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Comparing conventions*

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Abstract We offer a novel account of metalinguistic comparatives, such as 'Al is more wise than clever'. On our view, metalinguistic comparatives express comparative commitments to conventions. Thus, 'Al is more wise than clever' expresses that the speaker has a stronger commitment to a convention on which Al is wise than to a convention on which she is clever. This view avoids problems facing previous approaches to metalinguistic comparatives. It also fits within a broader framework — independently motivated by metalinguistic negotiations and convention-shifting expressions — that gives linguistic conventions a role in the semantics.

Keywords: metalinguistic comparatives, conventions, metalinguistic negotiation

1 Introduction

Metalinguistic comparatives (MCs), as in (1), seem to compare what is in some sense *better to say*.

(1) Al is more wise than clever.
≈ It is better to say that Al is wise than to say that she is clever.

MCs are distinct from "ordinary" comparatives, as in (2), which compare the degree to which individuals have some property.

(2) Al is wiser than Sam.
≈ The degree to which Al is wise is greater than the degree to which Bob is wise.

Beyond the idea that MCs are some special comparative form, there is little consensus on their proper analysis. MCs have been argued to be expressions of appropriateness (Giannakidou & Stavrou 2009), preference for what to say (Giannakidou & Yoon 2011), relative precision (Morzycki 2011), and credence (Wellwood 2014). However, each proposal makes inadequate predictions about the acceptability of MCs.

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We propose a new analysis of MCs on which they express *comparative commitments to conventions*. To preview: In uttering (1), the speaker expresses a stronger commitment to a linguistic convention according to which Al is wise than to one according to which Al is clever. As we will show, this analysis avoids challenges facing other approaches while preserving insights behind each. It also gains support as part of a broader framework that can account for a variety of "metalinguistic" phenomena in a unified way.

The plan is as follows. In §2, we review some key features that distinguish MCs from ordinary comparatives. In §3, we discuss previous approaches to MCs and illustrate the challenges they face. In §4, we introduce what we call the "conventionalist framework": an approach to linguistic theory that gives linguistic conventions a central role. We motivate this framework by looking at phenomena other than MCs, such as metalinguistic negotiations and convention-shifting expressions. In §5, we adapt the conventionalist framework to MCs by introducing a commitment ordering on conventions. In §6, we show how our analysis avoids the problems with previous analyses, while still capturing their motivating intuitions. In §7, we conclude with some questions that remain for our approach.

2 Metalinguistic and ordinary comparatives

To begin, we review some features that distinguish MCs from ordinary comparatives. First, MCs are more flexible in terms of their possible constituents. MCs need not involve gradable adjectives, as shown in (3a–b), and can even compare elements that are already comparative, as in (3c–d) (based on McCawley 1998).

(3) a. Your problems are more financial than legal.
b. *Your problems are more financial than mine.
c. Janet just had better luck than her rivals more than she was actually superior to them.
d. *Janet more had better luck than her rivals than Al.

In fact, MCs can involve a broad range of syntactic categories, as in (4). A single MC can even involve expressions of different categories, as in (5) (Morzycki 2011).[1]

(4) a. Line is more [$_{DP}$ a syntactician] than [$_{DP}$ a semanticist].

1 Huddleston & Pullum (2002: p. 1122) make a similar observation, giving examples with NPs and PPs, though they claim that Vs are excluded, citing the following (which they annotate with '*'):

(i) We more expect than require you to make a contribution.

However, we judge (i) also to be acceptable, and thus suspect that MCs can compare non-phrasal constituents in addition to phrasal ones. (See also Wellwood 2014: p. 228.)

b. A chimp is more [$_{NP}$ ape] than [$_{NP}$ monkey].
c. Harriet more [$_{VP}$ tumbled into a solution] than [$_{VP}$ sought it].
d. The dog is sitting more [$_{PP}$ on your head] than [$_{PP}$ in your lap].

(5) George is more [$_{AP}$ afraid of spiders] than [$_{PP}$ in love with them].

Second, MCs and ordinary comparatives differ morphosyntactically. Whereas the synthetic comparative form is grammatical in the ordinary comparative in (6a), it is ungrammatical in the MC in (6b); instead the MC must use the analytic form in (6c) (repeated from (1)) (Bresnan 1973; Huddleston & Pullum 2002; Embick 2007).

(6) a. Al is wiser than Sam.
b. *Al is wiser than clever.
c. Al is more wise than clever.

Additionally, in MCs, 'more' can appear either pre- or post-adjectivally, as in (7), whereas in ordinary comparatives it must be pre-adjectival, as shown in (8) (Embick 2007: p. 21).

(7) a. Your problems are more financial than legal.
b. Your problems are financial more than legal.

(8) a. Al is more intelligent than Sam.
b. *Al is intelligent more than Sam.

Third, MCs differ from ordinary comparatives when it comes to measure phrases. MCs do not allow measure phrases as constituents, even when the ordinary comparative does (Giannakidou & Yoon 2011; Morzycki 2011).

(9) a. Sam is taller than six feet.
b. *Sam is more tall than six feet.

Nor can they be modified with measure phrases, as shown in (10).

(10) a. Al is a foot taller than Sam.
b. *Al is a foot more tall than wide.

Fourth, MCs and ordinary comparatives differ in their context sensitivity (Wellwood 2014: p. 225). Knowing how tall Al and Sam are is enough to settle (11a). But to settle the MC in (11b), we must know what counts as tall and wide in the context.

