

METAMETACOMPARATIVES: COMMENTS ON 'METALINGUISTIC CONTRAST IN THE GRAMMAR OF GREEK'

Winfried Lechner (University of Athens)

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1. INTRODUCTION

In their empirically rich and stimulating contribution, Giannakdiou and Stavrou (G&S) bring to attention some interesting syntactic properties of metacomparatives in Greek which set this construction apart from regular degree constructions. In addition, the paper contains new suggestions as to the semantic analysis of metacomparatives, including a possible extension of the account to other metalinguistic uses of linguistic expressions.¹

Metacomparatives ('MC'), illustrated by (1), differ from regular object language comparatives in that the comparison relation does not apply to values provided by degree predicates, but operates on relative degrees of appropriateness in a context.²

- (1) O Pavlos ine perissotero eksipnos [_{para-XP} para erghatikos]
the Paul is-3s more intelligent than industrious
"Paul is more/rather intelligent than industrious."

G&S defend two major claims about the analysis of MCs in Greek, which to a large extent also holds in languages like English. First, they propose that the overt shape of the degree complement ('*para-XP*') in (1) is produced by TP-ellipsis targeting an underlyingly clausal source, as illustrated by (2):

- (2) a. [_{para-XP} Paul is industrious] base generated clausal *para-XP*
b. [_{para-XP} industrious₁ [_{TP} Paul is t₁]] ellipsis of non-remnant

Second, G&S suggest that (at least some) MCs are interpreted as if being embedded under a silent *I believe* operator, resulting in a paraphrase for the MC (1) as in (3):

- (3) The degree to which I believe that Paul is intelligent exceeds
the degree to which I believe that Paul is industrious. (see G&Sa, (50))

¹These notes originated as remarks on Giannakidou & Stavrou's workshop presentation (henceforth G&Sa), but also take into account amendments in the analysis which were made in G&S's paper (G&Sb) subsequent to my comments.

I would like to thank Elena Anagnostopoulou, Cleo Condoravdi and Sabine Iatridou for discussion and help with Greek data.

²For differences between MCs and regular comparatives see Cele-Murcia (1972); Embick (2007); McCawley (1964, 1988); McConnell-Ginet (1973); Smith (1961).

In what follows, I will discuss properties of MCs that challenge these claims. Section 2 presents three new observations about the overt syntax of MCs indicating that although an ellipsis account appears to be correct, G&S particular implementation generates some unwelcome predictions. The section concludes with an outline of alternative analysis. In section 3, which briefly addresses the meaning of MCs, it will be demonstrated that the specific semantic analysis submitted by G&S is incompatible with fundamental characteristics of attitude reports and indexicals. (Some of these shortcomings have been removed in G&Sb.)

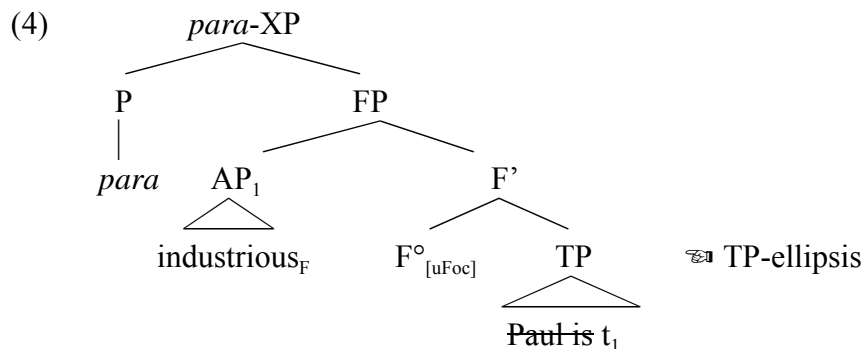
2. SYNTAX: ELLIPSIS

Even though I do not contend that an ellipsis account of MCs might ultimately be best suited to accommodate the largest number of generalizations, some of the empirical evidence collected in G&S require further qualification. Embedded in a discussion of some additional properties of the construction, I will briefly address three problems below: (i) a condition on the size of the remnant (§2.1); (ii) the interpretation of missing subjects (§2.2); and (iii) a correlation between the position of *perissotero*/'more' and the size of the *para*-XP (§2.3).

2.1. SINGLE REMNANT CONSTRAINT AND PARALLELISM

According to G&S, the derivation of the *para*-XP of (1), repeated below, proceeds as schematized in (4), where an uninterpretable focus feature on F° attracts the AP, followed by TP-ellipsis (Merchant 2006).

- (1) O Pavlos ine perissotero eksipnos [_{para-XP} para erghatikos_F]
 the Paul is-3s more intelligent than industrious
 "Paul is more/rather intelligent than industrious."



