

Metalinguistic Comparison in an Alternative Semantics for Imprecision*

Marcin Morzycki

Michigan State University

1. Introduction

Despite all the attention the semantics of comparatives has received, there has been little discussion of so-called ‘metalinguistic’ comparatives, such as those in (1) (Bresnan 1973, McCawley 1998, Huddleston and Pullum 2002, Embick 2007, Giannakidou and Stavrou To appear, Lechner 2007):

- (1) a. George is more dumb than crazy.
b. Clyde is more a syntactician than a semanticist.
c. I am more machine now than man. (Darth Vader in *Return of the Jedi*)

This paper provides an analysis of these structures built on the intuition that they compare not along scales introduced by gradable adjectives—as ordinary comparatives do—but rather along a scale of (*im*)precision, or of how much pragmatic ‘slack’ must be afforded to judge an expression ‘close enough to true’. Section 2 provides evidence that metalinguistic comparatives are fundamentally different from ordinary comparatives. Section 3 argues that they are ‘slack-regulators’ in the Lasersohn (1999) sense. Section 4 develops a semantics, reformulating the Lasersohnian pragmatic-halos theory of imprecision in terms of a Hamblin-style alternative semantics (Hamblin 1973) in a way that allows degrees of imprecision—roughly, ‘halo size’—to be directly compared. Section 5 considers in what sense such comparatives are actually ‘metalinguistic’. Section 6 concludes.

2. Metalinguistic Comparatives vs. Ordinary Comparatives

There are a number of syntactic and semantic differences between metalinguistic and ordinary comparatives. Metalinguistic comparatives (‘MCs’) are impossible with *-er*, even for adjectives that otherwise require *-er* comparatives:

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Marcin Morzycki

- (2) a. George is more dumb than crazy.
b. *George is dumber than crazy.
- (3) a. Dick is more crazy than dumb.
b. *Dick is crazier than dumb.

MCs are possible with adjectives that are not ordinarily gradable:

- (4) a. Your problems are more financial than legal. (McCawley 1998)
b. *Your problems are more financial than Clyde's.
- (5) a. This ball is more spherical than oblong.
b. *This ball is more spherical than that one.

The *than*-phrase in MCs can consist of an adjective alone, which is not possible in ordinary comparatives:

- (6) a. George is more dumb than crazy. (metalinguistic)
b. George is dumber than Dick. (ordinary)
c. *George is dumber than crazy.

The structure in which *more* is apparently displaced to the right seems to be possible only with MCs (McCawley 1998):

- (7) a. George is dumb more than crazy.
b. Your problems are legal more than financial.

MCs behave differently with respect to 'neutralization' of adjectives. Unlike ordinary comparatives, they give rise to a conversational implicature that the compared predicate holds absolutely:

- (8) This table is wider than that one.
NOT AN IMPLICATURE (OR ENTAILMENT): 'This table is wide.'

- (9) This table is more wide than long.
IMPLICATURE: 'This table is wide.'

This inference is cancelable, so not an entailment—(9) could without contradiction be followed by ... *but it's not wide (either)*. Partly for this reason, MCs can't be reduced to comparison of deviation (Kennedy 1997, 2007):

- (10) a. This table is wider than it is long. (COD)
b. This table is more wide than long. (metalinguistic)

The distinguishing property of comparison of deviation is the absence of neutralization with respect to both adjectives—(10a) entails that the table is long. There is no such entailment in (10b) (and only an implicature with respect to *wide*).