(11) a. Al is taller than Sam.
b. Al is more tall than wide.

This fits with the idea that MCs compare the extent to which it is appropriate to

attribute the positive form adjectives. For in order to make that comparison, we have to know something about the standards for applying the positive forms, and that is dependent on context.

Finally, some languages express MCs using different morphemes. In Greek, *apoti* 'than' can be used in either metalinguistic or ordinary comparatives, but *para*, also glossed 'than', can only be used metalinguistically (Giannakidou & Stavrou 2009). In Korean, MCs use *kopota*, which can be morphologically analyzed as a combination of *ki* 'saying', and *pota* 'than', whereas ordinary comparatives simply use *pota* (Giannakidou & Yoon 2011). Japanese has a metalinguistic comparative marker, *iu-yori*, which can also be glossed as 'say-than' (Sawada 2010: p. 225–26). In Russian, MCs also have distinctive morphosyntax (Zevakhina, Dzhakupova & Vishenkova 2017: §4). Though we are focusing on English, cross-linguistic evidence supports the distinctiveness of MCs as compared with ordinary comparatives.

In sum, MCs are a distinct construction from ordinary comparatives, with a distinct meaning naturally paraphrased in terms of what is "better to say". In the next section, we discuss how previous analyses have attempted to capture this.

3 Previous analyses

Here, we review three recent previous analyses of MCs. All of them hold that MCs, in some sense, express what it is better to say. We show, however, that none of them cashes this out in a way that accurately predicts the acceptability of MCs.

3.1 Preference and appropriateness

Giannakidou & Stavrou (2009), and later Giannakidou & Yoon (2011), take the idea that MCs express what is better to say fairly literally: (1) just means that it is more appropriate or preferable (according to an "anchor of comparison", usually the speaker) to say that Al is wise than that she is clever (see also McCawley 1998; Embick 2007). More precisely, they analyze the truth conditions of (1) as follows:

(12) Where R is a contextually supplied gradable propositional attitude (e.g., deeming it appropriate to say), the degree d to which the anchor of comparison α Rs the sentence 'Al is wise' is greater than the degree d' to which α Rs the sentence 'Al is clever'.

According to Giannakidou & Stavrou (2009), this propositional attitude R is either epistemic or preferential. Later, in Giannakidou & Yoon 2011, this analysis is refined so that R is always an attitude of preference relativized to a goal supplied by context. Thus, MCs are expressions of the speaker's preferences about what to say.

The proposal we advance in §5 will bear a formal similarity with this one.

However, neither appropriateness nor preference accurately predicts the acceptability of MCs. On the one hand, they are not restrictive enough: Deeming one thing more appropriate to say than another, or preferring to say one thing over another, is not sufficient to license an MC, as shown in (13) (Morzycki 2011: p. 47).

(13) [Herman approaches the bereaved at a funeral and says, "Sorry your mother croaked." Herman's friend takes him aside and says. . .]

a. It's more appropriate to say "She passed away" than "She croaked."
b. I'd prefer to say "She passed away" to "She croaked."
c. #She more passed away than croaked.

On the other hand, they are too restrictive: Deeming one thing more appropriate or preferable to say is not necessary to license an MC, as shown in (14).

(14) [Sam has died during a poorly-planned mountain climbing expedition. The speaker is discussing how to describe him in an obituary.]

a. #It's more appropriate to say "Sam was rash" than "Sam was brave."
b. #I'd prefer to say "Sam was rash" to "Sam was brave."
c. Sam was more rash than brave.

The problem is that one can find some utterance preferable or appropriate for a great variety of reasons (e.g., etiquette, aesthetic taste, etc.), and these can come apart from the notion of betterness relevant to MCs in both directions.

3.2 Precision

Recognizing that appropriateness and preference are too broad, Morzycki (2011) understands "better to say" more narrowly in terms of precision. Whereas appropriateness and preference are often sensitive to extrasemantic factors, precision is primarily semantic. So, on this view, MCs compare the degree to which something is *more accurate to say*, or *closer to the truth*, in a given context (see also Wellwood 2019). Building on Lasersohn's (1999) notion of "pragmatic halos" (and also inspired by McCawley's (1998) reference to "degrees of correctness"), Morzycki takes (1) to mean that 'Al is wise' is more accurate (i.e., true to a greater degree of precision) than 'Al is clever'. He thus analyzes the truth conditions of (1) as follows:

(15) There is a degree d of precision such that (i) there is a property F that resembles *being wise* to at least degree d (in the context of use) such that Al is F, and (ii) there is no property G that resembles *being clever* to at least degree d (in the context of use) such that Al is G.

This avoids the objections to the previous account. Even though it may be more

appropriate or preferable to say "She passed away" than "She croaked", it would not be more accurate or precise, since 'croaked' and 'passed away' are semantically coextensive. Similarly, it may be more accurate to say "Sam was rash" than to say "Sam was courageous" even if it's less polite and hence less appropriate or preferable.

While we are sympathetic to elements of this account, the use of precision is problematic for several reasons. First, MCs are not always felicitous in contexts that involve comparisons of precision, as in (16).

(16) [Herman is $6'2''$]
#Herman is more six-foot-three than six-foot-five.

In this context, it is *more* accurate to say that Herman is six-foot-three than six-foot-five. So it's not clear what, on the precision account, explains the infelicity of (16). Perhaps one could avoid this problem by telling different stories about pragmatic halos for terms like 'wise' compared with 'six-foot-three', but it's hard to see how that would work.

