Assertoric inertia and NPI licensing

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This study focuses on three scalar particles for which competing but ultimately imperfect analyses have been offered in the semantic literature. I will propose a new account that seeks to explain why scalar orientation, as reflected by negative polarity licensing and related diagnostics, is at most parasitic on, rather than identifiable with, the entailment-based notion of downward monotonicity. I will close by briefly revisiting the phenomenon of metalinguistic negation from the perspective offered by the framework developed here.

We begin with the mirror-image approximative adverbs almost and barely. As seen in (1),

(1) a. Gore almost won the election. \(\Rightarrow\) a'. Gore didn't win the election.
   b. Bush barely won the election. \(\Rightarrow\) b'. Bush won the election.

Almost is in part semantically negative—from (1a) it follows that (1a')—while barely is correspondingly in part positive—from (1b) we conclude that (1b') is true. (I will assume, as do Ducrot 1973, Fillmore et al. 1988, Sevi 1998, and others, that the two adverbs are interdefinable: If Bush barely won, he almost didn’t.)

The most straightforward account of the meaning contributed by almost and barely is the conjunctive analysis in (2):

   a. Gore almost won.
      a'. Gore “came close to” winning & Gore did not win
   b. Bush barely won.
      b'. Bush “came close to” not winning & Bush won

Rapp & von Stechow (1999: 159) offer the variant in (2’); note the difficulty of stating the proximal component without unfortunate circularity.

(2') Let \(w\) be any world; \(F(\text{fast } \text{‘almost’})(w)(p) = 1\) iff (a) and (b) hold
   a. There is a world \(w’\) which is almost not different from \(w\) and \(p(w’) = 1\)
   b. \(p(w) = 0\)

The analytic paradox arises from the fact that it’s not the adverb with the negative polar component, almost, but the one with the positive polar component, barely, that licenses NPIs (cf. Horn 1996):
(3)  a. #She almost (budded/slept) a wink/touched a drop/spoke to anyone.
   b. She barely (budded/slept) a wink/touched a drop/spoke to anyone.

This result is problematic for Linebarger’s (1987, 1991) theory of indirect polarity licensing, given the fact that (4a) entails, if it is not logically equivalent to, (4b) (though see Atlas 1984 for a different view); as seen in (5), however, the intimate semantic relation between almost doing something and not quite doing it fails to account for the distribution of NPIs:

(4)  a. I almost finished my homework.
   b. I didn’t quite finish my homework.
   a. I almost finished (some/*any) of my homework.
   b. I didn’t quite finish any of my homework.

Does the Ladusaw (1980) downward entailment theory fare any better? That depends. In previous work (Horn 1996: §7), I noted that the set-to-subset inference doesn’t exactly go through in (6a), given that to be completely bedridden is to be alive while not (even barely) ambulatory, or in (6b), given that her entire exposure to linguistic study may have come from one course in OT historical phonology.

(6)  a. He’s barely alive.
   b. She barely studied linguistics.

On the basis of the marginality of (6a,b) and the fact that the inferences in (6a,b) appear to be even less sound, I suggested that barely is DOWNWARD QUASI-ENTAILING, but this seems to be something of a desperate move. Atlas (1997) supports the non-monotonicity of barely VP by observing that if John is barely six feet tall, it doesn’t follow that he’s barely six-feet-tall-and-blond, and we might add along the same lines that to be totally naked is not to be barely dressed.

So where does that leave us? If barely is (partly) positive and almost (partly) negative, why don’t they act that way? And if they’re conjunctive... well, just what ARE the conjuncts, anyway, and how can we characterize the proximal components of the approximatives? This question arises for all accounts. Two classic asymmetric treatments of the semantics of these approximatives are provided by Ducrot and Sadock, as given in (8):

(8) Ducrot (1973): [presque p] has a positive assertion (p is ‘non loin’ from being true) and a negative presupposition (p is false), [à peine p] the reverse.
    Sadock (1981): [almost p] is true iff p is true in a world not very different from the real world; it conversationally implicates (rather than entails) ~p.

Now, it’s not clear that the proximal component can really be given in possible world terms, despite the tradition represented by Sadock. Consider:

   b. 961 is almost a prime number.  (Sadock 1981: n. 2; Sevi 1998: 18)
   c. 0.333 almost equals 1/3.  (Sevi 1998: 18)

Does (9a) really invoke a world in which planets do have circular orbits? Is there a world just like ours except for 961 being prime? And what of (9c): is there a neighbor world in whose mathematics .333 is indeed one third? Noting these cases, Sevi (1998: 32ff.) proposes the revised quasi-asymmetric analysis in (10):

(10) •[Almost P] asserts that P is true at the closest index to the index of evaluation, [Barely P] asserts that P is false at the closest index to the index of evaluation (where ‘closeness’ may involve scalar strength, possible world, time interval, or standard of precision)
    •[Almost P] entails/asserts [not P] and [Barely P] entails/asserts [P], but
    •This polar assertion is ‘somehow “backgrounded” or less “prominent”’
      than the proximal assertion (p. 32)

Sevi acknowledges that ‘almost’ is “positive” and barely is “negative” in some sense’ (1998: 34). But in what sense, given the facts of (1)? In particular, just what is the nature of the ⇒ relation in (1a,b)? Is it entailment, as Sevi maintains? If so, why IS almost more positive than barely? In particular, besides the NPI data already surveyed, there is a wide range of evidence attesting to the pragmatic or rhetorical negative force associated with barely, but not with almost (cf. Ducrot 1973, Lundquist & Jarvella 1994, Horn 1996, Sevi 1998).

Like other negative adverbials, barely (and its cousin hardly) can be fronted, triggering inversion, while almost can do neither:

(11)  a. Hardly ever will you see such a thing.
   b. [Barely/*Almost] had we arrived when an unearthly scream rang out.

Evidence from argumentative scales supports this impression. If the tank of our car is almost half empty we’d better stop to fill it, even though it contains more gas than if it’s barely half empty (in which case we can relax and biliethy drive on). Similarly, in (12) I am delighted if my printer almost works and concerned if it barely does, even though it’s in the latter case that it can actually be used.

