On metalinguistic comparatives and negation in Greek

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Abstract

In this paper, we identify a paradigm of metalinguistic comparatives in Greek headed by the preposition *para. Para* clauses are lexically distinct from other comparatives clauses in Greek (headed by *apo, apoti*). Building on earlier intuitions, we propose a semantics of metalinguistic MORE as a contrast between two propositions in terms of how appropriate of preferred they are by some individual. Syntactically, metalinguistic comparison appears to behave like a co-ordinate structure with ellipsis in the *para*-clause. Our account is extended to metalinguistic negation, lexicalized by *oxi* in Greek, which, on a par with metalinguistic comparison, is defined as a binary operator, also contrasting two propositions.

1 Main claims and implications

In this paper we identify a novel paradigm of comparatives in Greek, introduced by the comparative proposition *para* 'than':

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

Para comparatives have the meaning associated with metalinguistic comparison (MC; see McCawley 1988 and references therein), reinforced in the English example with the order reversal between *financial* and *more* which is only allowed in the MC. The sentence in (1) means, according to McCawley, that "it is more appropriate for me to say that you problems are financial, than to say that your problems are legal". We will analyze *para*-clauses as involving syntactically clausal (TP) ellipsis (following the specific implementation of Merchant 2001, 2006), subject to the condition that there be strict focus parallelism between the *para*-remnant and the overt constituent in the preceding clause. This condition will be used to explain the fact that *para* clauses appear to require single remnants. We will then propose a semantics for MC where the metalinguistic comparative MORE expresses not a relation between two degrees to which a predicate holds, but a contrast between two propositions in terms of how appropriate of preferred they are by some individual (in the default case, the speaker). Finally, we extend our account to another instance of metalinguistic contrast in Greek—metalinguistic negation, lexicalized by *oxi* (Giannakidou 1998). On a par with MC, we define *oxi* as a binary operator distinct from regular negation, contrasting also two propositions.

Our analysis certainly does not exhaust the issues associated with MC—it merely scratches the surface of a topic that remained largely unexplored in the comparatives literature, and it probably raises (at least) as many questions as it answers. Yet, if what we say here is close to being right, our analysis has the following implications. First, it provides an argument that metalinguistic functions are encoded in the grammar in a systematic way, and are not merely pragmatic devices (as suggested, e.g. in Horn 1989 for metalinguistic negation). Second, if MC involves, as we will be suggesting, some sort of co-ordination, then at least for some comparatives a co-ordination analysis is plausible (see Lechner 2004 for arguments that comparatives involve generally a parse that at some point is similar to that of co-ordinate structures).

2 Background: two types of comparatives in Greek

In the syntactic literature on comparatives in Greek (Stavrou 1982, Merchant 2006), two types are distinguished: a **clausal** (ap-oti "than.wh")[1] and a **phrasal** (*apo*) one; the latter is also considered as prepositional given that *apo* is a P.

In terms of the form of the compared constituent two types are distinguished: (a) a *synthetic* form, based on the bound morpheme ***-oter*** attached to the adjectival stem and followed by the inflectional affix, and (b) two *analytic* forms consisting of the free morphemes *pjo* or *perissotero* followed by the degree/comparative adjective/adverb. The two ways of forming comparatives (adjectives/adverbs) in Greek are normally in free variation, with the notable exception of *para* comparatives that is the focus of this study.

(2) I Kiki ine psil**oter**i apo **tin Ariadne** Phrasal/synthetic
the Kiki is taller than **the.acc** Ariadne

(3) I Kiki ine psil**oter**i apoti **i Ariadne.** Clausal/synthetic
the Kiki is taller than **the.nom**. Ariadne

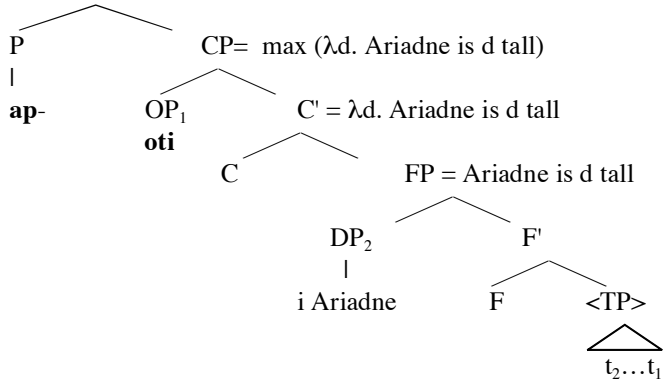
(4) I Kiki ine pjo **psili** {**apo tin/apoti}** i Ariadne.
the Kiki is more tall {than the Ariadne}
Kiki is more tall than Ariadne.
Clausal/Phrasal analytic