Second, Morzycki's semantics builds in several potentially problematic assumptions. For instance, according to Morzycki, pragmatic halos "compose" pointwise, as they do in alternative semantics (p. 52).

> **Pointwise Composition.** If F resembles F' to degree d and G resembles G' to degree d, then $F \wedge G$ resembles $F' \wedge G'$ to degree d.

This means Morzycki's account incorrectly predicts that (17) is valid.

(17) a. Al is more tall than wide.
b. Al is more average height than tall.
c. ??Therefore, Al is more tall and average height than wide and tall.

(Reason: Pointwise Composition implies that the degree to which x is $F \wedge G$ is the minimum of the degrees to which x is F and to which x is G.)

Still, the conjunctive inference is often valid when the conjuncts are along independent dimensions, as in (18).

(18) a. Al is more tall than wide.
b. Al is more handsome than rugged.
c. Therefore, Al is more tall and handsome than wide and rugged.

It would be nice to explain this without building in Pointwise Composition as a hard constraint.

Moreover, Morzycki's account linearly orders degrees of precision. This means that degrees of precision obey the following totality constraint:

Total Comparability. For any properties F, G, and H, either F resembles H at least as much as G resembles H or the reverse.

This entails that one of the following three sentences must be true:

(19) a. Al is more wise than tall.
b. Al is more tall than wise.
c. Al is as much wise as tall.

This prediction, however, is not entirely obvious: It seems coherent to reject all three of these sentences. Morzycki's account, however, does not easily accommodate such incomparability. If we simply allow for degrees of precision to be incomparable, then Morzycki's account will predict that (20) is logically consistent.

(20) #Al is more wise than clever and Al is more clever than wise.

(Reason: if d and d' are incomparable, then F could resemble *being wise*, but not *being clever*, to degree d, and the reverse for d'.) We could revise the semantics to avoid this. But if we did, then the semantics would not be best understood in terms of "degrees of precision", since the notion of precision is inherently total. To accommodate incomparabilities, we need a different notion altogether.

3.3 Credence

Wellwood (2014: Ch. 6) takes MCs to compare the speaker's credence in the two constituent propositions.[2] On this view, the truth conditions of (1) come out as follows (Wellwood 2014: p. 253):

(21) The speaker's credence in the proposition expressed by 'Al is wise' is greater than their credence in the proposition expressed by 'Al is clever'.

Taking MCs to compare degrees of credence leads to incorrect predictions about the acceptability of MCs. For one, assertions of MCs are compatible with the speaker having no credence in either proposition, as shown in (22).

(22) Al definitely isn't wise, but she's more wise than clever.

Moreover, on the credence view, we would expect MCs to be interchangeable with likelihood claims. But this is not the case. Say Al's work focuses more on

2 Later, in Wellwood 2019: Ch. 7, she revises her view such that MCs express comparative accuracy. This avoids the problems that face the credence account, though it reintroduces issues we discussed in §3.2 in connection to Morzycki's (2011) precision account. We include discussion of Wellwood's earlier view as a helpful dialectical bridge to the view we will propose in §5.

linguistics than philosophy, but she has a PhD in philosophy and is employed in a philosophy department. In that case, the MC in (23a) could be appropriate, while the likelihood comparison in (23b) would not be.

(23) a. Al is more a linguist than a philosopher.
b. #It's more likely that Al is a linguist than a philosopher.

And conversely, say it's springtime, when it rarely snows, but the speaker doesn't know whether there was any precipitation at the relevant time. Here, the likelihood comparison in (24a) is appropriate, while the MC in (24b) is odd.

(24) a. It's more likely that it rained than snowed.
b. #It more rained than snowed.

Still, our view will share with the credence view the idea that MCs express speakers' comparative attitudes towards the constituent claims — but it will not be *credences*, but rather opinions about how to use language, i.e., commitments to conventions. Indeed, as we'll discuss in §5 below, our analysis of MCs can be viewed as making a distinction analogous to that between belief and credence, except in the realm of conventional instead of factual commitments.

3.4 The speaker/anchor of MCs

There is a further problem with some previous analyses of MCs. This problem doesn't have to do with what is being compared with MCs, but rather with the way that the speaker (or, more generally, the "anchor") figures into the analysis. Both the preference/appropriateness account of Giannakidou & Stavrou (2009) and Giannakidou & Yoon (2011), as well as the credence account of Wellwood (2014) include the speaker in the truth conditions of MCs in a way that leads to problematic predictions about (i) the modal dependence of MCs on speakers' attitudes, and (ii) the subject matter of disagreement over MCs.[3]

On (i): The preference/appropriateness analysis incorrectly predicts that (25a) can be true, and the credence analysis incorrectly predicts that (25b) can be true — even in a scenario where Al's behavior is not at all affected by the speaker (we may assume that they've never even met).

(25) a. #If I had different desires/goals/beliefs about what was appropriate to say, Al would be more clever than wise.
b. #If I had different credences, Al would be more clever than wise.

3 This issue should be familiar from discussions of contextualist theories about a broad range of expressions.

On (ii): The preference/appropriateness account incorrectly predicts that the reply in (26b) expresses disagreement with the initial claim, while the credence account incorrectly predicts that the reply in (26c) does the same.

(26) a. Al is more wise than clever.
b. #No, you don't think the former is more appropriate/preferable to say.
c. #No, your credence that she's wise isn't higher.

The general problem is that while the felicity conditions of MCs need to be sensitive to the speaker's attitudes in some way, an analysis should not make MCs *about* those attitudes; these attitudes should not be part of the at-issue content of MCs.