(12)  a. Good news: My printer is almost functional!
   b. Bad news: My printer is barely functional!
Similarly, as noted by Anscombe & Ducrot (1983: 20ff.) (cf. Ducrot 1973, Lundquist & Jarvela 1994), the negativity of à peine ‘barely’ is rhetorically harmonic with the negative peu ‘few’ and thus excludes mais ‘but’, while the adversative is required by the clash between downward-oriented peu and upward-oriented presque ‘almost’:

(13) a. Peu d’automobilistes dépassent le 120, mais {presque/#à peine} 20%.
   *Few drives exceed 120 [k.p.h.], but {almost/#barely} 20% [do]*
   b. Peu d’automobilistes dépassent le 120, {à peine/#presque} 20%.
   *Few drivers exceed 120 [k.p.h.], {barely/#almost} 20%*

Other diagnostics for scalar orientation include the suspension paradigm in (14a) (Horn 1972) and the contrast in (14b) (Ziegeler 2000) in which the negative (polar) component of almost is too weak to support a causal link (I can only provide a reason for my coming close to P-ing, not my reason for failing to P).

(14) a. He’s {barely/only/#almost} 16, if that.
   b. I almost cancelled because {I was ill/#I would have felt too guilty}.

Another illustration is provided by a pattern adapted from Dayal (1998: 472), who observes that (15) “brings into focus” the existential (3x)(Fx & ~Gx), whence the negative counterexemplification in (15a) as against the negative counterexemplification in (15b):

(15) a. Every cat doesn’t like mice.
   b. *But Felix doesn’t.*

Correspondingly, we have the contrast between (16) and (17):

(16) Almost every cat likes mice.
   a. For example, Felix {does/#doesn’t}.
   b. But Felix {doesn’t/#does}.

(17) Barely {any/two out of ten} cats like dogs.
   a. For example, Felix {doesn’t/#does}.
   b. But Felix {does/#doesn’t}.

The distribution of but in (13a), (16b), and (17b), is especially telling. Note also:

(18) a. almost {but/#and} not quite (cf. Sadock 1981)
   b. Gore almost beat Bush {but/#and} he didn’t (beat him).
   c. Bush barely beat Gore {but/#and} he did (beat him).

For Sadock (1981), not P derives from almost P as a generalized conversational implicature, so that (19a) scalar- (quantity-) implicates (19b). This predicts that (19c) should be good as an instance of implicature cancellation.

(19) a. Bill almost swam the English Channel.
   b. Bill did not swim the English Channel.
   c. (#)Not only did Bill ALMOST swim the Channel, in fact he SWAM it.
   d. #Bill almost swam the English Channel, and (in fact) he DID swim it.

The acceptability of (19c) has been much (but inconclusively) discussed in the literature (Sadock 1981: 263, Atlas 1984: 352, Horn 1991: 318, Rapp & von Stechow 1999: 159), beginning with Sadock’s concession that it is “admittedly a bit odd.” Outside the not only construction, cancellation appears to be much worse, as seen in (19d) (see again Sadock 1981, as well as Hitzeman 1992, Sevi 1988, Tanaka 1998, and Ziegeler 2000).

Faced with the equivocal evidence of (19c,d), Sadock (1981: 263) draws on the felicity of (20) to support the conversational line on almost.

(20) Bill almost but did not quite swim the English Channel.

The crucial assumption is that an inference can be non-redundantly reinforced just in case it can be cancelled without contradiction, viz. when it is a conversational implicature. But in fact, contra Sadock, concession/affirmation structures can be felicitous even when they are informationally redundant, as long as the two clauses involved are rhetorically opposed—whence the adversative but connective (see Horn 1991 for details):

(21) a. It’s (#not) odd that dogs eat cheese, but they do.
   b. I #(don’t) know why I love you, but I do.

(22) a. Bush barely won the presidential election, but win it he did.
   b. #Hillary easily won the senatorial election, {and/but} win it she did.

If semantically inferrable (entailed) material is felicitously reinforceable, the acceptability of (20)—or of (22a)—cannot serve as a diagnostic for the status of the polar component associated with the meaning of almost or barely.

But if a Sadock- (or Ziegeler 2000-) style implicature-based analysis of almost and barely is ultimately problematic, this doesn’t resolve the problem posed by the asymmetry of the meaning components. Nor is this simply a problem for the analysis of English approximatives; besides the analogue we have noted in French (presque ‘almost’ vs. à peine ‘barely’; cf. Ducrot 1973, Anscombe & Ducrot 1983), comparable pairs have been investigated in Dutch (wrijvel ‘almost’ vs. nauwelijks ‘hardly’; cf. Klein 1997) and Hebrew (kim’at ‘almost’ vs. bekoECI ‘barely’; cf. Sevi 1998). Other studies have focused on the French, Danish, and Finnish counterparts of ‘almost’ and ‘only’; see Lundquist & Jarvela (1994), Jarvela & Lundquist (1994), and references therein.

It is time to take stock, which we proceed to do with the table of particulars in (23), on which virtually all possible polar positions (as asymmetricalist to intermediate to full symmetricalist) are instantiated.
One more factor in the characterization of the polar inferences is the nature of the predicate. The contrast between (24a) and (24b,c) is presumably attributable to the fact that the difference between being dead and not dead is typically more significant than that between dinner being ready or not.

(24)  a. A: Is dinner almost ready?
   B: Yes, it’s ready.
   Yes, (in fact) it IS ready/it’s COMPLETELY ready)
   b. A: Is Fredo almost dead?
   B: Yes, (in fact) he’s TOTALLY dead.
   c. A: Did you almost kill Sollazzo at the restaurant?
   B: Yes, (in fact) I DID kill him.

It is also worth noting that if dinner is almost ready in the actual world, it will be ready soon in all the inertia worlds determined in the context (cf. Dowty 1979: 148), while death is not similarly projectible as a default future. Thus almost P is sometimes (virtually) compatible with P and sometimes incompatible with P, depending on the significance of (as the waggish Paul Grice might have put it) the distinction between P-ing and not P-ing.