Metalinguistic Comparison in an Alternative Semantics for Imprecision

Ordinary comparatives are principally possible in the extended AP. MCs are more generally cross-categorical:

- (11) a. George is more [AP/DegP dumb] than [AP/DegP crazy].
b. George is more [DegP incredibly dumb] than [DegP incredibly crazy].
- (12) a. Clyde is more $\left\{ \begin{array}{l} \text{[DP a syntactician] than [DP a semanticist]} \\ \text{[NP syntactician] than [NP semanticist]} \end{array} \right\}$.
b. A chimp is more $\left\{ \begin{array}{l} \text{[DP an ape] than [DP a monkey]} \\ \text{[NP ape] than [NP monkey]} \end{array} \right\}$.
- (13) a. George more [VP felt the answer] than [VP knew it].
b. Clyde will more [VP confess the analysis] than [VP propose it].
c. Floyd [VP stumbled into a solution] more than [VP sought it].
- (14) a. George is more [PP beneath contempt] than [PP beyond help].
b. The dog is sitting [PP on your head] more than [PP in your lap].
- (15) He realized [CP that he was drunk] more than [CP that he was ugly].

In fact, a single MC can actually compare across different categories:

- (16) a. George is more [AP afraid of Dick] than [PP in love with him].
b. Dick is more [DP a war criminal] than [AP (merely) criminally insane].

MCs aren't completely cross-categorially promiscuous, though:

- (17) a. *More [D all] than [D many] dogs like socks.
b. *She more [T must] than [T can] chase squirrels.
- (18) a. ?George more [V fears] than [V loves] Dick.
b. ?Mary more [V respects] than [V admires] John. (McCawley 1998)

Some languages distinguish MCs morphologically. Giannakidou and Stavrou (To appear) show that this is the case for Greek *para* ('than'):

- (19) Ta provlimata sou ine perissotero ikonomika para nomika.
the problems yours are more financial than legal
'Your problems are financial more than legal.'

Sawada (2007) observes that Japanese has such a morpheme (which, interestingly, he glosses as 'say'):

- (20) Taroo-wa sensei-to iu-yori gakusya-da.
Taroo-TOP teacher-as say-than scholar-PRED
'Taroo is more a scholar than a teacher.'

So in numerous respects, MCs are fundamentally different from ordinary comparatives.

3. Imprecision and Metalinguistic Comparison

3.1 Appropriateness

One common and very natural characterization of what an MC like *George is more dumb than crazy* means is something like ‘it is more apt or appropriate or otherwise better to say *George is dumb* than to say *George is crazy*’. But this sort of paraphrase is rather sketchy, and one might hope for a more articulated understanding.

Giannakidou and Stavrou (To appear) propose one, suggesting that the relevant notion of appropriateness is ‘a gradable propositional attitude supplied by the context: either an epistemic attitude meaning approximately “appropriate to say”, or an attitude expressing preference (desiderative or volitional)’. Much depends here on how one construes ‘gradable propositional attitude’, and how this relates to gradability. Certainly, epistemic verbs like *know* are not gradable the ordinary sense. Perhaps the idea is to relate gradability to intensional notions like ‘graded possibility’ (Kratzer 1981).

Be that as it may, perhaps one can restrict the relevant notion of appropriateness further. Suppose Floyd has entered a nursery school class and announced to the children ‘George is an asshole’. Clyde might reasonably take him aside and say (21a); it would be distinctly odd, however, for him to say (21b):

- (21) a. It’s more appropriate to say *He is a bad man* than to say *He is an asshole*.
b. ??He’s more a bad man than an asshole.

Another scenario: Floyd approaches the bereaved at a funeral and says ‘Sorry your mother croaked’. Clyde might felicitously respond with (22a), but not with (22b):

- (22) a. It’s more appropriate to say *She passed on* than to say *She croaked*.
b. ??She more passed on than croaked.

It seems that appropriateness with respect to register or broader sociolinguistic context is *not* what’s at issue. Certain other conceivable linguistic appropriateness relations fail too. Composing out loud, Coleridge might have uttered (23) to Clyde:

- (23) in Xanadu did Kubla Khan
a stately pleasure dome requisition

Again, Clyde might respond with (24a), but not with (24b):

- (24) a. It’s more appropriate to say he *decreed* it than to say he *requisitioned* it.
b. ??He more decreed it than requisitioned it.

So aesthetic appropriateness seems to be ruled out as well.