This problem of the speaker/anchor of MCs could be avoided while still retaining the spirit of the preference/appropriateness or credence views. For instance, one could adopt expressivist versions of these accounts. This would not, however, solve the problems from §§3.1 and 3.3. The analysis we present in §5 will avoid the speaker/anchor problem through an expressivist approach. And it will avoid the problems from §§3.1–3.3 by taking MCs to express commitments to conventions.

4 The conventionalist framework

There is motivation, independent of MCs, to explicitly model speakers' commitments to conventions. For instance, doing so can help us model *metalinguistic negotiations* such as (27) (Plunkett & Sundell 2013; Barker 2013).

(27) **A:** Pluto isn't a planet (the International Astronomical Union changed the definition).
B: Yes, it is (I don't care what the IAU says)!

Here, A and B do not differ in their factual beliefs about Pluto. They agree about Pluto's size, mass, orbit, and so on. Instead, they differ on how to classify Pluto.

If communication is modeled on the standard Stalnakerian picture (e.g., Stalnaker 1999), it's unclear how to capture the conversational effects of the assertions in (27). On the Stalnakerian picture, the common ground of a conversation is modeled as a set of worlds: the worlds left open by what the speakers mutually accept (at least for the purposes of the conversation). The content of an assertion is also a set of worlds: the worlds where the assertion is true. And the effect of making an assertion in a conversation is to (propose to) rule out of the common ground all those worlds where the assertion is not true. That is, if accepted by the other conversational participants, the resulting common ground will be the original common ground intersected with the content of the assertion. This captures the idea that assertion adds information to the common ground. It rules out possibilities for what the world could be like.

The challenge metalinguistic negotiations pose within this framework is that the speakers in a metalinguistic negotiation often enter the conversation already holding all the same relevant assumptions about what the world is like. When B insists that Pluto is a planet in (27), B isn't disagreeing with A about any worldly possibility. We may even suppose that both A and B know all the facts concerning Pluto. In that case, since the content of their assertions is just a set of worlds, one of these assertions would already be commonly accepted, while the other would already be commonly rejected. So this view predicts that both assertions are uninformative. But this is incorrect: Both A's and B's assertions do communicate something. What they communicate, on our view, is their disagreement over a certain way of using language, not over a certain way the world might be.

To model this, we have elsewhere proposed extending the Stalnakerian theory of communication such that the common ground is not just a set of worlds, but a set of *world-convention pairs*, where a convention is an assignment of intensions to basic predicates and terms (Kocurek, Jerzak & Rudolph 2020). Intuitively, we can think of a convention as a kind of plan for how to use words. Just as speakers can disagree over matters of fact, they can also disagree over what plans to adopt, including plans for how to talk. These disagreements need not bottom out in factual matters: Speakers can agree on all the facts without agreeing on what to do (cf., Gibbard 2003). Moreover, speakers may be uncertain about how exactly to use words just as they may be uncertain about what exactly the world is like. The common ground of a conversation, then, encodes not just what factual matters speakers mutually agree on, but also their shared commitments about how to use words.

While assertions in the Stalnakerian framework are proposals to rule out certain worlds from the common ground, assertions in the conventionalist framework are proposals to rule out certain world-convention pairs. Thus, A's assertion in (27) is a proposal to rule out all $\langle w, c\rangle$ pairs where Pluto at w is in the extension assigned to 'planet' by c at w, and her assertion expresses her acceptance only of $\langle w, c\rangle$ pairs that lack this property.[4] This means that both A's and B's assertions in (27) are non-trivial, as they constitute proposals to remove certain conventions from the common ground.

Building conventions into our semantics is further motivated by convention-shifting expressions, also known as "c-monsters" (Einheuser 2006; Kocurek et al. 2020). Consider the conditional in (28).

(28) If Pluto were a planet, there would be dozens of planets in our solar system.

Intuitively, (28) can be true, not because changing the physical properties of Pluto would result in changes to the physical properties of other celestial objects, but rather

4 This is similar to some previous approaches to gradable adjectives (Barker 2002; MacFarlane 2016).

because *if we classified* Pluto as a planet, we would also have to classify many other objects as planets. This would be the natural reading of (28) in the context of a metalinguistic negotiation such as (27).

Convention-shifting conditionals can be captured in a straightforward way within the conventionalist framework. Simply put, we can give a semantics for the subjunctive conditional on which the consequent is evaluated not at the closest antecedent *worlds* (as on the standard Lewis-Stalnaker semantics), but instead at the closest antecedent *world-convention pairs*. So (28) is true iff the closest world-convention pairs where 'Pluto is a planet' is true are such that 'There are dozens of planets in our solar system' is also true. Even though we could make 'Pluto is a planet' true by shifting to a world where Pluto's orbit is different, such a change would be more deviant in the context of (27) than one where we simply revise the convention governing 'planet' so that Pluto counts as a planet.[5]

Thus, conventions already have a role to play within semantics proper.[6] Our proposal extends this framework to MCs as well.

5 Conventionalist analysis of MCs

Simple sentences express speakers' acceptance of conventions, and conditionals may shift conventions. We hold that MCs are a linguistic tool for *comparing* conventions.

Speakers don't just adopt certain conventions and reject others. They also have more nuanced attitudes: They may be more or less inclined to adopt certain conventions over others. For instance, even if A in (27) does not adopt a convention on which Pluto counts as a planet (along with dozens of other objects), they may be more committed to that convention than to a convention on which not even Earth counts as a planet.