Putting aside the evanescence of the polar inference from almost P to not P in contexts like (24a), is there any reason to reject the entailment analyses of Hitzeman, Sevi, or Rapp & von Stechow? Putative arguments against such an entailment are less than convincing; thus Atlas (1984) offers the compatibility of the two conjuncts in (25a),

(25)  a. Moore almost understood “material object” and he understood it.
   b. He is almost ready, if not completely ready.

but two separate sequenced events are involved here, as Sevi notes, while Klein’s (1997) suspension datum in (25b) doesn’t demonstrate the pragmatic nature of the inference, hinging as it does on the filtering properties of conditionals. We can certainly find naturalistic data like (26), but the parenthetical is attached here with an tacit or rather than and.

(26) It is almost certainly (perhaps quite certainly) wrong to reject as false, absurd, or linguistically incorrect some class of linguistic statements if this rejection is based merely on philosophical grounds. (Grice 1989: 172, emphasis added)

For Atlas (1997), barely any, unlike the non-monotonic barely VP, is downward entailing, whence the contrast in (27).

(27)  a. #It {hardly/barely} rained and (in fact) it didn’t rain.
   b. {Hardly/Barely} anyone came to the party—in fact no one came.
The DE-ness of quantificational barely is supported by the fact that, as Steve Anderson points out (p.c.), Barely 100 people came to the meeting is judged true by many (though not most) speakers if 97 people came. But even if Atlas is right on barely any, the non-monotonic he and others impute to barely VP remains problematic, as we are left with no explanation for its NPI licensing and other "negative" characteristics.

To obtain such an explanation, I will draw on the notion of assertion, as explicated by Stalnaker (1978). For Stalnaker, an assertion is a proposal to change the context: a potentially controversial move to reduce the context set—the set of possible worlds constituting the "live options"—or equivalently a proposal to add the content of what is asserted to the common ground. (A presupposition, on the other hand, is a proposition the speaker treats as being non-controversially part of the common ground, although it may acquire this status only through accommodation; cf. Lewis 1979.) Against this background, we shall adopt this proposal:

(28) Semantically entailed material that is outside the scope of the asserted, and hence potentially controversial, aspect of utterance meaning counts as ASSERTORICALLY INERT and hence as effectively transparent to NPI-licensing and related diagnostics of scalar orientation.

On this account, the polar component of the meaning of almost VP and barely VP is entailed but ASSERTORICALLY INERT, whence the quasi-monotonic behavior of the relevant clauses. A particularly dramatic illustration of the contrast between asserted and non-asserted entailments comes from the contrast between almost and not quite (cf. Sadock 1981: 264), two approximatives that are equivalent at the level of what they entail while differing as to what they assert:

(29) almost vs. not quite

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<th>Entailed</th>
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<td>Polar Component</td>
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<td>Polar Component</td>
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Thus, while a Republican and a Democrat would have agreed that Gore came close to winning without actually getting there, the former might have vouchedsafed the sentiment It's unfortunate that Gore didn't quite win (with a concern for the breadth of President Bush's mandate), where the latter would have subscribed instead to the proposition that It's unfortunate that Gore didn't quite win. Along the same lines, consider the prima facie contrast between (30a) and (30b):

(30) a. It's too bad you almost died in the accident
    [—now you'll need therapy]

    b. It's too bad you didn't quite die in the accident
    [—now I'll have to finish you off]

(31) I {never quite/*almost} made it to any of your parties.

The NPI licensing facts, as seen in (31), follow accordingly. What is relevant for NPI licensing is DOWNWARD ASSERTION rather than downward entailment per se.

Further evidence for the assertoric asymmetry of approximatives is provided by a set of constructions in which the proximal component is retained but the polar component effectively flip-flops depending on the context of utterance and interpretation. Thus consider the Mandarin particle variously transliterated as cha-yidjar/chadian and literally glossed as 'miss-a-little' (Li 1976, Biq 1989). While its ordinary interpretation is 'almost', when it scopes over a negative predicate it can be rendered as either 'almost not' (= 'barely') or as 'almost', with the negation essentially pleonastic:

(32) Wo chadian mei chi.
    I almost not eat
    a. 'I almost didn't eat', 'I barely ate'
    b. 'I almost ate' [= Wo chadian chi le]

(33) Wo chadian mei zhuangdao qiang.
    I almost not bump-to wall
    a. 'I almost didn't (barely) bumped into the wall'
    b. 'I almost bumped into the wall. [= Wo chadian zhuangdao qiang]

Depending on the predicate, the (b) reading may be virtually the only one available, as when we shift from 'eat' to 'bump into' to 'die'. The same is true for the parallel por poco (no) in Spanish (data from Dwight Bolinger via Li 1976):

(34) a. Por poco me ahogo. 'I almost drowned'
    b. Por poco no me ahogo. 'I almost/barely drowned'

As Schwenter (2000) observes, the standard Spanish approximative casi can be analyzed along the lines we have sketched for almost:

(35) María casi terminó la cena
    PROXIMAL COMPONENT = Maria almost finished dinner
    POLAR COMPONENT = She approximated finishing it.
    She did not finish it.
As in English, the polar component is ordinarily uncancellable but also transparent to the positive rhetorical force of the casi statement (Schwenter 2000):

(36) #Mari{a} casi termin{ó} la cena y (de hecho) lo termin{ó} (del todo).
   'Mari{a} almost finished dinner and (in fact) she finished it (all)'

(37) A: ¿Est{á} casi lista la cena? 'Is dinner almost ready?'
    B: No. [= it has a way to go; □ it's completely ready]

(38) a. Vamos a sentarnos (ya), está casi lista la cena.
    'Let's sit down (now), dinner's almost ready.'
   b. #No vamos a sentarnos (todav{í}a), está casi lista la cena.
    'Let's not sit down (yet), dinner's almost ready.'

