of (9b).

(8) a. Some F are G.
b. Some Fs are Gs, but not all are.

(9) a. Not all F are G.
b. Not all F are G, but some are.

Similarly, Chierchia (2004: 69) claims that "Our intuitions concerning the implicature of sentences like *[I don't have many matches left]* are somewhat shaky. In particular, such a sentence may or may not implicate that I have some matches left." [1] Of course, the "may or may not" codicil is endemic to implicature calculation, given the nature of cancelability and indeterminacy. But is there any evidence that the implicature in the positive case is more direct or stronger than in the negative, or that the scalar effects in (8) are more robust than those in (9)?

As it happens, the first invocation of the term SCALAR IMPLICATURE in the literature (according to the *Oxford English Dictionary*) was to account for the fact that "*not all* implicates *not none,* i.e. *some*" (Horn 1972: 96). Nor is this premise restricted to neo-Griceans. In one of the earliest applications of Gricean reasoning in the linguistic literature, Chomsky (1972: 112) takes the inference from *not many* to *some* in contexts like (10) to be not weaker but stronger than a garden-variety conversational implicature.

(10) a. Not many arrows hit the target.
b. Some arrows hit the target.

For Chomsky, "Sentence [(10a)] (equivalently, *Few arrows hit the target*) presupposes that some arrows hit the target." Similarly, (11a) is taken to presuppose (11b):

[1] Similarly, Chierchia et al. (2001: 160) observe that while *John saw many students* will normally implicate that he didn't see all of them, no such implicature arises in e.g. *There aren't many students*. From such observations follows the descriptive generalization

(i) Scalar implicatures do not arise in downward entailing environments.

But in fact There aren't many students DOES have an scalar implicature, viz. that there are some. Interestingly, it is noted in the same paper (Chierchia et al. 2001: 162) that "DE operators reverse canonical entailments", but it is for precisely this reason that they also reverse scales and SIs, rendering the generalization in (i) untenable.

(11) a. {Not much/Little} enthusiasm was shown for that project.
b. At least some enthusiasm was shown.

I have argued (Horn 1972: Chapter 2) that the relation in (10a) and (11a) must be (scalar) implicature, not presupposition. But there is no reason to believe that the inference with these pairs is on shakier or flimsier ground than that with (8) or other positive scalars. Absent the posited asymmetry between positive and negative scales, we can't really claim that SIs are suspended in DE contexts, but only that (as Levinson points out) the SIs induced there are based on negative scales as opposed to positive ones.

Given DE operators' twin role as licensers of NPIs and "blockers" of SIs, Chierchia seeks to unify the two phenomena under the umbrella of compositional semantics. In particular, he argues, just as NPIs serve to strengthen a negative implicature (as in the widening-cum-strengthening account of *any* due to Kadmon & Landman 1993), so too "implicatures must lead to strengthening" (Chierchia 2004: 70). But do NPIs always strengthen negative force?

It is undeniable that *any* in both polarity and generic/non-episodic contexts (i.e. NPI and free choice *any*) effectively strengthens a simple indefinite (Kadmon & Landman 1993) or contributes an end-of-scale *even*-type meaning (cf. Lee & Horn 1994, Lahiri 1998, Horn 2000b), as in (12), and that *ever*—the temporal analogue of *any*—along with minimizers such as those in (13) likewise serve to reinforce negation.

(12) a. I don't have {potatoes/any potatoes}.
b. {An owl/Any owl} eats mice.

(13) a. Robin didn't {drink/touch} a drop of the punch.
b. Dana won't sleep a wink tonight.
c. Pat isn't saying a word about it.