This is analogous to the relationship between belief and credence. Agents don't just believe some propositions and fail to believe others. They also have more nuanced doxastic attitudes: They may have higher or lower credences in certain propositions compared with others. For instance, even if A neither believes that Al is a linguist, nor that Al is a philosopher, she may have a higher credence in the former.

Representing doxastic states using credence, and not merely full belief, is essential for understanding behavior under uncertainty, as well as for modeling probabilistic language, as in (29) (Moss 2018; Yalcin 2010).

(29) It's *more likely* that Al is a linguist than that she's a philosopher.

With (29), the speaker expresses that their credence that Al is a linguist is higher than

5 For details, see Kocurek et al. 2020: §4.

6 For further motivation of this idea from attitude reports, see Muñoz 2019.

their credence that she is a philosopher — that is, they express their comparative credences in the two propositions. They do not *assert* that their credence in one is higher than their credence in the other.

On our proposal, MCs express comparative commitments to conventions in the same way that likelihood claims express comparative credences. This expressive feature of our view is what will allow us to avoid analogs of the modal and disagreement challenges, discussed in §3.4, that faced some previous views. We'll return to this in §6.

To capture the idea that MCs express comparative commitments to conventions, we represent an agent's comparative commitments with a commitment ordering $\leq$, which is a preorder over world-convention pairs. So when an agent is at least as committed to $\langle w_2, c_2\rangle$ as they are to $\langle w_1, c_1\rangle$, their commitments are represented by an ordering on which $\langle w_1, c_1\rangle \leq \langle w_2, c_2\rangle$. We'll also write $c_1 \leq_w c_2$ instead of $\langle w, c_1\rangle \leq \langle w, c_2\rangle$ to represent that the agent is at least as committed at w to c_2 as to c_1. The agent's *absolute* commitments can be taken to be maximal world-convention pairs, i.e., pairs $\langle w, c\rangle$ such that for no $\langle w', c'\rangle$ do we have $\langle w, c\rangle < \langle w', c'\rangle$.

An agent's commitment ordering ranks world-convention pairs, not just conventions. This is because a speaker's conventional commitments may depend on factual matters. For example, suppose A in (27) vows to use whatever definition of 'planet' the IAU adopts. Then which conventions A is committed to, as well as which conventions A is more committed to than others, will depend on what the IAU actually does. Moreover, if A is uncertain (or even mistaken) about how the IAU defines 'planet', A may end up adopting conventions the IAU does not adopt. Thus, there is a difference between a speaker's *absolute* commitments to conventions and their commitments to conventions *conditional on* the world being a certain way. (This, too, is analogous to the case of credence, where there's a difference between absolute and conditional credence.) This difference is captured by the fact that the relative ordering of conventions can depend on the world, i.e., that the commitment ordering ranks world-convention pairs, not just worlds.

To make our analysis more precise, we will work with a simple language with names $(a_1, a_2, \ldots)$, predicates $(P_1^n, P_2^n, \ldots)$, booleans, and a comparative sentential connective $>$ for $\ulcorner$more…than…$\urcorner$. The well-formed formulas are as follows:

$$A ::= Pa_1 \ldots a_n \mid \neg A \mid A \wedge A \mid A \vee A \mid A \supset A \mid A > A$$

Note, we are modeling the metalinguistic comparative connective as a sentential, rather than a predicative, operator. This allows us to formalize sentences like (30), which at least seem closely related to MCs.[7]

7 Some authors distinguish MCs from other potentially non-standard types of comparatives, like "comparisons of deviation" (CoDs), as in (i) (Kennedy 1997, 2001), and "indirect comparisons"

(30) Pluto is more a planet than Jupiter is a dwarf planet.

We can still define a predicative operator from the sentential one, though:

$$a \text{ is more } F \text{ than } G := Fa > Ga$$

So there's no loss in generality by modeling MCs with a sentential operator. We leave for future work the compositional implementation of these ideas.

The basic idea of the conventionalist framework is that extensions are determined not just relative to a world, w, but also relative to a convention, c, which is an assignment of intensions to names and predicates. Thus, where W is our set of worlds and D is our domain of objects:

- $c(a) : W \to D$ for each name a
- $c(P^n) : W \to \wp(D^n)$ for each n-place predicate P^n.

The semantics for the atomic case is given as follows (booleans work as expected):

$$[\![P^n a_1 \dots a_n]\!]^{\leq,w,c} = 1 \text{ iff } \langle c(a_1)(w), \dots, c(a_n)(w)\rangle \in c(P^n)(w)$$

So, e.g., 'Pluto is a planet' is true at a world w and convention c just in case the individual denoted by the name 'Pluto' according to c at w is in the extension of the predicate 'planet' according to c at w. (Note that the ordering $\leq$ does not do any work in this case.) MCs are then analyzed as follows:

$$[\![A > B]\!]^{\leq,w,c} = 1 \text{ iff } \exists c' : [\![A]\!]^{\leq,w,c'} = 1 \;\&\; \forall c'' \geq_w c' : [\![B]\!]^{\leq,w,c''} = 0$$

That is, $A > B$ is true relative to an ordering $\leq$ iff there's a convention that makes A true and is "better", i.e., carries a stronger commitment, according to $\leq$, than any

(ICs), as in (ii) (Bale 2008).

(i) The Red Sox are more legitimate than the Orioles are fraudulent.

(ii) Esme is more beautiful than Einstein is intelligent.