Metalinguistic Comparison in an Alternative Semantics for Imprecision

An alternative approach is suggested by McCawley (1998), who paraphrases MCs using ‘correct’. This may offer a more restrictive way to cash out ‘appropriateness’—perhaps it can be identified with (or at least related to) the independent phenomenon of (*im*)precision, what Lasersohn (1999) calls ‘pragmatic slack’.

3.2 Imprecision, Vagueness, and Halos

Imprecision is independent of vagueness (Lasersohn 1999, Kennedy 2007) and ordinary gradability:

- (25) a. Clyde is tall. (vague)
b. Clyde is six feet tall. (not vague but potentially imprecise)
c. Clyde is precisely six feet tall. (not vague and less imprecise)

Vagueness is characterized by difficulty in judging a sentence true or false (for borderline cases). Thus (25a) is vague, but (25b) is not—we know how tall Clyde must be to render (25b) true. Imprecision, on the other hand, is not an issue of truth or falsity, but of how close an approximation of truth is pragmatically appropriate. Thus even (25b) is potentially imprecise—it might well describe a state of affairs in which Clyde is 5’11¾”, even though it would then be strictly speaking false. What *precisely* in (25c) does is ‘slack regulation’. It signals that the standard for what counts as a sufficiently good approximation of the truth is to be raised.

Lasersohn (1999) conceptualizes imprecision in terms of *pragmatic halos*: the pragmatic halo of an expression is a set of objects of the same type as its denotation which differ in only ‘pragmatically ignorable’ ways. Thus, in most contexts, $\llbracket \textit{six feet} \rrbracket$ has a halo around it consisting of lengths that are near enough to six feet not to make any difference: 5’11½” – 6’½”, say. Halos expand compositionally. The halo of $\llbracket \textit{six feet long and three feet wide} \rrbracket$ combines the halos of $\llbracket \textit{six feet tall} \rrbracket$ and $\llbracket \textit{three feet wide} \rrbracket$, so that it might include objects that are 5’11½” tall and 2’11½” wide.

4. Metalinguistic Comparatives as Imprecision Regulators

4.1 Halos via Alternatives and with Degrees

To make the connection between imprecision and metalinguistic comparison, I will recast Lasersohn’s halo framework in different terms. The idea will be to understand halos as sets of alternatives.

There are several reasons to modify the original framework. First, if one adopts a degree semantics for (ordinary) comparatives, and if ordinary and metalinguistic comparatives are to be understood in broadly similar terms, some notion of ‘degrees of imprecision’ will be necessary—that is, some means of ‘measuring’ halo size. Second, recasting things specifically in terms of an alternative semantics provides a more familiar framework for understanding what halos are and how they combine, without doing violence to Lasersohn’s

original proposal. Given how halos of larger expressions are built up compositionally from those of their constituents, there is independently a parallel to the principles of semantic composition in an alternative semantics (a connection Lasersohn himself observes). Third, this sort of implementation makes an explicit connection between halos and an independently motivated theoretical tool. A wide range of phenomena have now proven to be amenable to an understanding in terms of alternatives—not just questions (Hamblin 1973) and focus (Rooth 1985), but also topichood (Büring 1997), pronouns (Kratzer and Shimoyama 2002), disjunction (Alonso-Ovalle 2006), and scalar implicatures (Keshet 2006). So pursuing an alternative-semantic account of metalinguistic comparison makes it relevant to the broader question of what role alternatives play in semantic interpretation.

The first ingredient will be a cross-categorial ‘approximates’ relation, which holds between two objects in the model if they are sufficiently similar. As Lasersohn shows, the context of use determines how similarity is evaluated. Different contexts impose different similarity orderings. To determine whether two objects are similar, then, what will be required is a standard of similarity and a context that provides the scale of similarity. The standard or threshold of similarity can be construed as a degree d , a real number in the interval $[0 - 1]$:

$$(26) \quad \alpha \approx_{d,C} \beta \text{ iff, given the ordering imposed by the context } C, \alpha \text{ resembles } \beta \text{ to (at least) the degree } d \text{ and } \alpha \text{ and } \beta \text{ are of the same type}$$

Identity is simply maximal similarity, so for any context C , $\alpha \approx_{1,C} \beta$ iff $\alpha = \beta$. Importantly, in this conception degrees of similarity are all on the same scale.