However, other NPIs, in particular those not involving indefinites, do not obviously result in strengthening. In his valuable study of the lexical semantics of polarity, Israel (1996) distinguishes emphatic NPIs (*any, ever, at all,* and the minimizers) from attenuating NPIs (e.g. *much, overmuch, long, be all that, any too, great shakes, be born yesterday, trouble to, mince words*); the attenuators do not strengthen negative force. Prime attenuating NPIs include negative modals *(need,* Du. *hoeven), yet, anymore* (for the relevant dialect), and *until.* While *He won't ever recover* is a stronger negative than *He won't recover,* there is no sense in which *She hasn't recovered yet* strengthens the negative force of *She hasn't recovered,* or *He doesn't read much* strengthens the force of *He doesn't read.*[2]

If NPI licensing does not necessarily imply strengthening, what of the purported strengthening effect of scalar implicatures? To return to the examples in (8) and (9): *Some but not all Fs are Gs* is, to be sure, more informative and more specific than *Some F are G sans implicatur*e, but it does not result in a stronger positive assertion, nor does *Not all F are*

[2] The generalization linking SI "blocking" and NPI licensing is open to challenge on other grounds. Empirical work since Ladusaw 1980 has demonstrated that DE-hood is neither necessary nor sufficient for the occurrence of NPIs. Polarity-licensing environments (including subjunctives, imperatives, generics, and modals) are not always DE, and while some environments are subsumable under DE-hood by adjusting the definition (cf. Heim 1984, Krifka 1995), not all of them are (see Linebarger 1987, Israel 1996, and Giannakidou 1998 for the roles of pragmatic inference, lexical semantics, and non-veridicality in accounting for the distribution of polarity items. What is relevant to scalar implicature is not polarity licensing per se but the scale reversal triggered by DE-hood.

G but some are result in a stronger (negative) claim than *Not all F are G.* By implicating the upper bound, the speaker in effect weakens the positive or negative force of what is said.

In the dualistic model of implicature I have been urging over the last two decades (Horn 1984, 1989, 1993, 2000a, 2007a), Q-based implicatures, based on the Q Principle ("Say enough", a generalization of Grice's first maxim of Quantity), must be distinguished from R-based implicatures, based on the R Principle ("Don't say too much", a correlate of Zipf's principle of least effort encompassing the second Quantity maxim, Relation, and Brevity). 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, the "perfection" of a sufficient *if*-condition to a necessary and sufficient *iff*-condition, the narrowing of a word's extension from a set to a salient or prototype member or subset, and the use of vague expressions as euphemisms for what one would prefer to leave unsaid.

Evidence for a Manichaean pragmatics (Horn 2007a) is provided by the mirror image principles of synonymy avoidance (an R-based tendency motivated by the speaker's economy) and homonymy avoidance (a Q-based tendency motivated by the hearer's economy) as factors in language acquisition and linguistic change, as well as the complementary processes of linguistically motivated Q-based narrowing and socially motivated R-based narrowing.

Related to lexical narrowing, and again motivated by social considerations—in particular, those relating to euphemism and respect for negative face (cf. Brown & 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 the varieties of affixal negation, simple litotes, and "neg-raising" instantiated in (14a-c) respectively; cf. Horn (1989: Chapter 5) for extensive discussion.

(14) **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 ouzo.	(stronger than ¬[I like ouzo])
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. I say I don't like ouzo 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 the 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 (15c), resulting in the understanding of a negative operator with semantic scope over certain predicates of opinion, desire, or likelihood being taken as if it had lower-clause scope. Here again, 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, 2000a).

Carston (2002: Chap. 3; 2005) rejects the distinction between R-based and Q-based implicature as illusory, in that "there is a strengthening of communicated content from 'at least some' to 'just some'" (Carston 2005: 314-15) that is entirely parallel to, say, the strengthening of not believing that p to believing that not-p. One question arising here is the the extent to which Relevance theory itself is truly monist, given the trade-off between 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). But in any event, does the upper-bounding effect of Q-based, in particular scalar, implicature amount to strengthening, as maintained by both Carston and Chierchia? Does a scalar implicature, by upper-bounding an assertion, in fact strengthen it? In particular, 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 more specific and hence INFORMATIVELY stronger than the unbounded utterance, is not RHETORICALLY stronger than the utterance sans 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 (15a) represents a stronger argument for the (underlined) conclusion than does the more specific but rhetorically weaker (15b).