The *para*-XP then combines with the matrix clause into a coordinate-like structure. Ellipsis is finally licensed by a version of the focus parallelism condition of Rooth (1992).³

³In the semantic discussion above (46), G&Sb use 'remnant' where they seem to mean 'the clause containing the remnant'. This leads them to spell out the focus condition as in (i):

(i) [remnant] ∈ [[TP]^f (G&Sb, (46))
 (i) cannot be correct, though. The focus semantic value of the antecedent TP (ignoring the contribution of

There is an intriguing property of MCs which militates against an ellipsis analysis along these lines. While regular comparatives such as (5) may naturally combine with a non-reduced comparative complement, MCs in which *perissotero* surfaces postverbally impose a single remnant constraint on the *para*-XP, as shown by the ill-formedness of the examples in (6) (for systematic exceptions to this conditions see below; for postverbal *perissotero* see §2.3).

- (5) To trapezi ine perissotero plati [ap'o'ti to parathiro ine psilo].
 the table is more wide than the window is high
 “The table is wider than the window is high”
- (6) a. *O Pavlos ine perissotero eksipnos [_{para-XP} para i Maria ine ergatiki].
 the Paul is more intelligent than the Mary is industrious
 “*Paul is more intelligent than Mary is industrious.”
- b. *O Pavlos ine perissotero eksipnos [_{para-XP} para ine ergatiki].
 the Paul is more intelligent than is industrious
 “*Paul is more intelligent than she is industrious.”

Unless one finds a reason why ellipsis in MCs is obligatory if possible, the inability of material inside the *para*-XP to forego ellipsis poses a substantial problem for ellipsis accounts. In contrast, such a constraint would be predicted by a direct analysis of MC, which posits that the *para*-XP does not contain any hidden structure.

Acknowledging the relevance of the single remnant condition in G&Sb (see discussion of (53)), G&S suggest that this complication for the ellipsis account can be defused by appeal to the exceptional focus projection properties of MCs. More precisely, G&S argue that the generalization falls out from the assumption that focus on V° does not project up to VP if the VP contains another phonologically independent phrase. As a result, VPs that are composed of verbs and full DPs, as in (7)a, cannot check the uninterpretable focus feature on F° , while VPs such as the one in (7)b, which only contain a verb-clitic cluster, may do so.

- (7) a. *Ghnorizo perissotero tin MARIA [para ghenorizo tin ADHERFI tis]. (see G&Sb’s (47b))
 know.1sg more the Maria than know.1sg the sister hers
 I know Maria more than her sister.
- b. GHNORIZO perissotero tin Maria [para tin SIBATHO]. (see G&Sb’s (48))
 know.1sg more the Maria than her like.1sg
 I know Maria rather than like her.

But the account cannot quite be correct. If an object clitic that does not corefer with its correlate

metacomparison) is the set of proposition of the form ‘Paul is X’. Thus, the meaning of the remnant (‘industrious’) cannot be a member of this set of propositions. What is called for is Rooth’s (1992) original version of ellipsis licensing condition, according to which the regular semantic value of the ellipsis clause must be a member of the focus semantic value of the antecedent clause ([ellipsis clause] ∈ [antecedent clause]^f).

in the antecedent clause takes the place of *tin*/'her' in (7)b, the resulting MC degrades substantially in acceptability:

- (8) *GHNORIZO perissotero tin Maria [para ton SIBATHO].
 know.1sg more the Maria than her like.1sg
 "I know Maria rather than like him"

This is unexpected, because on G&Sb's analysis, the well-formedness of the *para*-XP is - once ellipsis parallelism is satisfied - a function of the phonological properties of its part. Thus, exchanging one clitic for another should not matter.

Interestingly, the contrast between the minimal pair (7)a and (8) is part of a larger pattern, which includes a whole group of systematic exceptions to the single remnant condition. In particular, MCs with more than a single remnant improve substantially if the main clause and the comparative complement observe semantic parallelism *modulo* the contribution of the focused metalinguistic expressions. (Similar observations hold for English; all judgements pertain to the MC reading.)