This similarity relation will be the foundation of denotations that reflect degrees of imprecision. The idea will be to relativize the interpretation function to degrees of precision (and contexts), and to take an expression like *dumb* to denote the set of alternatives consisting of predicates sufficiently similar to *dumb*:

$$(27) \quad \begin{array}{l} \text{a. } \llbracket \textit{dumb} \rrbracket^{d,C} = \{f_{\langle e, st \rangle} : f \approx_{d,C} \textit{dumb}\} \\ \text{b. } \llbracket \textit{three o'clock} \rrbracket^{d,C} = \{t_i : t \approx_{d,C} 3:00\} \end{array}$$

As a result, *dumb* interpreted absolutely precisely will denote the singleton set containing only *dumb*; interpreted absolutely imprecisely, it would be completely uninformative and denote all predicates of the right type:

$$(28) \quad \text{for every context } C: \quad \begin{array}{l} \llbracket \textit{dumb} \rrbracket^{1,C} = \{\textit{dumb}\} \\ \llbracket \textit{dumb} \rrbracket^{0,C} = D_{\langle e, st \rangle} \\ \llbracket \textit{three o'clock} \rrbracket^{1,C} = \{3:00\} \\ \llbracket \textit{three o'clock} \rrbracket^{0,C} = D_i \end{array}$$

Thus *dumb* denotes a set of alternatives whose size depends on the degree of precision the context demands:

Metalinguistic Comparison in an Alternative Semantics for Imprecision

- (29) a. $\llbracket \text{dumb} \rrbracket^{0.9,C} = \{ \text{dumb}, \text{ignorant}, \text{dopey}, \text{foolish}, \text{slow-witted}, \dots \}$
 b. $\llbracket \text{dumb} \rrbracket^{0.8,C} = \left\{ \begin{array}{l} \text{dumb}, \text{ignorant}, \text{dopey}, \text{foolish}, \text{slow-witted}, \text{confused}, \\ \text{incurious}, \text{intellectually-lazy}, \text{criminally-reckless} \dots \end{array} \right\}$

Standard principles of composition in alternative semantics—pointwise function application—will ensure that halos will ‘expand’ properly:

- (30) $\llbracket \text{jerk} \rrbracket^{0.9,C} = \{ \text{jerk}, \text{schmuck}, \text{putz}, \dots \}$

$$\llbracket \text{dumb jerk} \rrbracket^{0.9,C} = \left\{ \begin{array}{l} \lambda x \lambda w . \text{dumb}(x)(w) \wedge \text{jerk}(x)(w), \\ \lambda x \lambda w . \text{dumb}(x)(w) \wedge \text{schmuck}(x)(w), \\ \lambda x \lambda w . \text{dumb}(x)(w) \wedge \text{putz}(x)(w), \\ \lambda x \lambda w . \text{ignorant}(x)(w) \wedge \text{jerk}(x)(w), \\ \lambda x \lambda w . \text{ignorant}(x)(w) \wedge \text{schmuck}(x)(w), \\ \lambda x \lambda w . \text{ignorant}(x)(w) \wedge \text{putz}(x)(w), \\ \vdots \end{array} \right\}$$

More generally, beyond this point standard assumptions about how Hamblin alternatives work will largely suffice.