There is a clear rhetorical contrast between casi and apenas ‘barely’ parallel to that of (12) above, so that (39b) is possible only on an ironic reading. Further, parallel to the NPI licensing asymmetry in English, some Spanish speakers allow negative concord with apenas, as seen in (40), while it is never licensed by casi:

(39) a. ¡Qué bien! Casi funciona el teléfono.
    'Great! The phone almost works.'
   b. ¡Qué bien! Apenas funciona el teléfono.
    'Great! The phone barely works.'

(40) a. Juan casi comió nada ayer. 'Juan almost ate nada yesterday'
   b. Juan apenas comió nada ayer. 'Juan barely ate anything yesterday'
   c. Juan casi no comió nada ayer. 'Juan almost ate nothing yesterday'

Thus, Schwenter (2000) concludes, we have the analysis in (41); in each case, the proximal ("closeness") component is both entailed and asserted, the polar (negative) component entailed but not asserted.

(41) Casi (p): entails ¬p but rhetorically oriented toward p
Apenas (p): entails p but rhetorically oriented toward ¬p (= Casi no p)

Against this background, consider the "inverted" casi in Valencian Spanish explored by Schwenter (2000). One speaker is trying to exit her car after parking on a narrow street, but is forced to wait as many cars go past. When she’s finally able to slip out, she sighs "¡Casi salgo!"—literally, ‘I almost get out’, but meaning ‘I barely/finally got out’. A second speaker, impatiently awaiting his friend at the auditorium door, sees her arrive a minute before the session starts and exclaims ¡Casi llegas! You just barely made it!” (lit., ‘You almost arrive’!). In such cases, all restricted to simple present tense and utterance-initial occurrence, casi p clearly does not entail ¬p, since the truth of p is obvious in the context. Instead, casi p = canonical casi + NO (p): ¡Casi no salgo!: ¡Casi no llegas!

Nør are Chinese and Spanish alone in sponsoring such constructions. Swiss German fasch is akin to standard fast ‘almost’, but also has an “inverted” sense, and English near miss is analogous. For airplanes and golfers, a near miss is still a miss (either a fortunate or unfortunate non-achievement), but for at least one champion curler a near miss was nearly—but luckily not quite—a miss:

“Greg Norman, best known for his massive collapse in ’96 and his other near misses”—Bill Pidto on ESPN SportsCenter, 24 Aug. 2001

[Headline:] Martin’s near miss
...Great Britain curling skip Rhona Martin almost missed the Winter Olympics because of a stomach problem. The gold medalist, who delivered the stone of destiny, spent time in hospital a week before the Salt Lake City Games began.
(http://news.bbc.co.uk/winterolympics2002/hi/english/curling)

If the polar component is more peripheral to the force of almost sentences than is the proximal component, it should not be too surprising to find such cases of inversion; what we never find is the reverse, when almost P retains the not P entailment while jettisoning its better (proximal) half.

For one last illustration, we turn to an innovative construction that references an item’s proximity to a category boundary, while remaining flexible as to which side of the boundary it falls on. We are dealing here with the UN-NOUN (Horn 2002), the bastard offspring when the seminal contribution of the copywriter who promoted 7-Up as the un-cola fertilized the ovum donated by Humpty Dumpty and his "un-birthday present."

Simplex un-nouns fall into two classes. CLASS A un-nouns of the form unX do not satisfy the structural criteria for the category X but share its function, evoking a superset category encompassing both X and unX. As a carbonated soft drink, 7-Up was a better candidate for an un-cola than chocolate milk or herbal tea would have been, and we can similarly assume that Tabla’s ginger citrus snap counts as an unmartini by virtue of being an aperitif served in a martini glass, just as Now & Zen’s vegan creation—a turkey it’s not—qualifies as an unturkey through its destiny of consumption by a large gathering at Thanksgiving.

(42) Class A un-nouns [here and below, emphasis is added]

un-hit
Un-hit of the week: Cardinals pitcher Garrett Stephenson came into last Saturday’s game with Atlanta 1 for 36 at the plate. Then he lined what looked like a single to right. But Brian Jordan charged, fielded it and threw him out at first.
(Baasbase "Week in Review" column by Jayson Stark at espn.com, 11 Aug. 2000)

unmartini
Photo caption: UNMARTINI -- A Ginger Citrus Snap, with pomegranate seeds, at Tabla.
(NYT 20 Jan. 1999, F1, "The Aperitif Moment: Sip or Flinch")
unpotato
Photo caption: THE UNPOTATO: Jerusalem artichokes are roasted with thyme in a craft.
(NYT 14 March 2001, F3)
unpublications
The main unpublications of H. P. Grice
(Heading for column in bibliographic addendum to PGRICE [Grandy & Warner, eds.,
1986: 495], facing page with listing of 'The publications of H. P. Grice'.)
unturkey (and unbird)
The Great UnTurkey. Let One of Now & Zen's featherless friends be the
centerpiece of Your Holiday table! This impressive creation is completely vegan and
offers 5 solid pounds of boneless eating (enough for 8 hungry adults)! Made of
delicately flavored tender seitan, dressed in a delectable "skin" made from yuba
(beamurd skin), ...this innovative creation will delight vegetarians and non-
vegetarians alike. This frozen "unbird" comes fully cooked, and needs only
reheating to be enjoyed. (ad for Now & Zen, San Francisco, November 1999)

A CLASS B un-noun of the form unY, on the other hand, is a member of
the category Y, but a peripheral or non-prototype member (cf. Rosch 1978), one
lacking a functionally significant (but not criterial) property associated with the
category in question. This is schematized in (43):

(43)

Class B un-nouns are exemplified in (44); note that even an un-place like New
Jersey must nevertheless count as a place, and that unvegetarian Deborah
Madison is indeed a vegetarian, though not the "vegetarian vegetarian" associated
with bland, unimaginative, and definitely un-chic meatless meals.