- (9) a. Ine perissotero eksipnos [_{para-XP} para (?ine)⁴ erghatikos]
 is more intelligent than is industrious
 "He₁ is more intelligent than he₁ is industrious."
 b. *Ine perissotero eksipnos [_{para-XP} para (ine) erghatiki] (≈ (6)b)
 is more intelligent than is industrious
 *He₁ is more intelligent than she₂ is industrious."
 c. *Ine perissotero eksipnos [_{para-XP} para ise erghatikos]
 is more intelligent than is industrious
 *He₁ is more intelligent than you are industrious."
 (10) a. (?)H Maria harise perissotero prosoxi sthn mitera tis [para tis harise agapi]
 the Mary gave more attention to mother her than her gave love
 "Mary gave more/rather attention to her mother, than love"
 b. *H Maria harise perissotero prosoxi sthn mitera tis [para harise agapi ston patera tis]
 the Mary gave more attention to mother her than gave love to-the father her
 "Mary gave more/rather attention to her mother, than love to her father"
 c. *H Maria harise perissotero prosoxi sthn mitera tis [para o Iannis tis harise agapi]
 the Mary gave more attention to mother her than the Iannis her gave love
 "Mary gave more/rather attention to her mother, than Iannis have her love"

The generalization emerging from the data in (6) - (10) seems to be that in MCs, *non-elided* material in the *para*-XP has to observe the same semantic identity condition that is characteristic of elided constituents in standard cases of ellipsis. Expressed in terms of focus semantics (Rooth 1992), the denotation of the *para*-XP has to be identical to a focus semantic alternative of the antecedent clause. This requirement is e.g. met by (9)a (because (11)a holds) but not by (9)b (because of (11)b).

⁴If the copula is present, some - but not all - speakers report degradation.

- (11) a. For all assignments g , $\llbracket he_1 \text{ is industrious} \rrbracket^{g[1 \rightarrow \text{Hans}]} \in \{p_{\langle s, t \rangle} | p = \exists P_{\langle e, t \rangle} \llbracket \text{Hans is P} \rrbracket^{g[1 \rightarrow \text{Hans}]}\}$
 b. There is an assignment g , s.t.
 $\llbracket she_2 \text{ is industrious} \rrbracket^{g[1 \rightarrow \text{Hans}]} \notin \{p_{\langle s, t \rangle} | p = \exists P_{\langle e, t \rangle} \llbracket \text{Hans is P} \rrbracket^{g[1 \rightarrow \text{Hans}]}\}$

2.2. INTERPRETATION OF MISSING MATERIAL

A second problem for G&S's analysis is furnished by examples like (12)a, which demonstrate that the missing subject of the *para*-XP is interpreted as a bound variable, co-varying in semantic value with the matrix subject. (For ease of exposition, I use English, which behaves identical in this respect to Greek).

- (12) a. Some of you are more intelligent than industrious.
 b. Some of you are more intelligent than industrious₁ ~~some of you are~~ are t₁

For this reason, a derivation in terms of TP-ellipsis (see (12)b) cannot accurately describe the evolution of the string (12)a. Rather, an ellipsis account should relate the surface form (12)a to its underlying source by ATB-movement of the subject, as documented in (12)c.⁵

- (12) c. Some of you₂ [t₂ are more intelligent] [than industrious₁ t₂ are t₁]

I will return to further possible applications of the ATB-strategy in section 2.4.

2.3. POSITION OF 'PERISSOTERO'/'MORE'

The third property of MCs to be considered here pertains to the position of *perissotero*/'more'. G&S note that *perissotero* can float to the left, to a position preceding the verb. What they fail to observe is that the overt position of *perissotero* systematically correlates with the size of ellipsis. More precisely, once *perissotero* surfaces in a preverbal position (see b-examples below), the single remnant condition is obviated, and the size of the *para*-XP may grow in size up to the sister node of *perissotero*:

- (13) a. *O Pavlos ine *perissotero* eksipnos [_{*para*-XP} para i Maria ine ergatiki]. (= (6)a)
 the Paul is more intelligent than the Mary is industrious
 b. *Perissotero* o Pavlos ine eksipnos [_{*para*-XP} para i Maria ine ergatiki]. (cf. (13)a)
 more the Paul is intelligent than the Mary is industrious
 “*Paul is more intelligent than Mary is industrious.”

⁵Following G&S, I assume that the *para*-XP and the matrix clause can be parsed into a paratactic structure, licensing the application of ATB-extraction.

- (14) a. ?O Pavlos ine *perissotero* eksipnos [_{para-XP} para ine ergatikos].
the Paul is more intelligent than is industrious
b. *Perissotero* o Pavlos ine eksipnos [_{para-XP} para ine ergatikos].
more the Paul is intelligent than is industrious
“Paul is more intelligent than industrious.”
- (15) a. *Ghnorizo *perissotero* tin Maria [para ghnorizo tin adherfi tis]. (= (7)a)
know.1sg more the Maria than know.1sg the sister hers
b. *Perissotero* ghnorizo tin Maria [para ghnorizo tin adherfi tis].
more know.1sg the Maria than know.1sg the sister hers
“I know Maria more than her sister”

Thus, useful as a heuristic as it was, the single remnant restriction eventually turns out to be an epiphenomenal fact, to be subsumed under the broader generalization in (16):

- (16) *perissotero* and *para* embed subtrees of the same size.