4.2 Comparing Imprecision

In this framework, the denotation of metalinguistic *more* will compare halo size, as in (31):

- (31) $\llbracket \text{more}_{\text{MC}} \alpha \text{ than } \beta \rrbracket^{d,C} =$

$$\left\{ \lambda x \lambda w \left[\begin{array}{l} \max \left\{ d' : \exists a \left[a \in \llbracket \alpha \rrbracket^{d',C} \wedge a(x)(w) \right] \right\} > \\ \max \left\{ d'' : \exists b \left[b \in \llbracket \beta \rrbracket^{d'',C} \wedge b(x)(w) \right] \right\} \end{array} \right] \right\}$$

This requires that α be closer to being true of x than β is. Spelling it out further: the highest degree of precision at which the extension of α contains something true of x is greater than the highest degree of precision at which the extension of β contains something true of x . To take an example, here is how *more_{MC} dumb than crazy* would work:

- (32) $\llbracket \text{more}_{\text{MC}} \text{dumb than crazy} \rrbracket^{d,C}$

$$= \left\{ \lambda x \lambda w \left[\begin{array}{l} \max \left\{ d' : \exists a \left[a \in \llbracket \text{dumb} \rrbracket^{d',C} \wedge a(x)(w) \right] \right\} > \\ \max \left\{ d'' : \exists b \left[b \in \llbracket \text{crazy} \rrbracket^{d'',C} \wedge b(x)(w) \right] \right\} \end{array} \right] \right\}$$

$$= \left\{ \lambda x \lambda w \left[\begin{array}{l} \max \left\{ d' : \exists a \left[a \approx_{d',C} \text{dumb} \wedge a(x)(w) \right] \right\} > \\ \max \left\{ d'' : \exists b \left[b \approx_{d'',C} \text{crazy} \wedge b(x)(w) \right] \right\} \end{array} \right] \right\}$$

The result is that *George is more_{MC} dumb than crazy* would mean that George could be said to be dumb with a higher degree of precision than he could be said to be crazy.

It's worth noting that, as implemented here, MCs should actually eliminate further imprecision. That is, *more dumb than crazy* is itself not at all imprecise. This seems plausible—it is difficult to imagine what the halo of this expression should look like. Possibilities like *more foolish than crazy* seem straightforwardly inappropriate. If this weren't the case, (33) might be felicitous:

(33) #George is more dumb than crazy. To be precise, he is more foolish than crazy.

That said, it would be possible (though not pretty) to construct a denotation for MCs in this spirit that doesn't eliminate imprecision.

There is a methodological advantage in understanding MCs in this framework for representing imprecision. Halo construction on this view is *multiply* context-sensitive, in that halos vary with respect to *both* contexts and degrees of imprecision. This provides a lot of flexibility. In principle, this mechanism could be used to model relative appropriateness or aptness as well—or, more generally, to replace imprecision with some weaker notion if it turns out to be empirically necessary. To put it another way, what precisely imprecision should include (and whether 'imprecision' is actually a good term for it) is independent from whether alternatives/halos are involved. The more interesting hypothesis, though, is that MCs are substantively no different from the other slack-regulators Lasersohn originally explored.

4.3 Ordinary Comparatives

Ordinary comparative morphology would have a roughly parallel denotation in this kind of system. Adapting one style of interpreting comparatives (von Stechow 1984, Rullmann 1995) to the Hamblin-style system here, one arrives at (34):

$$(34) \quad \llbracket \text{more } \alpha \text{ than } \text{Floyd} \rrbracket^{d,C} = \left\{ f_{\langle e, st \rangle} : \exists a \left[a \in \llbracket \alpha \rrbracket^{d,C} \wedge f = \lambda x \lambda w \left[\begin{array}{l} \max\{d' : a(x)(d')(w)\} > \\ \max\{d'' : a(\text{Floyd})(d'')(w)\} \end{array} \right] \right] \right\}$$

The gradable adjective denotation a above is a relation between individual and degrees. A certain amount of complexity is introduced here by the machinery of alternatives interacting with the core denotation of the comparative. The general picture, though, is that this involves comparison of degrees to which the gradable adjective is satisfied rather than degrees of precision. This all would have the consequence that *Clyde is more ugly than Floyd* would, interpreted with absolute precision, mean the highest degree to which Clyde is ugly is greater than the highest degree to which Floyd is ugly. Interpreted with lower degrees of precision, predicates resembling *ugly* would be introduced into the mix. Setting aside the alternative-related machinery in (34) on top of portion of the denotation concerned with maximality, the result is broadly similar to what was suggested for metalinguistic compar-

ison above. (Indeed, one can loosely construe the difference as involving the relative scope of the maximality operators and existential quantification.)