(44) Class B un-nouns

uncollege
Even though many Mids [= Midshipmen, i.e. students at the U. S. Naval Academy]
refer to their school with bemused affection as "the uncollege", it remains one of
the great bastions of "old college spirit" in its pristine form. (Washington Post, 22

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1The XX at the core of the category structure represents a LEXICAL CLONE or DOUBLE, which
typically (although not invariably) represents the prototype instance of a category member: a dog
dog may be a retriever or German shepherd but not a chihuahua, a salad salad is based on lettuce
and not tuna or rice, and crucially a college college has a high-powered football team and a
drinking problem, features an uncollege lacks. Thus an unX is at the opposite pole from the XX:

Undesign: Moving Away from Aggressive Décor
(NYT headline, 2 June 1988, C6)

"Nothing is ‘design designed’. Nothing has a signature."
—New York architect Diana Agrest
If incompatibility means that two people are not compatible, then it is not the case that they are compatible. For example, consider the following statement: "If it rains, then the ground is wet." This statement is true because if it rains, then the ground is indeed wet. However, the converse statement "If the ground is wet, then it rains" is false because the ground can be wet for other reasons, such as from a recent watering or because of a leak in the roof.

Now, consider the statement "If a person is a vegetarian, then they do not eat meat." This statement is also true because if a person is a vegetarian, then they do not eat meat. However, the converse statement "If a person does not eat meat, then they are a vegetarian" is false because there are many reasons why someone might not eat meat, such as dietary restrictions or cultural preferences.

In general, the converse of a true statement is not necessarily true. This is because the truth of a statement depends on the specific circumstances, and the converse statement may not hold in those circumstances. Therefore, it is important to be careful when interpreting statements and their converses.
Indeed, the evident parallel seen in the quasi-conjunctive nature of each of these approximatives—entailing and asserting closeness to success and entailing but not asserting failure—underlines the need to devise a general solution rather than an ad hoc patch invoking conventional implicature or a comparable notion. But what of other particles, in particular the classical exponibile par excellence, only?

For Peter of Spain, (52a) entails the conjunction of (52b) and (52c) and thus entails each of them singly.

(52) a. Only God can make a tree.
    b. God can make a tree.
    c. No one distinct from God can make a tree.

The Latin ‘only’ particle, solus or tantum, is an EXPOSIBLE to be expounded or unpacked into “an affirmative copulative proposition whose first part is the same proposition without only”—the “PRAEICENS” or PREJACENT—and whose second part is a negative proposition denying the predicate of all others apart from the subject” (Tractatus Expositibilium 21ff., in Mullally 1945: 106-7). Similarly, for Ockham (1980: 132-42), “Every exclusive proposition has two exponents: one affirmative and the other negative. For example, ‘Only a man is an animal’ has these exponents: ‘A man is an animal’ and ‘Nothing other than man is an animal.’”


As I argued many a CLS ago (Horn 1969; cf. Horn 1992, 1996), however, if we analyze only statements into two equal conjuncts, one conjunct is clearly more equal than the other. Simple symmetricalist theories cannot readily explain why the positive component of only sentences is at least marginally suspensible while the negative component is not (cf. (53)), why only-initial phrases trigger negative inversion (cf. (54)), or why the nuclear scope of only should license negative polarity expressions (cf. (55), from Klina 1964).

(53) a. (#)Only Ann will pay her taxes on time, and maybe even she won’t.
    b. #Only Ann paid her taxes on time, (and but) maybe someone else did.

2I am indebted to Víctor Sánchez Valencia for directing me to many of the medieval sources. The earliest one we have located in this connection is Abelard (1079-1142), whose analysis of (i) into the conjunction in (ii) appears in Tractata III (Topica) of his Dialectica (Abelard 1970: 323-33).

(i) Socrates tantum est Socrates.
    ‘Only S. is S.’

(ii) Socrates est Socrates et nulla alia res est Socrates. ‘S. is S. and nothing else is S.’

(54) a. Only in stories does a dropped glass betray agitation. (Graham Greene)
    b. Only one new feature did I notice in the landscape, a large white villa.

(55) a. Only young writers ever accept suggestions with any sincerity.
    b. Only his sister will expect him to write any more novels.

Such evidence appears to motivate an asymmetricalist analysis, on which the prejacent of the only sentence is not entailed but rather semantically presupposed (Horn 1969, König 1991), or perhaps conventionally implicated or pragmatically presupposed (Horn 1979, Rooth 1985, Krifka 1993), or maybe just conversationally implicated (McCawley 1981: 227)—or perhaps we could get away with ignoring it altogether (Geach 1962: 187).

While I am sympathetic to the spirit of such proposals—and not just because I’ve endorsed most of them at one time or another—I would now concede that they are flawed in the letter. Both liberal and radical asymmetricalist approaches fall afoul of Atlas’s observation (1991, 1993) that simple cancellations of the prejacent in contexts like (56a,b) are unsalvageably bad.

(56) a. #Only Hillary trusts Bill, and (even) she doesn’t.
    b. #I love only you, but I don’t love you either.

And in response to my contention (Horn 1992: 182) that (57a)

(57) a. I love only you.
    b. I love you.

“is not a declaration of love” and that its recipient, rather than being entitled to semantically infer (56b), is at most “pragmatically licensed to hope for the best”, Atlas (1993: 314, 317) retorted:

[This] consequence strikes me as so outrageously counter-intuitive as to be a reductio of the theory. The idea that simultaneously I love only you could be true while I love you is false just seems crazy to me—I just have a very hard time with Horn’s theory about the truth-conditions of I love only you.

Well, I sorta do too—and I agree with Atlas that only NP cannot be a classical downward monotone (DE) operator, given the lack of entailment from (58a) to (58b).

(58) a. Only Socrates entered the race.
    b. Only Socrates entered the race early.

Indeed, Peter of Spain (Tract. Synct., in Mullally 1964: 33) had observed eight centuries earlier a similar lack of entailment either way between (58'a) and (58'b).
(58') a. Only Aristotle moves
b. Only Aristotle runs

But unlike the future Pope John XXI, an English language symmetricalist has the NPI-licensing property of *only NP to explain, or at least explain away, and I find Atlas's attempts to wave off the polarity facts as unpersuasive as my own theory of love. Atlas (1993: 313) begins by distinguishing examples like (55) above or (59a) from (59b,c) to support his argument that *only is not, in general, a trigger for Negative [Polarity] Items” or indeed a negative item.