If correct, hypothesis (16) entails that the overt shape of a *para-XP* does not always provide direct evidence as to its actual size. In (17), for one, *perissotero* appears to combine with a larger subtree than *para*, indicating that the comparative complement contains silent nodes. (See section 2.4 for further discussion and actual derivation of (17).)

- (17) *Perissotero* [_{TP} o Pavlos ine eksipnos] [_{para-XP} para [_{TP} ergatikos]].
more the Paul is intelligent than industrious
“Paul is more intelligent than industrious.”

Finally, note on the side that English behaves just like Greek in that metalinguistic *more_{MC}* cannot be embedded in its own clause, as illustrated by the sharp contrast between (18) and (19):

- (18) Kim is more [_{VP} reevaluating some priorities] than [_{VP} having a mid-life crisis]
(Kennedy 1996, ex.(71))
- (19) *_{[TP} Kim is *more* [_{VP} reevaluating some priorities]] than [_{TP} *Bill is* having a mid-life crisis]

Thus, the overt position of *more_{MC}* determines the maximal size of the remnant also in English (see (16)). The further to the left *more_{MC}* surfaces, the larger the remnant can be. (18) is well-formed, because *more_{MC}* attaches to VP, and the remnant is a VP. Conversely, (19) is unacceptable because VP-adjoined *more_{MC}* is for some reason incompatible with a TP-remnant,

To summarize, the TP-ellipsis analysis of MCs advanced by G&S is not able to capture the correlation between linearization (position of *perissotero*) and the size of the comparative complement. It was demonstrated that these effects manifest themselves in two ways: (i) the generalization (16), which partially in the guise of the single remnant condition for MCs with postcopular *perissotero*; and (ii) systematic exceptions to the single remnant condition in parallel MCs. In addition, G&S’s ellipsis account creates (iii) wrong expectations as to the interpretation of

missing subjects inside the *para*-XP. The next section outlines an alternative for deriving the core properties of these three additional observations.

2.4. AN ALTERNATIVE ANALYSIS

Assume that ATB-movement is not only implicated in silencing the subject of (12)c (repeated from above), but is generalized in such a way, that in MCs with postcopular *perissotero*, ATB-extraction subsumes the work previously done by ellipsis, removing all non-shared material from the *para*-XP.

(12) c. Some of you₂ [t₂ are more intelligent] [than industrious₁ t₂ ~~are~~ t₁]

On this view, the formation of standard predicative MCs with postcopular *perissotero* does not involve ellipsis at all. Rather, the cases discussed by G&S are all derived by ATB-movement of the subject and the copula, as in (20). DP-traces are interpreted as individual variables. The trace of the auxiliary is of the same logical type as the verb denotation in order to allow reconstruction in semantics.

(20) O Pavlos₂ ine₃ perissotero [TP t₂ t₃ eksipnos] [*para*-XP para erghatikos₁ [TP t₂ t₃ t₁]] (= (1))
 the Paul is more intelligent than industrious.

Assuming that *perissotero* is a propositional operator (following G&S; see also §2.5), it seems natural to adjoin it to TP, as in (20). As a result, the movements postulated in (20) can actually be read off the surface realization of the string, because *Paul* and *ine* precede *perissotero*. Failure to move out of both clauses results in a violation of the Coordinate Structure Constraint (CSC; movement of *erghatiki* in the *para*-XP not represented). Thus, examples which previously fell under the reign of the single remnant constraint actually turn out to be excluded by the CSC.

(21) *O Pavlos₂ ine₃ perissotero [TP t₂ t₃ eksipnos] [*para*-XP para [TP i Maria ine erghatiki]]

Next, in MCs with preverbal *perissotero*, the *para*-XP may grow in size, the upper bound being determined by the position of *perissotero* in the antecedent clause. The missing subject in (22) has once again been removed by ATB-movement, and is interpreted as a bound variable:

(22) [TP *Perissotero* enas fitis₂ [TP t₂ ine eksipnos] [*para*-XP para [TP t₂ ergatikos]]].
 more a student is intelligent than industrious

In (22), the *para*-XP does not only lack an overt subject, but the finite auxiliary has been removed from the *para*-XP, too. (23) demonstrates that the process may also affect full verbs.

(23) Perissotero o Iannis ghnorizi tin Maria [para o Petros ~~ghnorizi~~ tin adherfi tis].
 more the Iannis knows the Mary than the Peter knows the daughter her
 “It is rather true that Iannis knows Mary than that Peter knows her sister”

Since the verb precedes *perissotero*, ellipsis can this time not be attributed to ATB-movement, but is best interpreted as the product of a deletion rule that parallels the pattern of Gapping⁶, a process independently attested in Greek (see (24)).