(5) I Kiki ine **perissotero psili** {apo tin/apoti} i Ariadne.
Kiki is more tall than Ariadne.
Clausal/Phrasal synthetic

(6) I Kiki pezi kithara **kalitera** {apo tin/apoti} i Ariadne.
the Kiki plays guitar better {than the/than} the Ariadne
Kiki plays the guitar better than Ariadne

For the purposes of this paper, we will assume, following Merchant 2006, that all Greek comparatives involve clausal ellipsis underlyingly, with movement of the remnant to the Specifier of FP, as illustrated below:

(7) PP= max (λd.Ariadne is d tall) (Merchant 2006)



apoti i Ariadne 'than Ariadne <is d-tall>'

[1] There is another clausal morpheme, *aposo,* which we will not consider here for simplicity reasons. *Aposo* involves the relative pronoun 'osos' next to *apo*. *Osos* is the same pronoun used in free in amount relative clauses, and is best with amount comparisons.

Apo comparatives, according to Merchant 2006, involve a bit more structure above CP, but this will not be crucial for our present purposes. What *is* important is that *apoti* comparatives involve TP ellipsis—a position that we will adopt for *para*-clauses too. At the same time, *apoti* clauses contain degree abstraction, like regular comparatives, and end up denoting the maximal degree d to which a property holds; this degree serves as the second term of comparison (for various implementations of this general idea see Kennedy 1997, Heim 2000, and references therein). *Para* clauses, we will argue, do not involve semantically degree abstraction of the kind we find in regular comparison.

3 Metalinguistic comparatives: *Para*

In this section we introduce *para* comparatives. These have more limited distribution, as we illustrate below, and seem to be not "regular" comparisons, but metalinguistic (McCawley 1988). The opposition here seems to be between two propositions which are either contrasted in how much the speaker believes them, or in how much s/he prefers them or finds them appropriate or deviant.

The following English examples are considered as instances of metalinguistic comparatives (Bresnan 1973, McCawley 1988, Embick 2007):

(8) a. Your problems are more financial than legal.
b. Helen is more clever than industrious.

The contrast here is metalinguistic in that it is anchored to the speaker's own attitude, beliefs, and, generally, perception of things. A metalingustic comparative can be paraphrased as: 'It is more appropriate to say that "Helen is intelligent" than to say "Helen is industrious" (McCawley 1964, 1988, Smith 1961).

In order to get the effect of MC, Greek employs the preposition *para*.[2] The degree adverbial is usually the synthetic form of the adverb *poli* ('much'), nam. *perissotero*, though it can also be (more rarely) its analytic counterpart consisting of the invariable comparative morpheme *pjo* ('more') and the base adverb *poli*. In few cases, the comparative *malon* ('rather') is also found.

Below we give examples of *para* comparatives of various types. As in the beginning, we are using postpositioning of *more* as a means to bring about the MC reading. Notice also the paraphrase with the English *rather* in some of the examples below, an item that we will also take to express metalinguistic contrast (parallel to para and *oxi* in Greek; we come back tot this point in our conclusions), and which we also will be using here occasionally as a disambiguating device:

(9) O Pavlos ine perissotero/ pjo poli eksipnos *para* erghatikos. APs
the Paul is-3s more clever than industrious
Paul is clever more than he is industrious.

(10) O Pavlos ine perissotero/pjo poli filologhos *para* glossologhos. Ns
the Paul is-3s more philologist than linguist
Paul is more of a philologist than he is a linguist.

(11) Ghnorizo tin Elena perissotero *para* ton adherfo tis. DPs
know-1s the Helen more than the brother her
I know Elena more than her brother.

(12) Perissotero xazevi *para* dhjavazi. TPs
more is goofing off than studying
He is goofing off rather than studying.
'It is more accurate to say that "he is goofing off" than to say that "he is studying".