4.4 Properties Only?

The proposed denotation predicts that only property-denoting expressions should occur with MCs. This seems to be largely right, at least in English (cf. Giannakidou and Stavrou To appear for Greek). To take some particularly clear examples, determiners and modals can't be compared in this way:

- (35) a. *More [_D all] than [_D many] dogs like socks.
b. *Clyde poked more [_D every] than [_D some] monkey.
c. *She more $\left\{ \begin{array}{l} [\text{T must}] \text{ than } [\text{T can}] \\ [\text{T will}] \text{ than } [\text{T might}] \end{array} \right\}$ chase squirrels.

There seems to be some variation with respect to whether transitive verbs can occur in MCs:

- (36) a. ?George more [_V fears] than [_V loves] Dick.
b. ?Mary more [_V respects] than [_V admires] John. (McCawley 1998)

Certainly, these don't seem quite as hopeless as (35). To the extent that (36) is good for anyone—as it apparently is for McCawley—some modifications to the proposed denotation would have to be made. For speakers who accept (36), the generalization may be that only first-order predicates can occur in MCs. To accommodate this, the denotation proposed above would have to be rendered more type-theoretically flexible (that is, generalized in the same sense as generalized conjunction is). I won't pursue this more explicitly here.

4.5 Incommensurability

Comparatives constructed from adjectives that measure along distinct scales are normally ill-formed:¹

- (37) a. *This chair is wider than it is heavy.
b. *Clyde is taller than he is boring.

This kind of incommensurability is a signature property of ordinary comparatives.

If all MCs compare degrees of precision, these incommensurability effects should be absent in metalinguistic comparison. In general, this is indeed the case, as many examples already provided demonstrate—George can be said to be *more dumb than crazy* even though the scales of stupidity and insanity are distinct. But what about (38)?:²

¹There is a comparison-of-deviation-style reading on which these may be improved.

²I owe this observation, and (38a), to an anonymous NELS reviewer.

Marcin Morzycki

- (38) a. That disc is more rectangular than $\left\{ \begin{array}{l} \text{round} \\ ??\text{flat} \end{array} \right\}$.
- b. This chair is more wide than $\left\{ \begin{array}{l} \text{large} \\ ??\text{heavy} \end{array} \right\}$.
- c. Clyde is more tall than $\left\{ \begin{array}{l} \text{huge} \\ ??\text{boring} \end{array} \right\}$.

Clearly, MCs are not so thoroughly indiscriminate that they can compare an arbitrary pair of predicates. It's not obvious, though, that what goes wrong here involves comparison across scales. For one thing, these examples don't seem to be as starkly ill-formed as (37).

One can also imagine contexts in which at least some of these would be more felicitous. The exchange in (39) reflects one such scenario:

- (39) FLOYD: This chair is heavy.
- a. CLYDE: No, it's not really *heavy* as such. It's more *wide* than heavy.
- b. *CLYDE: No, it's not really *heavy* as such. It's *wider* than it is heavy.

Even (38c) might be salvageable. Suppose that there are two contests, and no one can enter both. One of them can be won by being the tallest person; the other by being the most boring. In considering which contest Clyde should enter, we might make the observation in (40a), but not the one in (40b):

- (40) a. Clyde is more tall than boring.
- b. *Clyde is taller than boring.

So examples like these really reflect at best a kind of quasi-incommensurability, one that depends on the circumstances of use.

This suggests a pragmatic explanation for the effect. Any pair of predicates can have their precision compared, but in order for such a comparison to be felicitous, it must be in some way relevant. There must be a *reason* to compare the two predicates. For some predicates, it's very easy to imagine such a context. For others, a fairly bizarre one may be required. For others still, no context may suffice. But these are facts about the circumstances under which one might have an interest in the relative precision of two predicates, not about whether two predicates can be compared *in principle*.