- (24) O Iannis ghnorizi tin Maria ke o Petros ~~ghnorizi~~ tin adherfi tis.
 the Iannis knows the Mary and the Peter knows the sister her
 “Iannis knows Mary and Peter knows her sister”

Thus, on the surface oriented analysis advocated here, there are two different deletion processes that may target verbs: ATB-movement (for MCs with postverbal *perissotero*) and Gapping.

(25) illustrates that the Gap may also include objects. Crucially, the missing object in (25) is - in contrast to the silent subject in (22) - not interpreted as a bound variable. In contexts that satisfy (25), the actual questions may vary across Iannis and Maria. This supplies strong support for an analysis of (25) in terms of Gapping, instead of ATB-movement.⁷

- (25) Perissotero o Iannis thimate mia erotisi [para i Maria ~~thimate mia erotisi~~]
 more the Iannis remember a question than the Mary
 “Rather Iannis can remember a question, than Mary”

Finally, how are non-reduced, parallel MCs which violate the single remnant condition (see (6)-(10)) accounted for? What is the explanation for the contrast in (26)?

- (26) a. *O Pavlos ine perissotero eksipnos [_{para-XP} para i Maria ine ergatiki]. (= (6)a)
 the Paul is more intelligent than the Mary is industrious
 b. (?)O Pavlos ine perissotero eksipnos [_{para-XP} para ine erghatikos] (~(9)a)
 the Paul is more intelligent than is industrious

There are two possible venues to pursue. First, (26)b could be analyzed as an instance of phonological reduction (deaccenting), which is well-known to behave similar to ellipsis in that it is subject to focus semantic parallelism. As was seen in §2.3 (see (11)), parallelism is indeed a prerequisite for overtly spelling out parts of the *para-XP*. If correct, this would afford potentially interesting evidence that deaccenting is not only found with ellipsis proper (such as VP-ellipsis), but also manifests itself in contexts that involve (ATB-)movement.

Alternatively, one might treat the overt occurrences of the subject and the auxiliary inside the *para-XP* as instances of resumption, as shown in (27) for English.

⁶There is convincing evidence that Gapping is to be analyzed in terms of ATB-movement (Johnson 2006). Thus, the question whether the verb is elided by one operation or the other becomes meaningless.

⁷On an analysis in which Gapping is reduced to ATB-movement (Johnson 2006), differences in DP-interpretation between the subject of (12) and the object of (25) can be made to follow from the assumption that objects, but not subjects, reconstruct for scope.

(27) Paul₂ is₃ more [t₂ t₃ intelligent] [than he₂ is₃ industrious]

On the one side, this ensures parallelism between the moved categories and their correlates inside the *para*-XP. On the other side, analyzing the pronoun and the auxiliary as bound variables has the advantage of offering a solution to another problem imminent in (27), viz. the fact that extraction of *Paul* and *is* violates the CSC. Selective exceptions similar to (27) have been reported in Ruys (1993), who observed that CSC violations are suspended if a category asymmetrically extracted out of the first conjunct binds into the second conjunct:

(28) a. *I wonder who [took what₁ from Mary] and [gave a book to Jeremy]
 b. I wonder who [took what₁ from Mary] and [gave it₁ to Jeremy]

Exactly the same structural description applies to (27). On the resumptive account, parallel MCs receive a descriptively adequate analysis.⁸

In the end, it seems that G&S were correct in positing an ellipsis analysis for MCs, even though the specific type of reduction operation involved is more likely a combination of Gapping and ATB-movement than TP-ellipsis.

2.5. METACOMPARATIVES VS. REGULAR COMPARATIVES

Recall that in MCs, the overt position of *more_{ML}* marks the size of *para*-XP (= (16)). VP-adjoined *more_{ML}* in (19), repeated from above, does not provide enough room inside for the comparative complement to contain a full TP:

(19) *_{[TP Kim is *more* [_{VP} reevaluating some priorities]]} than [_{TP} Bill is having a mid-life crisis]

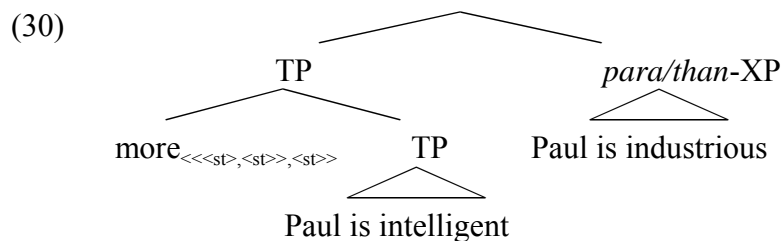
In contrast to *more_{MC}* object language *more_{OL}* can 'sink' up to a certain depth into its own clause without adversely affecting the size of the remnant. The data in (29) attest to the fact that VP-adjoined *more_{OL}* may combine either with a full TP remnant (see (29)a), or with a subject remnant in SpecTP which has been isolated by ellipsis (see (29)b). (Note that (29)a minimally contrasts with (19); comparative deletion is not represented.)