(15) a. I've graded some of the exams, <u>so it's time for a break.</u>
b. ?I've graded some, but not all, of the exams, <u>so it's time for a break.</u>

As Israel also notes, *already* is possible in the former but not in the latter, given the incompatibility of directly expressing the Q-based implicature with the suggestion that things are ahead of schedule.

(16) a. I've already graded some of the exams (so let's go out for a beer).
b. #I've already graded some, but not all, of the exams (so let's go out for a beer).

Another argument for separating the two notions of strength comes from the distribution of rank orders (Lehrer 1974, Hirschberg 1985, Horn 1989, Horn 2000b), which are related to but distinct from true scales; see (17) for a proposed notational differentiation and (18) for additional examples of rank orders.

(17) ***true scales:*** ***rank orders:***

<scalding, hot, warm> «felony|misdemeanor|tort»

<certain, likely, possible> «win|place|show»

<loathe, hate, dislike> «dead|sick»

(18) «general|colonel||lieutenant|sergeant|private» «married|engaged»

«full professor|associate professor|ass't professor» «full house|flush»

«senior|junior|sophomore|freshman» «A|B|C|D|F»

«α ϕ'd| α almost ϕ'd» «α didn't ϕ| α barely ϕ'd»

In a scale of the form <Y, X>, …Y… unilaterally entails …X…: if it's hot, it's warm; in a rank order <<Y, X>>, …Y… unilaterally entails …¬X…: if they're married, they're NOT engaged; if he's a colonel, he's NOT a lieutenant. Similarly, if she's a full professor, it's false that she's an assistant professor—although it's true that she's AT LEAST an assistant professor. (Note that *S is at least P* can be true while *S is P* is false.[3]) Similarly, compare these exchanges between players in (non-wild card) poker, where having a full house outranks but precludes having a flush:

(19) A: Do you have a flush?
B: {No/#Yes} (in fact) I have a full house.

(20) A: Do you have at least a flush?
B: {Yes/#No} (in fact) I have a full house.

Rank-ordered items essentially build in the upper bound: *Chris has a full house* and *Chris has a flush* are equally informative, in that neither entails the other. Similarly for *Dr. Doolittle is a full professor* vs. *Dr. Doolittle is an associate professor.* Yet the first member of each pair is assertorically stronger in asserting that the higher rank holds. Once again, we see that rhetorical strength is distinct from informative strength.

In addition to challenging—or at least problematizing—the claim that scalar implicature results in strengthening, these observations provide additional support for a dualistic or Manichaean approach to pragmatic inference; a minimal pair illustrating the difference between R-based and Q-based implicature is provided in (21).

(21) a. Not only was she able to solve the problem, (in fact) she solved it.
(a was able to φ R-implicates *a φ'd)*
b: #Not only is it possible that she solved the problem, (in fact)
it's (possible but) not certain that she solved it.
(it's possible that p Q-implicates *it's not certain that p)*

III. Pragmatic intrusion and "what is said"

Recent years have witnessed the formulation of a partial consensus regarding semantic underspecification and pragmatic enrichment, a consensus that agrees in rejecting the

[3] Similarly, the effect of *already/yet,* like that of *at least,* is to convert a rank order into an acting scale: (ii) and (iii), unlike (i), invoke a disjunction between the item in question and higher values.

(i) a. Is your daughter a sophomore?
b. No/#Yes, (in fact) she's a junior.

(ii) a. Is your daughter at least a sophomore?
b. Yes/#No, (in fact) she's a junior.

(iii) a. Is your daughter a sophomore yet?
b. Yes/#No, (in fact) she's a junior.