(59) a. Only John ever suspected David Alexander.
   b. *Only Bill wants Sam to finish the report until Friday.
   c. *Only Phil will give Lucy a red cent.

In fact, though, only licenses not just weak NPIs (any, ever) but minimizers:

(60) a. (Of all her friends,) Only Phil would lift a finger to help Lucy.
    b. Only your wife gives a hoot about what happens to you.
    (McCawley 1981: 83)
   c. My nose and my lungs are only alive at all because they are part of my body and share its common life. (C. S. Lewis, Mere Christianity)
   d. Only Greg Monarch has a prayer of getting him off.
   (Siegel 1998, back cover)

Nor is this surprising, given the long-established conversational relation between ‘only’ and ‘all’ (see Horn 1996 for extensive documentation):

(61) ONLY (A,B) [i.e. only As are Bs] ↔ all Bs are As ↔ BCA

Indeed, the predicate of only CN licenses NPIs just as does the restrictor of V:

(62) a. Only philosophers ever have any problems with this.
    b. Everyone who has ever had any problems with this is a philosopher.

Atlas (1996: 285-86) is willing to concede that only CN is DE, while continuing to maintain that only with NP focus is non-monotonic and hence not a polarity licensor (nor a “negative item“): it only SEEMS to license NPI minimizers because it’s a focus operator. Whence the (putative) parallel with even:

(63) {Only Phil/Even Phil} would lift a finger to help Lucy. (Atlas 1996: (22k))

To which my response is: Parallel? What parallel? Unlike only NP, which as we’ve seen above, licenses a wide range of NPIs (although not those of the strictest variety, e.g. in weeks, until midnight), even NP comes up spectacularly short, even with the most trigger-happy polarity items:

(64) a. {Only Phil*/Even Phil} ate any of the squid.
   b. {Only Phil*/Even Phil} could sleep a wink with all that noise.

We are at a familiar impasse: as with almost VP and barely VP, the distribution of only NP seems to be compatible with neither a purely symmetrical nor a semantically asymmetrical analysis; in particular, as with barely, the positive component of only is transparent to the negative and DE-like behavior of the particle. The situation is ripe for an invocation of the same analytical tool: the only NP statement can be taken as entailing both conjuncts, only one of which is, however, asserted (the other being assertorically inert).

Curiously, this result was partially foreshadowed in a remark of the arch-conjunctivalist Atlas (1991: 139): “[I]n asserting Only a is F, we do not thereby assert a is F ...What we do assert entails a is F, but it does not ‘say’ it” (emphasis in original). Partly because his account, unlike the current one, requires that Only a is F does “say” that exactly one thing is F, Atlas does not draw the same conclusions from his assertoric asymmetry (e.g. for NPI-licensing properties of only NP) that we have drawn from ours, but the parallel is interesting nonetheless.

A natural move now open to us is to redefine the classic Karttunen & Peters (1979) scopal diagnostics for conventional implicature as diagnostics for non-assertion. Essentially, “presupposed” or conventionally implicated material —on our account, non-asserted material—scopes out of factives. Thus, (65a) is understood as reporting that I just discovered that my cat came close to antedating Andrew Wiles, not that she didn’t succeed, and in (65b) I am lamenting that you came close to death, not that you didn’t arrive there.

(65) a. I just discovered that my cat almost proved Fermat’s Last Theorem.
   b. It’s too bad that you barely recovered.

Similarly, in (66), the proposition that home loans are deductible, i.e. the prejacent of the only clause, is outside the assertive scope of the higher factives:

(66) a. I just discovered that only home loans are tax-deductible.
    b. It’s too bad that only home loans are tax-deductible.

When the model contains the prejacent, the only statement can be asserted (or questioned), but when it contains the exclusion, it can’t be:

(67) a. I know home loans are deductible, but are ONLY home loans deductible?
b. #I know no loans besides home loans are deductible, but are ONLY home loans deductible?
c. I know that no loans other than home loans are deductible, but I just realized (#only) home loans are deductible.

As the contrasts in (67) indicate, material already entailed in the model can be asserted, but asserted material cannot be questioned or (re-)asserted. In conclusion, 3

(68) •K/P diagnostics demonstrate what’s outside the scope of assertion, but not (necessarily) what’s presupposed or conventionally implicated.  
•NPIs are sensitive to DOWNWARD ASSERTION, not DOWNWARD ENTAILMENT as such, hence the licensing properties of barely VP and only NP.

One tempting approach to representing the scope effects we have surveyed would adapt a device patented by Grice (1989, Chapters 4, 17), the use of brackets constituting “a syntactical scope device” that provides “a conventional regimentation” of a pragmatic distinction (Grice 1989: 282). The bracketed expression A(B )C rewrites via erasure as ABC if the context does not contain a “denominated term T”, but via extraction as BAC if the context does contain such a denominated term. For our purposes, let us suppose that the bracketed expression corresponds to the (non-asserted) polar component of an approximative and the (non-asserted) prejacent of an exclusive:

(69) a. Robin almost passed: [− Robin pass] & C(Robin pass)  
   b. Robin barely passed: [Robin pass] & C−(Robin pass)  
      [where Cφ is true iff φ is true at the closest world  
       or index of evaluation to the actual world/index ]  
   c. Only Robin passed: [Robin passed] & 3y(y(Robin & y passed)

Among the denominated terms would figure the emotive factives (e.g. It’s too bad that) and, crucially, the assertion operator (∼) itself:

(70) It’s too bad that Robin almost passed  
     ➔ (∼(Robin passed) & ∼ It’s too bad that C(Robin passed))  
It’s too bad that Robin barely passed  
     ➔ (Robin passed & ∼ It’s too bad that C−(Robin passed))  
It’s too bad that only Robin passed  
     ➔ (Robin passed & ∼ It’s too bad that no one other than Robin passed)  
[I assert that] Robin almost passed  
     ➔ (Robin didn’t pass & ∼ C(Robin passed))  
[I assert that] Robin barely passed  
     ➔ (Robin passed & ∼ C−(Robin passed))  
[I assert that] only Robin passed  
     ➔ (Robin passed & ∼ 3y(y(Robin & y passed))