4.6 Other Metalinguistic Degree Constructions?

MCs are possible with degree morphemes other than *more*:³

- (41) a. George is less crazy than dumb.
- b. George is as much crazy as dumb.

³Thanks to Alan Munn for pressing this point.

Metalinguistic Comparison in an Alternative Semantics for Imprecision

The denotation above is for $more_{MC}$ alone. Metalinguistic *less* and *as much* would require distinct metalinguistic denotations.⁴ Does this amount to losing a generalization?

Perhaps. It's certainly not the case that *any* degree morpheme can be metalinguistic, though:

- (42) a. *George is as crazy as dumb.
b. George is $\left\{ \begin{array}{l} \text{too} \\ \text{very} \\ \text{certainly} \end{array} \right\}$ crazy. (not metalinguistic)

Nor is it the case that metalinguistic degree words have the same syntax as ordinary ones:

- (43) a. George is crazy more than dumb.
b. *George is crazy less than dumb.
c. *George is crazy as much as dumb.
- (44) a. Clyde is more than ugly.⁵
b. *?Clyde is less than ugly.
c. *Clyde is as much as ugly.
- (45) a. She's more than my dog. She's (also) my psychiatrist.
b. *She's less than my dog. She's (merely) my psychiatrist.
c. *She's as much as my dog. She's my psychiatrist.

So there is some evidence of distinct, idiosyncratic behavior among metalinguistic degree words that may justify distinct lexical entries. Further cross-linguistic research may be particularly useful in gauging the plausibility of this approach.

There are alternatives to proposing homophonous lexical entries, though. One such possibility would be to introduce a single operator that mediates all metalinguistic degree modification. Perhaps this could be understood as a rough analogue of the squiggle operator in focus semantics (Rooth 1992), which serves as a single grammatical mechanism mediating access to focus alternatives. On such an approach, no independent metalinguistic degree morphology would be required. It's not clear to me how one might adequately represent the semantics of such an operator, however. It would present a significant (and interesting) challenge, in that it would require providing a semantics for the degree morphemes themselves that would be agnostic in the right way with respect to whether it is a degrees of precision that are being compared or ones provided by a gradable predicate.

⁴For *less*, one might simply replace $>$ in (31) with $<$; for *as*, with \leq .

⁵It's not obvious to me how to treat structures like these semantically. One straight-forward possibility: Suppose these involve existential quantification over salient properties. Since presumably there is always a property that's both salient and absolutely true, all this sentence would mean is that the (maximal) precision of 'Clyde is ugly' is not 1. This is a very weak claim, but it is in fact very hard to imagine circumstances under which *Clyde is more than ugly* would be false.

5. How ‘Metalinguistic’?

This approach represents the ‘metalinguistic’ phenomenon here in purely *grammatical* terms, without reference to extralinguistic or extra-grammatical considerations. The alternative is rather unappealing, as it would entail construing overt morphemes with a unique syntax as somehow extra-grammatical. It is, however, possible to take a step in the metalinguistic direction without going quite so far as this.

On the approach proposed here, MCs compare *meanings*, not utterances. There is an alternative. Potts (2007) proposes a means of understanding metalinguistic negation as (essentially) a species of quotation. This makes possible a grammatical analysis of a metalinguistic phenomenon that *does* permit reference to utterances rather than merely meanings. Perhaps metalinguistic comparison is similarly utterance-oriented—Lechner 2007 actually provides a sketch of such a theory. If this is on the right track, metalinguistic comparison should mirror the quotative-like properties of metalinguistic negation. Potts observes a parallel between examples of metalinguistic negation such as (46) and examples of quotation such as (47):

- (46) a. He didn’t order ‘[eɪ]pricots’; he ordered ‘[æ]pricots’.
 b. He didn’t call the POLice; he called the POLICE. (Horn 1985)
- (47) a. When in Santa Cruz, Peter orders ‘[eɪ]pricots’ at the local market.
 b. When in Amherst, Peter orders ‘[æ]pricots’ at the local market.