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". 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 & Ward 2004), it is clear we must accept some version of what Bach (2005) 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 in the examples of (22), the speaker uttering the non-bracketed material in each case may well communicate the full sentences indicated, enriched by the bracketed addenda. As seen from the cancelability diagnostics in (23), however, this process is pragmatic in character, even though its result is the computation of truth-conditionally relevant propositions that are not directly expressed.

(22) 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. Chris is ready {for the exam}.

(23) 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; the subtitle of Carston's important (2002) monograph is, after all, "The Pragmatics of Explicit Communication". A faithfully Gricean theory can accept neither Levinson's picture of implicatures as benignly informing literal content (what is said) nor the notion of explicature as applied by Relevance theorists. As Bach has stressed, the typically communicated propositions in (22) cannot literally be "explicatures" because they are not explicit; at the same time, they are not implicatures but "implicitures", implicit in, rather than read off, what is said.

Objecting to the premise that a pragmatically supplemented proposition is not communicated explicitly, Carston (2005: 311) observes that in many cases there will then be nothing (or, more exactly, no proposition) on our account that IS communicated explicitly. But if we can agree that no full-fledged proposition is literally expressed and explicitly communicated, what do we gain by then taking the most nearly explicitly communicated proposition to constitute an explicature, with the acknowledged suggestion of explicitness? Carston defends the term as justified on the grounds that "this partially pragmatically-determined proposition is about as explicit as we ever are, or can be" in (22)-type examples. But even if we grant that filling in the bracketed material in such cases yields the closest thing we can get to an explicitly communicated proposition, the theory of meaning is not an enterprise like horseshoes or hand grenades, where closeness counts.

Whether or not we invoke "truth-conditional pragmatics" (to adopt Recanati's term), it must be borne in mind that implicatures—whether conventional or conversational—are propositions that have their own truth conditions. In uttering a given sentence in a given context, the speaker may communicate more than one truth-evaluable proposition, and what is said (in the Gricean sense) may correspond to a proposition radical that is not itself truth-

evaluable, as with *Chris is ready* (Bach 2001, 2006). At the same time, there are the intuitions of the localists—Chierchia (2004) and Levinson (2000: §3.3), among others—and the problem itself, formulated through examples in which the implicatures licensed by a subexpression seem to affect the truth-conditions of the larger expression in which they are embedded, as in Cohen's (1971) celebrated example of conjunctions within conditional protases, where (24a, b) are intuitively assigned distinct truth conditions.

(24) 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:

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

(26) 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 & Stanley (2005) in explaining away (26a) as an instance of metalinguistic negation (Horn 1989), this won't extend to the evidently parallel cases.

Some concessions to the localists appear to be inevitable, despite the best efforts of die-hards like King & 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 accounts. The key issues, as stressed by Geurts (2007), 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 (cf. Horn 2004, 2006; King & Stanley 2005). In the scalar-antecedent conditionals in (27), 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. [4]

(27) 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/hot}, 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 REinterpreted as expressing (rather than merely communicating) 'some but

[4] Even the retroactive adjustment of semantic content appears to be a pragmatic and hence defeasible process. Thus King & Stanley (2005) cite (i) (their (27)), borrowed from Robyn Carston, as a problematic case for the unadorned Gricean account.

(i) If Hannah insulted Joe and Joe resigned, then Hannah is in trouble.

But even here, I can respond that in fact Hannah insulted Joe and Joe did resign, but Hannah has nothing to worry about because Joe was going to resign anyway. The causal connection, therefore, does not seem to be semantically written into the protasis of the conditional in (i).

not all' or *injured* 'non-fatally injured'. This retroactive accommodation is triggered by focus on the relevant scalar operators.