[2] For the categorial status of *para* in the history of Greek, its gradual development to a comparative morpheme out of a preposition and its simultaneous multiple meanings in the various stages of the evolution of Greek see Hila-Markopoulou 2007.

(13) Perissotero taksidevi me to treno *para* me to leoforio. PPs
more travel.3sg with the train than with the bus
He travels more with the train than with the bus.

We see here that the constituent that appears after *para* can belong to various syntactic categories: AP, DP, TP, even CP (as embedded *na* clauses are in Greek), as indicated below:

(14) M' aresi kalitera na pijeno ekdhromes *para na* kathome brosta stin tileorasi.
me likes better to go excursions than to sit in front to-the TV
I prefer going on trips **rather than** sitting and watching TV.

Here the predicate that licenses *para* is a periphrasis consisting of the verb *aresi* 'like' plus the comparative modal adverb *kalitera*, 'better'. A *para* comparative is also compatible with a predicate of preference, viz. verbs like *protimo* 'prefer' which express a preference relation without overt comparative morphology:

(15) Kalitera na se dino para na se taizo!
better to you dress than to you feed
I **would rather** clothe you than feed you.
(= It costs me more to feed you than to clothe you—i.e. You eat a lot!)

(16) Protimo ton kafe para to tsai.
Prefer.1s the coffee than the tea
I prefer drinking coffee rather than tea.

In most of these cases, *para* appears to be interchangeable with *apoti.* There is, however, a fundamental semantic difference between *para* comparatives and *apoti* ones, which involve invariably abstraction over degrees of a property. Consider first the case, repeated here, where *para* is flanked by adjectives (APs), and is also possible with *apoti*:

(17) O Pavlos ine perissotero/ pjo poli eksipnos *para* erghatikos.
the Paul is-3s more clever than industrious
Paul is clever more than industrious.
(Roughly equivalent to: Paul is clever rather than industrious).

(18) O Pavlos ine perissotero eksipnos apoti erghatikos.
the P. is more clever than industrious
Paul is more clever than he is industrious.

(17) and (18) differ in that the former, but not the latter, conveys the meaning we identified earlier as the hallmark of MC, as indicated in the translation. The *apoti* sentence, on the other hand, has the expected meaning where two degrees of (in this case different) properties are being compared:

(19) *'The degree d to which Paul is intelligent is higher than the degree d' to which Paul is industrious.'*

In both cases we get the inference that:

(20) Paul is to some positive degree industrious.

In this, *para* and *apoti* contrast with *rather* which seems to disallow (20): *Paul is clever rather than industrious* does not allow a positive inference to the industriousness of Paul. *Para* is in this sense more "positive' than *rather;* notice, however, that the positive inference is cancellable:

(21) O Pavlos ine perissotero eksipnos {para/apoti} erghatikos.
Ke ja na poume tin alithia, den pistevo oti ine katholou ergatikos.
Paul is more intelligent than he is industrious; in fact I don't think he is industrious at all.

This seems to suggest that (21) is at most an implicature with both *para* and *apoti*. To illustrate now with another example, consider *apoti* and *para* with PPs:

(22) Perissotero ghnorizo tin Elena para ton aderfo tis.
I know Elena more than her brother.
It is more appropriate for me to say that I know Elena than that I know her brother.

(23) Perissotero ghnorizo tin Elena apoti ton aderfo tis.
more know-1s the Helen than the brother her
The degree d *to which I know Elena is greater than the degree* d′ *to which I know her brother.*

Again, the intuition is that *para* contrasts two propositions in terms of accuracy or appropriateness, unlike the *apoti* comparative which compares two degrees to which a property holds. In the following section we will present further evidence to the effect that *para* comparatives do not involve regular comparison.

4. Asymmetries between regular and *para* comparatives

We review here a number of asymmetries between *para* and *apoti* clauses that point out to the direction that semantically *para* clauses do not involve abstraction of degrees to which a predicate holds. We will take this to be our starting point for the semantics of metalinguistic comparison we will propose in section 5.

4.1 *Para* does not express "regular' comparison between degrees

The point that the para comparative does not express 'regular' comparison becomes clear when we consider the simplest case of predicative comparative:

(24) # I Kiki ine pjo psili para i Ariadne.
the Kiki is more tall than the Ariadne
(Intended: Kiki is taller than Ariadne.)