As for “non-denominated terms”, there do appear to be contexts in which the tendency toward extraction is overridden in favor of simple erasure. Thus when sports columnist Bob Ryan explained the burdens of the favorite’s role as applied to the Los Angeles Lakers (on WFAN radio, 6/7/00), “You can’t almost win anymore,” the sense is clearly that of (71), with both proximal and polar components within the scope of the modal assertion after bracket erasure:

(71) {− ∼ 3y(∼ you win & C(you win))}  
     = ‘You can’t (come close to winning and not win)’

Another illustration is (72), taken from Horn (1992: 182-83),

(72) Mary will be upset if only Bill makes it to her dinner party.

with the gloss that “Mary may just be apprehensive about an evening alone with Bill; if no one shows up at all she will happily pop a meal into her microwave and a tape into her VCR.” Both prejacent and exclusion fall within the scope of Mary’s apprehension here. The local context evidently plays a role in determining when brackets will be erased rather than bracketed material extracted.

While we cannot fully explore the rich territory of “presuppositional phenomena” outside the realm of scalar particles, it is worth touching briefly on the case of universally quantified statements, which as we’ve seen are the converses of only-exclusives. On the modern view, universals with empty subject terms are vacuously true, but this yields notoriously counterintuitive results:

(73) A: All John’s children are bald.
B: #Yes, (but only) because he doesn’t have any.
   #That’s true, because he’s childless.
   (?)That’s false—he doesn’t have any children.
On the standard classical view on existential import (see Horn 1997 for capsule history), \textit{All F is G} (like \textit{Only G is F}) is taken to entail (and assert) the existence of Fs while denying the existence of non-G Fs.\footnote{Following Strawson (1952) and Moravcsik (1991), I have argued (Horn 1997) that we need to distinguish \textit{CATEGORICAL} (empirical) universals (and other quantified statements) with existential import from \textit{THETIC} (lawlike) universals without it, e.g. \textit{All violators will be prosecuted}. The latter are not vacuously true either; emptiness of the subject set here would be simply irrelevant to the truth conditions. The present discussion focuses on the \textit{categorical} (non-lawlike) universals.} But it’s not clear that existence is really asserted here; indeed, one tradition, usually associated with Strawson (1952) but actually well antedating him, characterizes it as a presupposition:

In translating categorical universals into existential negatives, part of the meaning is dropped by the way...In an ordinary proposition the subject is necessarily admitted to exist...When we say \textit{no stone is alive, or all men are mortal}, we presuppose the existence of stones or of men.  

\hspace{1cm} \textit{(Land 1876: 290-91)}

For Husserl too (cf. Frege 1906), (empirical) universals, like singular expressions, presuppose a non-null subject class: “The form containing ‘all’ is normally so understood that the existence of objects falling under the subject...is part of what is meant and is presupposed as having been admitted. In response, Frege (1906: 306-7) averred, ‘I use expressions containing ‘all’ in which a way that existence is neither part of what I mean nor something I presuppose as having been admitted...It must be possible to express the main thought without \textit{Nebengedanken}.’ But it’s precisely such \textit{Nebengedanken} or ‘side-thoughts’ that offer themselves up to a suitable non-presuppositional treatment in the current framework. In categorical universal statements, the existential proposition is entailed but not asserted; in thetic universals, it’s neither. The relevant bracketing yields:

\begin{equation}
(74) \exists x (Fx \land \forall y (Fy \rightarrow Gx)) \quad \text{"rewriting" as} \quad \exists x (Fx \land \forall y (Fy \lor Gy))
\end{equation}

Checking in briefly at one more way-station on the presuppositional highway, the complement of an adversative can also be treated as assertorically inert, thereby finessing the problems with the traditional DE approach to this class of NPI-licensors based on the non-entailment of (75b) by (75a) (cf. Linebarger 1987, 1991, von Fintel 1999):

\begin{enumerate}
\item a. I’m surprised that Robin bought a car.
\item b. I’m surprised that Robin bought a Honda.
\end{enumerate}

Borrowing the representation suggested by Grice (1989: 280), we have:

\begin{enumerate}
\item a. \textit{I’m surprised you passed}; \quad [you passed \&] I expected \textit{–} (you passed)
\item b. \textit{I regret that you passed}; \quad [you passed \&] I AM NOT (you passed)
\end{enumerate}

Finally, we turn to the phenomenon of \textit{METALINGUISTIC NEGATION}, taken in Horn (1989: 377) to be “a device for objecting to a previous utterance on any grounds whatever—including the conventional or conversational implicata it potentially induces, its morphology, its style or register, or its phonetic realization.” Carston (1996) argues that while MN has been characterized variously as a \textit{rejoinder} to a previous utterance, by the fall-rise or “contradiction” \textit{contour}, by occurrence in \textit{garden-path} sentences necessitating double processing by the addressee, by yielding \textit{logical contradiction}, by requiring \textit{rectification}, etc., the true generalization is that “the representation falling in the scope of the negation operator is \textit{implicitly echoic}” (Carston 1996: 320-21, emphasis added). Working within a relevance theoretic framework, Yoshimura (1994, 1998) has argued that metalinguistic or echoic negation involves \textit{PROCEDURAL} rather than \textit{CONCEPTUAL} meaning, whence its failure to license NPIs (cf. Horn 1989: §6.4.2). Similarly, Predelli (to appear) sees MN as rejecting the ATTACHMENT rather than the MESSAGE. But how can we characterize the \textbf{target} of echoic negation? Some samples from the specimen table (Horn 1989):