The same issues arise for other applications of the pragmatic intrusion argument. Thus, Levinson (2000: 210) extends the argument from conditionals like (24) to *because* clauses, based on such examples as (28):

(28) 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 these cases are heterogeneous. (28a) involves a cardinal, which as we have seen is indeed plausibly taken to involve an adjustment of what is said. In (28b), *such a fine friend* involves conventionalization of the sarcastic meaning; compare *?Because he's so considerate, I fired him.* The *all* in the second clause of (28c) forces the reprocessing of the some in the first clause as 'some but not all' (a reprocessing again triggered by the focal stress on *some*). Without the *all* or some other context-forcing continuation, this narrowing is difficult or impossible:

(29) Because the police recovered some of the gold, the thieves are expected to return later #(for the rest).

In general, such *because* cases are 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 (as in (29)) and in which no reprocessing is forced by the affirmation of a stronger value (as in (28c)). Typically, both focus and contrast of scalar values are required, serving to convert a scale to a rank order of incompatibles, just as *at least* and *yet* convert rank orders to scales, as seen above. Thus consider:

(30) 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 gruel *[i.e. and not all of it]*, you get no dessert.

So where do we stand on the issue of implicatures and pragmatic infusion? While scalar implicature is derived for the most part by the usual Gricean means, that original program must be modified to allow for a restricted range of cases of locality effects in which upper bounding can enter into the reinterpretation of what scalar operators express, although this reinterpretation is itself pragmatic in nature. (See Geurts 2007 for a useful survey of the domain, including a helpful distinction between marked L[evinson]-type cases and unmarked C[herchia]-type cases of putative locality effects and for convincing arguments on why only the former represent true problems for the classical (neo-)Gricean theory of implicature.)

In any case, 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. Schwenter 1999: 26; Bach 2001, 2006, and Saul 2002b)—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 & Posada

2003, Bott & Noveck 2004, Breheny et al. 2006) arguing that—contra 'neo-Gricean theory', in their words—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. I see no reason to revisit the distinction between generalized and particularized implicature as Grice originally formulated it (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.

An implicature may arise in a default context without thereby constituting a default or automatic inference.[5] Nor should this be surprising: I shave every morning unless it's a weekend day at home, but this does not render my shaving on work days 'automatic'—I still have to get out the razor and actually perform the procedure.

IV. On what is said (again): a defense of austerity

A bone of perennial contention in neo- and post-Gricean pragmatics is the proper treatment of 'what is said'. Relevance theorists (e.g. Carston 2002) have questioned the utility of this notion (to the extent that it cannot be identified with the RT notion of explicature), Recanati (2001) distinguishes a Gricean notion of what-is-said$_{min}$ from what-is-said$_{max}$,with only the latter playing a significant role within his framework of truth-conditional pragmatics, and even the self-described semantic minimalists Cappelen & Lepore (2005) endorse an inflationary view of what is said, incorporating pragmatically inferred expansions.

To be sure, Grice's notion of what is said cannot be accepted as is. For one thing, as Bach (2001) and Saul (2002a) have stressed, we can—and should—give up Grice's overly restrictive condition that saying something entails meaning it, i.e. that we can't say what we don't mean. This constraint becomes implausible when we consider slips of the tongue, non-literality, and performances or rehearsals. (Recall in this connection Austin's (1962) distinction between the locutionary and illocutionary acts: saying is not identical to stating.) Communicative intention does not determine what is said.

This point aside, what is the fate of the Gricean notion of what is said? As argued by Bach (2001), Saul (2002b, 2006), and Borg (2004), the death-knell for a relatively orthodox

[5] Geurts (2007) argues against not only the "strong" defaultism of Levinson and Chierchia, amounting to the automaticity of generalized conversational implicature, but even the "weak" defaultism I have endorsed. I regard this as an open question, pending the development of more refined empirical evidence. See also Jaszczolt (2005) on defaults.

or (in Saul's terms) austere conception of what is said may be premature. Bach (2001) has advanced the "syntactic correlation constraint", based on Grice's position (1989: 87) that what is said must correspond to "the elements of [the sentence], their order, and their syntactic character"; aspects of enriched content that are not directly linked to the utterance cannot be part of what is said. As we have noted, many have been skeptical of this view, from Cappelen & Lepore (2005) to Recanati (2001, 2004) and the Relevance theorists. In the words of Carston (2005: 310; cf. also Carston 2002: §2.5 and Carston 2004), "It is hard to see what this conception of 'what is said' buys one". What DOES "what is said", on the austere view, buy one? As I shall try to show in the following travelogue, it depends on who, and where, one happens to be.