(29) a. [_{TP} Kim is reevaluating *more_{OL}* priorities] than [_{TP} Bill can enumerate] (cf. (19))
 b. [_{TP} Kim is reevaluating *more_{OL}* priorities] than [_{TP} Bill ~~is reevaluating~~]

This surprising contrast falls out from the different semantic contributions that *more_{MC}* and *more_{OL}* make. Assuming, following G&S, that *more_{MC}* translates as an operator which applies to two proposition denoting nodes (and yields a proposition), the logical syntax of MCs looks, just as suggested by G&S, as given in (30). Subsequent to ATB-movement of *Paul* and *is*, (30) results in

⁸ Another alternative - parsing the *para*-clause optionally as a subordination - would leave the parallelism condition unaccounted for.

the by now familiar surface string (1).

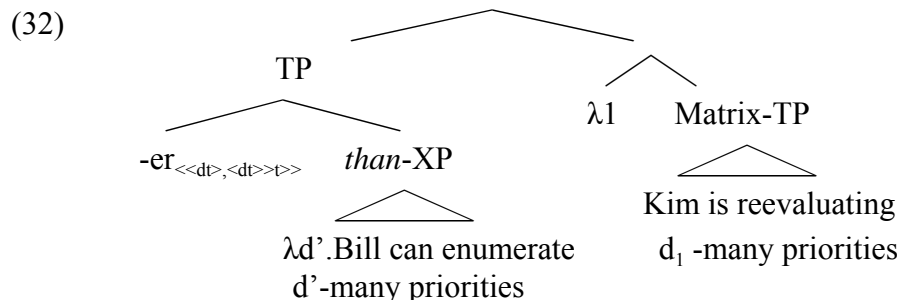


(1) Paul₂ is₃ more [TP t₂ t₃ intelligent] than [TP t₂ t₃ industrious]

Regular comparatives, by contrast, are not interpretable in such a surface oriented way. It is standardly assumed that *more*_{OL} is decomposed into *much/many* and the comparative morpheme *-er*. The latter denotes a generalized quantifier of degrees (Heim 2000):

(31) $[[er_{OL}]] = \lambda D_{\langle dt \rangle} \lambda D'_{\langle dt \rangle} . iD' > iD$ (see Heim 2000)

In course of the covert derivation, *-er* and the comparative complement (*than-XP*) move as a unit and adjoin to the matrix clause, as illustrated by (32) for example (29)a:



(29)a [TP Kim is reevaluating *more*_{OL} priorities] than [TP Bill can enumerate]

What is important for present purposes is the fact that the semantics of *more*_{OL} necessitates additional, abstract re-arrangement of the tree that is not required in the composition of MCs with *more*_{MC}. As a consequence, overt material may separate the surface position of *-er* from the node in the tree where it is interpreted (in (29)a, this is the string *Kim is reevaluating*). A similar dissociation is excluded for MCs like (19) by G&S's assumption that the matrix clause and the *para-XP* are parsed into a coordinate structure. In (19), e.g., asymmetric extraction of *Kim* across *more*_{MC} results in a violation of the CSC (the composite coordinated parts are boxed):

(33) *[Kim₂ is more [t₂ ...]] [para-XP [Bill is ...]] (= (19); excluded by CSC)

To recapitulate, differences between MCs and regular comparatives can be derived from the (logical syntax of the) semantics of the respective construction, and a coordinate parse for MCs. Together with the construction specific evidence discussed in section 2.3, this observation further strengthens G&S's coordinate analysis of MCs.

3. SEMANTICS OF MCs

In this last section, I will briefly review the semantics of G&S, concluding that two central claims are not tenable. (For an outline of an alternative, based on recent work on predicates of taste (Lasersohn 2005; Stephenson 2006) and quotation (Potts 2007), see Lechner (2007)).