And one might claim that (30) belongs in one of these categories instead. However, we are skeptical (along with Embick (2007: pp. 20ff) and Wellwood (2014: §6.2)) that these really represent distinct categories of comparatives over and above the ordinary degree comparatives and the metalinguistic. Morzycki (2011: p. 43) distinguishes MCs from CoDs on the grounds that MCs implicate (though do not entail) their positive form, while CoDs entail their positive form. We do not share this judgment, however. To make the same point, Wellwood (p. 233) gives the following counterexample:

(iii) The Red Sox are more legitimate than the Orioles are fraudulent, and this is kind of hilarious because the Red Sox aren't even remotely legitimate.

And (30) does not, by our judgment, entail that Pluto is a planet.

convention making B true. The result is that an assertion of (1) expresses a stronger commitment to a convention on which Al is wise than one on which Al is clever. (Note: These truth conditions assume that $\leq_w$ is total, i.e., for any c_1 and c_2, either $c_1 \leq_w c_2$ or $c_2 \leq_w c_1$. We consider dropping this assumption below.)

On the conventionalist analysis developed here, the label "metalinguistic" for MCs is appropriate in some ways, but potentially misleading in others. MCs are "metalinguistic" in the sense that they communicate speakers' linguistic commitments. However, they are not "metalinguistic" in the sense of being *about* language, nor in the sense of operating outside ordinary semantic theorizing.[8] As we discussed in §4, MCs are not the only motivation for bringing conventions into the semantics proper. Our analysis of MCs, in addition to doing better than its competitors (see §6), fits within a broad approach to semantic theorizing with wider application.

6 Doing better

The conventionalist analysis captures the intuitions behind previous approaches without their costs. People may hold a stronger commitment to a convention because they prefer it to others, or think it is is more appropriate to use, or more precise. These are all grounds for judging, in an intuitive sense, that one thing is "better to say" than another. But not every preference, or every judgment of appropriateness or precision, is based on comparative commitments to conventions. We now return to the proposals reviewed in §3 and show how our approach avoids the problems identified there.

Start with the preference and appropriateness views from Giannakidou & Stavrou (2009) and Giannakidou & Yoon (2011). Recall the following problem case for them, due to Morzycki (2011) (repeated from (13)):

(31) [Herman approaches the bereaved at a funeral and says, "Sorry your mother croaked." Herman's friend takes him aside and says. . .]

a. It's more appropriate to say "She passed away" than "She croaked."
b. I'd prefer to say "She passed away" to "She croaked."
c. #She more passed away than croaked.

Here, the speaker's preference and judgment of appropriateness are based on register

8 On this latter point, we are in agreement with Giannakidou & Stavrou (2009: p. 57), who, based on evidence from MCs, hold that "metalinguistic functions are encoded in the grammar in a systematic way, and are not merely pragmatic devices." See also Giannakidou & Yoon 2011: pp. 625–626. Wellwood (2014, 2019) uses the label "categorizing comparatives" in the place of "metalinguistic comparatives", and her terminology is very congenial to our approach (indeed, arguably more so than to her own, at least in her 2014 work; whereas she there takes MCs to communicate credences about categorizations, we take them to communicate commitments to categorizations directly).

or politeness, not on views about what it is better for terms to mean. The speaker, we may assume, is committed to 'croak' and 'pass away' being semantically equivalent. Thus, we explain why (31c) is odd on our analysis, whereas (31a–b) are fine.

The same considerations apply to the reverse case, from (14), where the MC is felicitous but the statements of preference and appropriateness are not. The speaker can hold the comparative commitment between conventions that makes the MC felicitous, while having views about what is ultimately appropriate to say that are influenced by other overriding considerations.

Now return to Morzycki's (2011) precision account. Recall the following problem case for him (repeated from (16)):

(32) [Herman is $6'2''$]
#Herman is more six-foot-three than six-foot-five.

The problem for Morzycki is that one claim simply being more precise than another is not enough to license an MC. But one might worry that the conventionalist analysis also predicts that (32) should be appropriate. After all, if one knows that Herman is $6'2''$ wouldn't one likely be more committed to a convention that makes 'Herman is six-foot-three' true than one that makes 'Herman is six-foot-five' true?

But it's not clear that this is the case. It's plausible that speakers are committed to using measure terms fairly precisely, say to a degree of precision within about an inch when it comes to heights. And so one likely ranks all conventions that deviate from that equally. In that case, we would not predict the MC to be appropriate.

However, the conventionalist analysis does not rule out (32) from ever being appropriate. We take this to be a feature of the view, not a problem. Imagine, for instance, that we're grouping people into coarse-grained height categories, in increments of two inches. In such a context, (32) might sound fine, and for exactly the reason predicted by the conventionalist analysis: In the context, the speaker is more committed to a convention that counts Herman as six-foot-three than one that counts him six-foot-five. Relative precision can be the basis for comparative conventional commitments, but need not be.

Furthermore, comparative commitment to conventions is more general than precision in that it does not need to build in principles like Pointwise Composition or Total Comparability. For Pointwise Composition, just because a speaker is more committed to x being F than F', and more committed to x being G than G', it doesn't follow that they're more committed to x being $F \wedge G$ than $F' \wedge G'$. After all, the F-convention that the speaker is more committed to than any F'-convention may be a $\neg G$-convention; and it may turn out that the strongest $(F \wedge G)$-convention does not carry as strong a commitment as the strongest $(F' \wedge G')$-convention. This point is dramatized in (33) (repeated from (17)) by letting G be incompatible with F.