The first stop in our grand tour through the space-time continuum is 21st century New York, with an episode from *The White Rose* (Korelitz 2005: 296), a reimagining of *Der Rosenkavalier* as a comedy of manners in modern Manhattan. In the local context, protagonist Oliver is disconsolate after a quarrel with his older lover Marian during a weekend in the Hamptons. After she drives them back to New York (supposedly for a faculty meeting she must attend) and drops him off in midtown, he impulsively heads uptown to Columbia to set things right with her, arriving at the history department only to discover that there is no faculty meeting, whereupon he happens to encounter Sophie, a grad student of Marian's who had engaged the services of his florist shop for her upcoming wedding. So poor, distracted Oliver must make small talk with Sophie…

> He hasn't done the first thing about the flowers for her wedding. And now, just thinking about the flowers for the wedding fills him with abject misery. "I'm sorry", he hears himself say, "I feel terrible about what happened"...
>
> "You came all the way up here?" Sophie asks, "To apologize?"
>
> "Yes," Oliver says, with some relief, **and truthfully enough**. **He has in fact come all the way up here to apologize, albeit not to her.**

What is SAID is true, as indicated in the boldfaced commentary, whence the feeling of relief (Oliver **did** in fact go up to Columbia to apologize, after all, albeit to Marian); what is COMMUNICATED is false (viz. that Oliver went to Columbia to apologize to Sophie).

The manipulation of these two dimensions of meaning—what is (austerely) said vs. what is communicated—can be accomplished with more premeditation than it was for Oliver. We travel back now to 17th century Paris to visit the Jesuits' take on applied pragmatics (Simon 1762; Fauconnier 1979). One expert, Sanchez [1614], instructs his charges on how to promise: A debtor can make a promise by reciting the formula 'I promise to pay what I owe' while silently adding that he will pay it not to his creditor, but rather to his confederate. More generally, the accused can avail himself of the doctrine of mental restriction, as expounded by Fillucius [1633] (Fauconnier 1979: 20; translation mine):

> [L]orsqu'on commence à dire *je jure,* il faut ajouter tout bas cette restriction mentale, *qu'aujourdhui,* & continuer tout haut, *je n'ai pas mangé telle chose*
>
> When you begin to say *'I swear...'*, you must add under your breath this mental restriction, *'that today...'*, and continue out loud, *'I have not eaten such and such'*

In the same way, advises Tolet, the accused can truthfully swear "I have not killed anyone" as long as "sa pensée soit de dire qu'il ne l'a pas fait depuis qu'il est en prison" (cf.

Fauconnier 1979: 17); this is legitimate since, as noted in the Fillucius passage above, such enrichments are entirely natural.

Nor is it only the (justly) accused who deserve recourse to such methods of 'hiding the truth': "La manière de cacher la verité doit être à la portée de tout le monde" [Casnedi 1719]. But to hide the truth is not to lie: crucially,"Il est licite d'employer toute ces manières de cacher la vérité non pas dans l'intention expresse de tromper les autres, mais seulement **de les laisser se tromper eux-mêmes"** [Fegeli 1750, emphasis added].