3.1. ARGUMENTS AGAINST EMBEDDING MCs UNDER 'BELIEVE'

G&Sa argue that metalinguistic *perissotero*/ 'more_{ML}' translates as a functor that applies to two propositions, and makes the following contribution to the sentence meaning:

- (34) More_{ML} compares the two propositions in terms of the degree that the speaker believes, prefers or is willing to assert them (G&Sa, p.9)

Combining *more_{ML}* with the matrix clause and then the *para*-XP yields the quasiformalization in (35) as the meaning of sentence (1) (*Paul is more/rather intelligent than industrious*):

- (1) Paul is more intelligent than industrious
(35) $\exists d. I \text{ believe to the degree } d \text{ that Paul is intelligent} \wedge$ (see G&Sa, (50))
 $d > \max(\lambda d'. I \text{ believe to the degree } d' \text{ that Paul is industrious})$

The contrast between MCs and regular comparatives can be conceived of as similar to the one defining the use propositions *de dicto* vs. *de re*. MCs compare the way we talk about things (*de dicto*) or the notional ascriptions (Quine 1956), instead of the way things themselves are (*de re*). In this sense, G&S are correct in assuming that MCs involve an additional layer of embedding under an intensional operator, as in (35). Just like a regular intensional operator, this hidden predicate should make the truth of the proposition dependent on a modal base and some accessibility relation. In the case of MCs, this seems to be a relation that orders expressions according to their appropriateness in a context (see McCawley 1988, a.o.). But unlike standard intensional operators, the relation encoded by *more_{ML}* does not trigger referential opacity effects. MCs are transparent, they support substitution *salva veritate*. Whoever knows (36)a and (36)b also accepts (36)c as true.

- (36) a. DoménicosTheotokópoulos is more an Expressionist than a Mannerist.
b. DoménicosTheotokópoulos is El Greco.
c. \Rightarrow El Greco is more an Expressionist than a Mannerist.

An analysis which posits a silent propositional attitude embedding predicate falsely predicts MCs to be referentially opaque. If (36)a is construed with the underlying logical form (37)a, the inference in (36) should be invalid for the same reason that the inference in (37) is. (37) is invalid because I might hold a certain attitude about how to describe the art by Theotokópoulos, but not be aware of the fact that Theotokópoulos and El Greco are extensionally identical.

- (37) a. The degree to which I believe that DoménicosTheotokópoulos is an Expressionist exceeds the degree to which I believe that DoménicosTheotokópoulos is a Mannerist.
 b. DoménicosTheotokópoulos is El Greco.
 c. \nRightarrow The degree to which I believe that El Greco is an Expressionist exceeds the degree to which I believe that El Greco is a Mannerist.

Hence, MCs are not embedded under a silent *believe*, as G&Sa’s quasiformalization in (35) suggests. This shortcoming is in part amended in G&Sb, where *more_{ML}* is now defined as in (38), without explicit reference to *belief*.

$$(38) \quad [[\text{MORE}_{ML}]] = \lambda p \lambda q. \exists d [R(a)(p)(d) \wedge d > \max(\lambda d' [R(a)(q)(d')])] \quad (\text{G\&Sb (40)})$$

“where R is a gradable propositional attitude supplied by the context: either an epistemic meaning approximately “appropriate to say”, or an attitude expressing preference (desiderative or volitional); a is the individual anchor (Farkas 1992; Giannakidou 1998, 1999) of the attitude: typically, the speaker in an unembedded sentence.”

The point still seems worth stressing, partially because the issue is not explicitly addressed by G&S, partially because (38) still contains remnants of the *belief* analysis by making reference to ‘propositional attitudes’, i.e. relations that are typically understood to induce referential opacity.⁹

3.2. ARGUMENTS AGAINST (COVERT) INDEXICAL IN MCs

G&S’s assume that MCs are evaluated relative to the beliefs of an anchor which is typically represented by the speaker (see (38)). In this final subsection, I outline two arguments justifying G&S’s use of the qualification ‘typical’.

In a recent analysis of predicates of personal taste, Lasersohn (2005) argues for inclusion of a judge parameter in the meaning of predicates of taste (such as *be fun*, or *taste good*). I suggest to use this concept also in the analysis of MCs, where the judge can be thought of as the person assessing the appropriateness of an expression in a context. Sentence (1) can then be paraphrased as “Paul is intelligent to some degree and the degree to which ‘intelligent’ is appropriate according to the judge exceeds the degree to which ‘industrious’ is appropriate according to the judge.”

Crucially, known properties of the judge parameter in constructions with predicates of taste can now be used in order to probe comparable properties of MCs. One of these interesting judge-related properties manifests itself in contexts of disagreement among speakers, as in (39):

- (39) a. A: This cake tastes good.
 b. B: No, it doesn’t \triangle . It tastes terrible. $(\triangle = \text{taste good})$

⁹The claim also shows up in other parts: “The contrast here is metalinguistic in that it is anchored to the speaker’s own attitude, beliefs, and, generally, perception of thing” (G&Sb, below (8)). For a version without *belief* see G&Sb (44).