(33) a. Al is more tall than wide.
b. Al is more average height than tall.
c. ??Therefore, Al is more tall and average height than wide and tall.

Thus, one may be more committed to counting Al as tall than wide, and more committed to counting Al as average height than tall, without being more committed to counting Al as both tall and average height than as both wide and tall.

However, when F and G (and F' and G') are along independent dimensions, conjunctive inferences of this form sound better. This is expected in the conventionalist account: If the conventions governing F are unrelated to those governing G (in the speaker's view), then the speaker's relative commitment to a convention where something is F should not be affected by what counts as G on that convention and vice versa. In that case, the speaker's relative commitment to something being both F and G should be determined solely by their relative commitments to its being F and to its being G. We leave it to future work to spell out this idea more precisely.

As for Total Comparability, we can accommodate non-total commitment orderings by replacing the truth conditions in §5 for $A > B$ with the following:

$[\![A > B]\!]^{\leq,w,c} = 1$ iff

(i) $\exists c' \colon [\![A]\!]^{\leq,w,c'} = 1$, and

(ii) $\forall c' \colon [\![B]\!]^{\leq,w,c'} = 1 \Rightarrow \exists c'' \geq_w c' \colon [\![A]\!]^{\leq,w,c''} = 1 \;\&\; \forall c''' \geq_w c'' \colon [\![B]\!]^{\leq,w,c'''} = 0.$

This says that $A > B$ is true iff, first of all, there is a convention that makes A true (i.e., A is not inconsistent), and second, for every convention that makes B true, there is a better convention that makes A true and no convention making B true is better. These truth conditions allow us to avoid the prediction that one of the sentences in (34) (repeated from (19)) must be true.

(34) a. Al is more wise than tall.
b. Al is more tall than wise.
c. Al is as much wise as tall.

If $\leq$ is total, these truth conditions collapse to the simpler ones in §5. Thus, the modified truth conditions given here are flexible enough to accommodate failures of totality while still allowing it to be imposed as an additional constraint.

Next, return to Wellwood's (2014) credence account. We saw that this account incorrectly predicts that MCs are equivalent to likelihood claims. Recall (35) (repeated from (23)):

(35) a. Al is more a linguist than a philosopher.
b. It's more likely that Al is a linguist than a philosopher.

On the conventionalist analysis, these sentences are not equivalent. Likelihood claims express comparative credences in worldly possibilities, whereas MCs express comparative commitments to conventions. One might know, for instance, that Al is a psychologist (and thus, neither a linguist nor a philosopher), but still be more committed to a convention on which she's linguist than one on which she's a philosopher, say because her work is more heavily focused on linguistics. This shows that the MC doesn't entail the comparative likelihood claim, on our view.

For the reverse, consider (36) (repeated from (24)).

(36) a. It's more likely that it rained than snowed.
b. It more rained than snowed.

The speaker can have a higher credence that it rained than that it snowed, thus licensing the comparative likelihood claim, but not know whether any precipitation actually fell at all. In that case, it would be odd to express stronger commitment to a convention on which the weather is described as 'rain' compared with 'snow', since if there was no precipitation, both of those descriptions would be equally inapt.

Finally, the conventionalist analysis avoids an analog of the speaker/anchor problem that faced Giannakidou & Yoon (2011) and Wellwood (2014). The conventionalist analysis takes MCs to *express* the speaker's comparative commitments to conventions, but not to *assert* that they have such commitments. That is, we do not take (37a) to be equivalent to (37b).

(37) a. Al is more wise than clever.
b. I am more committed to a convention on which Al is wise than to one on which Al is clever.

The relationship between these sentences, on our view, is analogous to the relationship between a likelihood claim and a claim about one's credence:

(38) a. It's probably raining.
b. I have a high credence that it's raining.

No plausible semantics should predict that the modal connection in (39) holds, or that (40) is a sensible disagreement.

(39) #If my credences were different, it probably wouldn't be raining.

(40) a. It's probably raining.
b. #No, you don't have high credence in that.

Likewise, then, we do not predict that MCs are modally dependent on the speaker's commitments as in (41), nor that (42) is a sensible disagreement over MCs.

(41) #If my commitments were different, Al would be more clever than wise.

(42) a. Al is more wise than clever.
b. #No, you aren't more committed to her being wise than her being clever.

The conventionalist analysis avoids making MCs about the speaker, while still capturing the fact that they're used to communicate the speaker's commitments.

7 Conclusion

We have argued for an analysis of metalinguistic comparatives on which they express speakers' comparative commitments to linguistic conventions. We close by mentioning three questions left open by the analysis as it stands.

First, how do metalinguistic comparatives relate to metalinguistic negation (Horn 1989; Giannakidou 1998; Giannakidou & Yoon 2011)? Perhaps just as MCs express comparative commitments to conventions, so metalinguistic negations express rejection of conventions. However, it's not straightforward how this would go, given the apparent contrast in (43).

(43) a. #She more passed away than croaked.
b. She didn't *croak*; she passed away.

Second, can indicative conditionals express comparative conventional commitments? Hinterwimmer (2010) gives an analysis for conditionals with vague predicates, like (44a), on which they can be equivalent with superlatives, as in (44b).

(44) a. If anyone was drunk at the party, it was Mary.
b. Mary was drunker than anyone else at the party.

Could such an analysis be extended to cases involving comparisons of conventions, even without vague predicates, as in (45)?