The distinction between lying and hiding the truth (and that between deceiving others and allowing them to deceive themselves) was artfully employed by the Jesuit-trained Bill Clinton in 20th century Washington, D.C., who in turn transmitted his understanding of these methods to his disciple Monica Lewinsky. Asked under oath whether her testimony in re Paula Jones was false, Lewinsky truthfully testified that this testimony was "incomplete and misleading", implicating (falsely) that it wasn't false. In recounting this exchange, New York Times reporter Francis X. Clines describes Lewinsky as "exhibiting a Clintonian way with words" (6 Feb. 1999), but as we can see, the skill involved might be indirectly attributed to seminary training.[6]

We now move from the Oval Office to the O.R., observing the exploitation of the difference between what is said vs. what is meant in 21st century TV hospital dramas. First, a bit of background. The Jesuits' disingenuous parallel between (31a,b) parallels our sense of the contrast between (32a) [cf. (22a) above], which favors a natural temporal restriction, as we have noted, and (32b), which does not.

(31) a. I have not eaten such-and-such.
b. I have not killed anyone.

(32) a. Have you eaten breakfast?
b. Have you had sex?

This minimal pair is revisited by Taylor (2001: 46), who explains the difference between having sex and having breakfast.

> Taken on its own, independently of context and of the speaker's communicative intentions, [32a], for example, expresses neither the question "have you ever in your life eaten breakfast?" nor the question "have you eaten breakfast yet this morning?" Moreover, neither the meaning of the word 'sex' nor the meaning of the word 'breakfast' forces one rather than the other temporal import on the relevant question. Indeed, without changing the meanings of either word, we can cook up contexts in which an utterance of [32a] amounts to an 'ever' question and contexts in which an utterance of [32b] amounts to a "so far today" question.

Now consider a scenario developed in the 9/29/2006 episode of "Grey's Anatomy" (ABC). Young Benjamin, a patient with has a brain tumor causing him to blurt out his thoughts without restraint, is in his hospital bed begin undergoing an examination by Dr. Meredith Grey, the intern who he has earlier witnessed exchanging smoldering glances with Dr. Derek Shepherd (a.k.a. Dr. McDreamy).

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[6] For more on Clintonian applied pragmatics and its relation to perjury statutes, along with other real-life illustrations, see Solan & Tiersma (2004: Chap. 11).

Benjamin: **"Did you have sex with that brain surgeon?"**
Benjamin's sister: "Benjamin!"
Meredith: "It's OK. **Nope, I haven't.** [PAUSE.] **Not today, anyway.**"

Teleporting from eros in Seattle to thanatos in New Jersey brings us to the domain of "House" (FOX, 11/21/2006). Once more we have a young (and doomed) male patient, his young (but precocious) sister, and the examining doctor (House's associate Eric Foreman). Kama is grilling Dr. Foreman about her brother Jack's serious but as yet undiagnosed mystery disease from which is suffering.[7]

Kama: "Is he gonna die?"
Dr. Foreman: "No, **no one's gonna die**."
Kama: "**In the whole world? Ever?** That's so great!"
Dr. Foreman: "I meant…"
Kama: "I know what you meant."

Resetting the dials of our time machine to 4th century Egypt, we can join Saul (2006: 3) who borrows a page from Alisdair MacIntyre recounting an episode from the life of St. Athansius to illustrate the distinction between lying (entailing the falsity of what is said) and misleading (allowing the falsity of what is implicated):

> Persecutors, dispatched by the emperor Julian, were pursuing [Athanasius] up the Nile. They came on him travelling downstream, failed to recognise him, and enquired of him: "Is Athanasius close at hand?" He replied: "He is not far from here." The persecutors hurried on and Athanasius thus successfully evaded them without telling a lie. (MacIntyre 1994: 336, cited in Saul 2006: 3)

This is all well and good, but given the unassailable content provided by wikipedia (http://en.wikipedia.org/wiki/Athanasius_of_Alexandria) revealing that St. Athanasius, "along with the standard method of excommunication…used beatings, intimidation, kidnapping and imprisonment to silence his theological opponents", one wonders whether he really would have been all that bothered by the occasional outright lie. With all deference to Professor MacIntyre, we must seek our patron saint of truth concealment elsewhere.