The acceptability of corresponding examples of metalinguistic comparison is unclear:

- (48) a. ?He more ordered [eɪ]pricots than [æ]pricots.
 b. ?He called more the POLice than the POLICE.

These are not nonsense, as one might have suspected if it is only meanings, and not utterances, that are being compared. But they are distinctly odd. Perhaps the right approach would be to assume that these are actually good, but that they require somehow imputing to the two alternative pronunciations distinct meanings so that their relative precision can be compared. Another similarity between metalinguistic comparatives and metalinguistic negation is that neither can be expressed with (derivational) bound morphemes: *un-* and *im-* fail to support metalinguistic negation just as *-er* fails to support metalinguistic comparison.

It seems, then, that there is at least a case to be made that what is at issue are not alternative meanings but alternative utterances. To pursue this direction in the Potts (2007) and Lechner (2007) spirit, utterances would be introduced into the model (*u*).⁶ Imprecise denotations would look like (49):

⁶Changes have to be made to the rules of semantic composition as well. Doing this would require engaging (to a greater extent than is possible here) the multidimensional system Potts builds to interpret quotation.

Metalinguistic Comparison in an Alternative Semantics for Imprecision

$$(49) \quad \llbracket \text{dumb} \rrbracket^{0.9,C} = \{u_u : u \approx_{0.9,C} \text{'dumb'}\} \\ = \{\text{'dumb'}, \text{'ignorant'}, \text{'dopey'}, \text{'foolish'}, \text{'slow-witted'}, \dots\}$$

The denotation of more_{MC} would be as in (50) (the SEM operator below relates utterances to their meanings):

$$(50) \quad \llbracket \text{more}_{\text{MC}} \alpha \text{ than } \beta \rrbracket^{d,C} = \\ \left[\lambda x \lambda w \left[\begin{array}{l} \text{max} \left\{ d' : \exists u \left[u \in \llbracket \alpha \rrbracket^{d',C} \wedge \text{SEM}(u)(x)(w) \right] \right\} > \\ \text{max} \left\{ d'' : \exists u' \left[u' \in \llbracket \beta \rrbracket^{d'',C} \wedge \text{SEM}(u')(x)(w) \right] \right\} \end{array} \right] \right]$$

The meaning here is largely as proposed above, except that it is now utterances that are compared. As formulated here, this would still require distinct meanings for the utterances, which seems appropriate given (48). There is an interesting consequence of adopting such an approach: imprecision *itself* should be quotative in the relevant sense. This is conceivable, though perhaps a bit provocative. If this is so, perhaps other slack regulators, like *exactly*, might be said to be quotative or ‘metalinguistic’ too.⁷

6. Final Remarks

To summarize, MCs appear to compare degrees of imprecision. They are in that sense slack-regulators. To facilitate comparison of imprecision, the Lasersohnian pragmatic-halos framework can be recast in terms of alternatives. Metalinguistic comparison can thus be understood in grammatical terms.

Many worthwhile questions have been left unaddressed here. Among them is the role of focus in these constructions, and, perhaps most prominently, how the syntax works. One broader consequence of the proposal particularly warrants highlighting, though. On the view proposed here, there are two varieties of gradability—one involves the machinery of vagueness, the other the machinery of imprecision. This raises the question of whether other gradability phenomena might actually operate on the level of imprecision modulation (rather than gradability as normally understood) as well.⁸

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⁷Rendering imprecision via utterance alternatives wouldn’t actually require that *every* morpheme that targets imprecision alternatives should be metalinguistic, but one might expect at least a few to be.

⁸There are various candidates, including nominal degree constructions such as *big idiot* (Morzycki 2005) and *more of an idiot*.

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Metalinguistic Comparison in an Alternative Semantics for Imprecision

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