\begin{enumerate}
\item \textbf{conventional implicata}
\begin{enumerate}
\item He didn’t \textbf{MANAGE} to win the election—he was awarded the office.
\end{enumerate}
\item \textbf{conversational implicata}
\begin{enumerate}
\item \textbf{scalar cases}
\begin{enumerate}
\item Around here we don’t \textbf{LIKE} coffee—we \textbf{LOVE} it
\item She’s not patriotic OR quixotic—she’s patriotic \textbf{AND} quixotic.
\end{enumerate}
\item \textbf{non-scalar cases}
\begin{enumerate}
\item Ms. X didn’t produce a series of sounds that corresponded closely to the score of “Mañana,” damn it—she SANG “Mañana.”
\item Mozart’s sonatas weren’t for violin and piano, they were for \textbf{piano} and violin.
\end{enumerate}
\item \textbf{non-cancelable cases} (involving R-based strengthening implicature)
\begin{enumerate}
\item He wasn’t able to solve the problem.
\item \textit{(C ‘He was ABLE to solve it but he didn’t’: cf. Horn 1989: 387-92)}
\end{enumerate}
\item \textbf{register}
\begin{enumerate}
\item It’s not stewed bunny, honey, it’s \textit{civet de lapin}.
\item Grandma isn’t feeling lousy, she’s indisposed.
\end{enumerate}
\item \textbf{connotative focus}
\begin{enumerate}
\item I’m not HIS brother; HE’S MY brother.
\item Ben Ward is not a black police commissioner but a police commissioner who is black.
\end{enumerate}
\item \textbf{morphological or syntactic form}
\begin{enumerate}
\item I didn’t \textbf{trap} two \textbf{monGEESE}—I \textbf{trapped} two \textbf{monGOOSE}s.
\item Non, je n’ai pas “\textbf{coco-PAY} luh vee-\textbf{AND},” j’ai coupé la viande.
\end{enumerate}
\end{enumerate}
(82) **phonic form**
We don’t serve [t’me’d’z], we serve [t’mA:toz]
I didn’t call the PO-lice, I called the po-LICE.

Yoshimura (2001) has recently proposed that if we put aside PROPOSITIONAL DENIAL (Foolen 1991, Geurts 1998)—e.g., *The cat is NOT on the mat, She DOESn’t live in Chicago*, where no rectification is required—we can take the target of the metalinguistic use of negation to be “what is necessarily accompanied but not communicated by the...attributed utterance” (Yoshimura 2001: 123). This extends not only to the cases of (79)-(82), but also to entailments that are not communicated, e.g. the classic “presupposition” cancellation in (83) or presumably the negation of the assertorically inert polar component in (84).

(83) The king of France is not bald—there is no king of France.
(84) a. Gertrude didn’t ALMOST swim the channel—she SWAM it!
   b. I didn’t ALMOST kill Sollazzo, I DID kill him.

but not to implicature as in (77)-(78), which does, however, qualify as a legitimate target of MN. Revising Yoshimura accordingly, we arrive at a modified schema:

<table>
<thead>
<tr>
<th>Part of what is communicated?</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Part of explicit content?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Yes</strong></td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>(asserted)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>implicature denial</strong></td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>(77), (78ab)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(italicized categories adapted from Geurts 1998)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In this four-cell matrix, the one potential target off limits to MN is A, the site for ordinary descriptive negation. MN does target non-communicated entailments (à la Yoshimura) in B, communicated but implicit material in C, and aspects of form in D. The target of “classical” MN is **what is not asserted**: material that is not part of explicit content and/or not communicated. The patterns of metalinguistic negation respect and thereby ratify the distinction between the asserted and the (merely) entailed, a distinction we have tried to establish in the present study.

We are now prepared to recognize why Boar’s Head Brand of deli foods finds it necessary to remind us that “Almost Boar’s Head Isn’t Boar’s Head”, as well as why (as Scott Schwenter notes) the “Almost Family” vans for seniors in Columbus are not labeled Barely (or Not Quite) Family. Finally, I hope I’ve shown why in principle it’s really better if you **almost** filed your taxes on time two weeks before the IRS conference than if you barely made the deadline. How to convince the IRS of this fact will be left as an exercise for the reader.

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**References**


Indefinite Nouns Plus Two Types of Conjoiners

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1 Introduction
One of the basic facts about language is that you need at least two items in order to use such coordinators as and and or. Based on this fact, we provide answers to the following pervasive and difficult questions: (i) Why does Korean amwulo ‘anyone’ necessarily become a negative polarity item (NPI, hereafter)? And (ii) why should amwulo-na ‘anyone,’ which is closely correlated to the NPI amwulo-to, be invariably interpreted as free choice any? A couple of assumptions will be made for this purpose. First, the NPI amwulo-to is best characterized if decomposed to be [amwulo + to], of which [amwulo] is an indefinite and [-to] is a conjunctive. Second, the morpheme amwulo is placed on the bottom of a pragmatically defined scale which represents significance, degree, and/or amount, along the line of study conducted by Fauconnier (1975). Given that -to is a conjunctive coordinator and -na is a disjunctive coordinator, we show that the semantics of amwulo-to (negative polarity) and amwulo-na (free choice) are fully predicted from the compositional meaning of their constituents, thereby offering a uniform analysis of them. In particular, we show that Lee and Horn’s (1995) claim that any is an indefinite + even is too strong. Instead, we claim that any (and its Korean counterpart) is an indefinite plus conjunctive/disjunctive coordinator and that the pragmatic scale is presupposed by the role of these coordinators.

2 Polarity Scale and Polarity Item Licensing in English
Analyzing superlatives, Fauconnier (1975) proposes a scalar theory of NPI licensing. Section 2.1 discusses cases of positive polarity item licensing and section 2.2 deals with cases of negative polarity item licensing in English.

2.1 Positive Polarity Items
First, consider the following examples:

(1) a. John can solve the most difficult problem.
    b. John can solve an easy problem.

If someone can solve the most difficult problem, then he can naturally solve an easy one. This is the situation that we see in sentences given in (1). Negation of the sentences in (1) does not pose a special problem for our purpose.

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1A scale approach to the polarity phenomena is found in various previous works including Israel (1996), Fillmore, Kay and O’Connor (1988), Kadmon and Landman (1993), Lee and Horn (1992), and references cited therein, among many others. Readers are referred to these works.