Some centuries after the trials and devices of St. Athanasius, the young lovers Tristan and Iseult were ceaselessly hounded by the efforts of the jealous Cornish lords Denoalen, Andret, and Gondoïne to trap them in adultery and betray them to King Mark, Isolde's husband and Tristan's uncle. These "felons" take their chance when Tristan is (supposedly) overseas in service to the King of Frisia and convince Mark to force Queen Isolde to undergo the Ordeal by Red Hot Iron which will result in her either having her name cleared forever or—as the villains confidently expect—burning to death for falsely swearing fidelity. Prior to undertaking the Ordeal before King Mark and his retainers, with King

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[7]If Dr. Grey was operating under the influence of Taylor (2001) and the Jesuits, the dialogue in House was obviously informed by the commentary in Bach (1994):

> The proposition being communicated is conceptually enriched or elaborated version of the one explicitly expressed by the utterance itelf. So, for example, if a mother utters (1) to her crying son upset about a cut finger,
>
> (1) You're not going to die from that cut.
>
> She is likely to mean that he is not going to die from that cut, not that he is immortal.

Arthur, Sir Gawain, and his other knights as warrantors, she secretly sends word to Tristan instructing him to appear by the river bank on the Day of Judgment disguised as a miserable ragged pilgrim who helps preserve her fine robes by carrying her to shore across the muddy stream. All transpires as planned, and now Queen Iseult addresses the assembled nobles by the bank of the river, as Bédier (1946) picks up the story…

Roi de Logres, et vous, roi de Cornouailles, et vous, sire Gauvain, sire Ké, sire Girflet, et vous tous qui serez mes garants, par ces corps saints et par tous les corps saints qui sont en ce monde, **je jure que jamais un homme né de femme ne m'a tenue entre ses bras, hormis le roi Marc, mon seigneur, et le pauvre pélerin qui, tout à l'heure, s'est laissé choir à vos yeux**. Roi Marc, ce serment convient-il?

—Oui, reine, et que Dieu manifeste son vrai jugement!

—Amen! dit Iseut.

Elle s'approcha du brasier, pâle et chancelante. Tous se taisaient; le fer était rouge. Alors, elle plongea ses bras nus dans la braise, saisit la barre de fer, marcha neuf pas en la portant, puis, l'ayant rejetée, étendit ses bras en croix, le paumes ouvertes. Et chacun vit que sa chair était plus saine que prune de prunier.

Alors de toutes les poitrines un grand cri de louange monta vers Dieu.
(Bédier 1946: 137-38)

King of Logres and you, King of Cornwall, and you, Sir Gawain, Sir Kay, Sir Girflet, and all of you who are my warrantors, by all the holy things in the world, ***I swear that no man born of woman has ever held me in his arms other than my lord King Mark, and that poor pilgrim who just fell down before your eyes.*** *King Mark, will that oath stand?"*

"Yes, Queen", he said, "and let God manifest his true judgment!"

"Amen!" said Iseult.

She approached the brazier, pale and staggering. All were silent; the iron was red hot. She thrust her naked arms into the coals, seized the iron rod, and bore it as she walked nine steps. Then, casting it off, she stretched out her arms in a cross, her palms open. Every witness saw her flesh healthier than a plum on a plum tree.

Then, from the lungs of all assembled, a great cry of praise ascended to God.
(translation mine)

In the words of Béroul, the 12th century Norman poet who first transcribed the Tristan legend of Tristan and Iseult, "Dieus i a fait vertuz" (Bédier 1946: 129). Rendering the sentiment loosely in modern language, it can only be concluded that God Himself is a semantic minimalist with an austere neo-Gricean conception of what is said.

Acknowledgments

Thanks are due to those who attended and commented on earlier presentations of parts of this material in Milan, East Lansing, Oakland, Rochester, Sheffield, and Leysin, and in particular to Barbara Abbott, Mira Ariel, Kent Bach, Emma Borg, David Braun, Bart Geurts, Michael Israel, Manfred Krifka, Anna Papafragou, Jennifer Saul, and Gregory Ward. The blame is all mine.

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