(45) a. If anything is a planet, it's Jupiter.
b. Jupiter is more a planet than anything else.

Finally, what, if anything, do positive form assertions express about comparative commitments to conventions? Notice that the MC in (46a) is felicitous whereas the comparative likelihood claim in (46a) is infelicitous.

(46) a. Al is both wise and clever, but she's more wise than clever.
b. #Al is both wise and clever, but she's more likely wise than clever.

Predicting this contrast is another task that remains for the conventionalist approach to metalinguistic comparatives.

References

Bale, Alan Clinton. 2008. A universal scale of comparison. *Linguistics and Philosophy* 31. 1–55. doi: 10.1007/s10988-008-9028-z.

Barker, Chris. 2002. The dynamics of vagueness. *Linguistics and Philosophy* 25. 1–36. doi: 10.1023/A:1014346114955.

Barker, Chris. 2013. Negotiating taste. *Inquiry* 56. 240–257. doi: 10.1080/0020174X.2013.784482.

Bresnan, Joan W. 1973. Syntax of the comparative clause construction in English. *Linguistic Inquiry* IV(3). 275–434.

Einheuser, Iris. 2006. Counterconventional conditionals. *Philosophical Studies* 127(3). 459–482. doi: 10.1007/s11098-004-7790-5.

Embick, David. 2007. Blocking effects and analytic/synthetic alternations. *Natural Language & Linguistic Theory* 25. 1–37. doi: 10.1007/s11049-006-9002-9.

Giannakidou, Anastasia. 1998. *Polarity Sensitivity as (Non)Veridical Dependency*. Amsterdam: Benjamins. doi: 10.1075/la.23.

Giannakidou, Anastasia & Melita Stavrou. 2009. Metalinguistic comparatives and negation in Greek. In Claire Halpert, Jeremy Hartman & David Hill (eds.), *Greek Syntax and Semantics* MIT Working Papers in Linguistics 57, 57–74. MIT Press.

Giannakidou, Anastasia & Sunwoo Yoon. 2011. The subjective mode of comparison: metalinguistic comparatives in Greek and Korean. *Natural Language & Linguistic Theory* 29. 621–655. doi: 10.1007/s11049-011-9133-5.

Gibbard, Allan. 2003. *Thinking How to Live*. Cambridge, MA: Harvard University Press.

Hinterwimmer, Stefan. 2010. The metalinguistic use of vague predicates in conditionals. In Man Li & David Lutz (eds.), *Semantics and Linguistic Theory (SALT)* 20, 366–386. doi: 10.3765/salt.v20i0.2578.

Horn, Laurence R. 1989. *A Natural History of Negation*. Chicago: Chicago University Press.

Huddleston, Rodney & Geoffrey K. Pullum. 2002. *The Cambridge Grammar of the English Language*. Cambridge: Cambridge University Press. doi: 10.1017/9781316423530.

Kennedy, Christopher. 1997. Comparison and polar opposition. In Aaron Lawson (ed.), *Semantics and Linguistic Theory (SALT)* VII, 240–257. Ithaca: CLC Publications. doi: 10.3765/salt.v7i0.2782.

Kennedy, Christopher. 2001. Polar opposition and the ontology of "degrees". *Linguistics and Philosophy* 24. 33–70. doi: 10.1023/A:1005668525906.

Kocurek, Alexander W., Ethan Jerzak & Rachel Etta Rudolph. 2020. Against conventional wisdom. *Philosophers' Imprint* 20(22). 1–27.

Lasersohn, Peter. 1999. Pragmatic halos. *Language* 75. 522–551.

doi: 10.2307/417059.
MacFarlane, John. 2016. Vagueness as indecision. *Aristotelian Society Supplementary Volume* 90(1). 255–283. doi: 10.1093/arisup/akw013.
McCawley, James. 1998. *The Syntactic Phenomena of English*. Chicago and London: University of Chicago Press 2nd edn.
Morzycki, Marcin. 2011. Metalinguistic comparison in an alternative semantics for imprecision. *Natural Language Semantics* 19. 39–86. doi: 10.1007/s11050-010-9063-5.
Moss, Sarah. 2018. *Probabilistic Knowledge*. Oxford: Oxford University Press. doi: 10.1093/oso/9780198792154.001.0001.
Muñoz, Patrick. 2019. Behavioral attitudes in hyperintensional grammar. Manuscript.
Plunkett, David & Tim Sundell. 2013. Disagreement and the semantics of normative and evaluative terms. *Philosophers' Imprint* 13(23). 1–37.
Sawada, Osamu. 2010. *Pragmatic aspects of scalar modifiers*: The University of Chicago PhD dissertation.
Stalnaker, Robert C. 1999. *Context and Content: Essays on Intentionality in Speech and Thought*. Oxford: Oxford University Press.
Wellwood, Alexis. 2014. *Measuring predicates*: University of Maryland, College Park PhD dissertation.
Wellwood, Alexis. 2019. *The Meaning of* More Studies in Semantics and Pragmatics. Oxford: Oxford University Press. doi: 10.1093/oso/9780198804659.001.0001.
Yalcin, Seth. 2010. Probability operators. *Philosophy Compass* 5(11). 916–937. doi: 10.1111/j.1747-9991.2010.00360.x.
Zevakhina, Natalia, Svetlana Dzhakupova & Anna Vishenkova. 2017. The grammar of Russian metalinguistic comparatives. *Scando-Slavica* 63(2). 179–197. doi: 10.1080/00806765.2017.1399589.

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