Lasersohn assumes that speakers felicitously disagree if and only if their respective assertions result in contradictory Kaplanian content (Kaplan 1989). The discourse in (39) is for instance felicitous, because the content of the proposition expressed by (39)a, given in (40)a, contradicts the content of (39)b, spelled out in (40)b. (The details are irrelevant for present purposes.¹⁰ ‘j’ denotes the judge).

- (40) a. content: {<w, t, j>: this cake tastes good to j in w at t}
 b. content: {<w, t, j>: this cake doesn’t taste good to j in w at t}

The addition of an overt indexical to the predicate results in infelicity, as shown by (41).¹¹

- (41) a. A: This cake tastes good to me.
 b. B: #No, it doesn’t. It tastes terrible. (△ = taste good to me)
- (42) a. content: {<w, t, j>: this cake tastes good to A in w at t}
 b. content: {<w, t, j>: this cake doesn’t taste good to B in w at t}

The contrast between (39) and (41) provides now a good test for the presence or absence of a hidden indexical in MCs. If there were a hidden indexical *I* in the logical form of MCs, as suggested by G&Sa’s (50) (see (35) above) it should not be possible to find MCs in discourses involving disagreement. This is not the case, (43) is as felicitous as (39):

- (43) a. A: El Greco is more an Expressionist than a Mannerist.
 b. B: No, he is not. El Greco is more a Modernist than a Mannerist.

Conversely, adding an overt indexical triggers the same effect that was observed to lead to degradation with predicates of personal taste (see (41)).

- (44) a. A: El Greco is more an Expressionist to me than a Mannerist.
 b. B: #No, he is not. El Greco is more a Modernist than a Mannerist.

It follows that MCs do not contain a hidden indexical *I*. Rather, the silent judge parameter is to be construed as a variable that can either be contextually specified (see Stephenson 2007), or be bound by a higher predicate. The latter option accounts for the observation that in configurations in which MCs are embedded, the proposition does not report an attitude on part of the speaker, but on part of the higher subject. (45) is close in meaning to (45)b, but cannot be paraphrased by (45)c.

¹⁰Roughly, in order to keep the content judge dependent - i.e. in order to ensure that (39)a and (39)b actually yield a contradiction - Lasersohn proposes that the judge has not been filled yet at the point at which the content of a proposition is calculated. That is, the judge is part of the Kaplanian index, which is calculated by combining the content, with the world/time parameter and the judge.

I adopt here the implementation of Stephenson (2006).

¹¹Again, the details do not matter for present purposes. According to Lasersohn (2005), infelicity ensues because (i) the indexical *me* is supplied by the (Kaplanian) context, (ii) and a Kaplanian character yields different contents in different contexts. Thus, no contradiction ensues, in violation of Lasersohn’s felicity condition.

- (45) a. Ann claims that Bill is more intelligent than industrious. (uttered by me)
- b. $\sqrt{\text{Ann}}$ claims the following: the degree to which ‘Bill is intelligent’ is appropriate for Ann is greater than the degree to which ‘Bill is industrious’ is appropriate for Ann
- c. *Ann claims the following: the degree to which ‘Bill is intelligent’ is appropriate for me is greater than the degree to which ‘Bill is industrious’ is appropriate for me

Thus, embedded MCs demonstrate that not all beliefs are anchored to speaker - the judge is not necessarily the attitude holder. This provides further strong support against embedding MCs under a hidden speaker denoting indexical (as assumed by G&SA; see (35) above).

4. CONCLUSION

Even though these comments presented dissenting views on a number of details, these points of disagreement do not adversely affect the overall line of the argumentation pursued by G&S. G&S’s attempt to derive MCs by syntactic ellipsis is well-motivated. If the specific implementation can be partially improved upon, this is only possible due to G&S’s preparatory work. In addition, G&Sb provide a not entirely transparent, yet thought-provoking, semantics the basic properties of MCs. Further advances in this area might be based on a better understanding of the function that (autonomous) quotation plays in this construction (see Recanati 2000; Potts 2006). In sum, G&S’s contribution provides excellent reason to pursue further these and related matters.

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Winfried Lechner
Department of German Language and Literature
University of Athens
Panepistimioupoli
15784 Athens, Greece
Phone: +30 210 727 7389 (office); +30 693 26 96 182 (cell)
email: wlechner@gs.uoa.gr; winfried.lechner@uni-tuebingen.de
Webpage: <http://vivaldi.sfs.phil.uni-tuebingen.de/%7Ennsle01/>