(24) cannot mean: the degree to which Kaki is tall is greater than the maximal degree to which Adriane is tall (see also Embick 2007 for English[3]). There is a particular intonation, with a break before *para* which renders the sentence acceptable, but in this case, again, the comparison is metalinguistic:

(24') I Kiki ine pjo psili, # para i Ariadne.
In my opinion, the proposition "Kiki is taller than Ariadne" is more appropriate than the proposition "Ariadne is taller than Kiki".

Hence *para* simply cannot function as a predicative comparative. We will take this as an indication that there is no degree abstraction in the *para* clause of the kind involved in the regular *than* clauses.

4.2 *Para* is incompatible with the synthetic comparative

Para is not compatible with the synthetic form of the comparative adjective or adverb, unlike *apo*/*apoti*, which is compatible with either the synthetic or the analytic form (Stavrou 1982):

(25) * O Pavlos ine eksipnoteros para erghatikos.
#Paul is smarter than he is industrious.

[3] Embick (op.cit.:16-17) discusses the English sentence *Your problems are more financial than mine,* which is presented as ungrammatical by McCawley (1988:673).

The same effect has been observed for MCs in English (see McCawley 1988, Embick 2007 for discussion and references). The impossibility of the synthetic form in this case ties in with our earlier conclusion that no regular comparison between predicates is involved, and suggests a difference in status and meaning between the synthetic and analytic MORE, which we will capitalize on later.

4.3 No *para* in comparison of deviation

Para is not possible in a comparative of deviation:

(26) I Mesogios ine pjo vathia **{apoti/*para}** o Adriatiki ine rixi.
The Mediterranean Sea is more deep than the Adriatic is shallow.

This fact is significant because it questions the idea that MC and comparison of deviation are the same thing (as seems to be suggested in Embick 2007). To us, the impossibility of *para* in comparative of deviation follows from the general inability of this type of comparative to express a comparison between degrees of predicates. Additionally, these structures are quite telling as regards the role of focus in the *para* comparative: the *para* remnant must contain one term of comparison, not more, as is the case here where two pairs are compared: Adriatic / Mediterranean, as well as the predicates deep and shallow. We will revisit the focus conditions on *para* shortly.

4.4 Para cannot introduce a measure phrase

Para is incompatible with a measure phrase:

(27) *I Kiki {ine pjo psili/ exi ipsos parapano} **para dio metra.**
Kiki {is more tall/has height more} **than 2 meters**
(28) *To ktirio ine parapano **para ekato metra.**
The building is more than 100 meters
(29) Kathe pektis s'afti tin omadha exi ipsos parapano apo {1.95/ ***para 1.95**}
each player in this team has height more than {1.95/ para 1.95}

Such cases fail completely because the measure phrase cannot be (re) analyzed as a proposition, as is required for MC, if our hypothesis is correct.

4.5 Syntactic differences between regular and *para*-comparatives

4.5.1 Comparative float

The comparative morpheme *perissotero* can 'float' in a *para*-comparative: it can precede or follow the contrasted constituent but can also appear sentence initially. In normal comparatives it can only immediately precede the adjective. Recall also the flexibility of the English *more,* which in the case of the MC it can follow the predicate:

(30) a. Ine eksipnos perissotero para erghatikos.
He is clever more than industrious.
b. Perissotero ine eksipnos para erghatikos.
(31) a. Ghnorizo tin Elena perissotero para ton aderfo tis.
know.1s the Elena more than the brother her
b. Perissotero ghnorizo tin Elena para ton aderfo tis.
I know Elena more than her brother.

(32) Perissotero ine o Janis eksipsnos {??apoti/*apo} erghatikos.
more is the John clever {than.what/than industrious}

This float suggests adverbial status of metalinguistic *perissotero* "more"; in particular MC *perissotero* seems to behave like a sentence adverbial rather than VP-level (for the relevant tests in Greek see Alexiadou 1997), since it can easily appear, at least in Greek, in sentence initial position.

4.5.2 No extraction of the *para* constituent

While in regular comparatives involving *apo* the target of comparison may be moved to form a (unbounded) *wh*-question (of the usual type that in Greek), what follows *para* cannot move:

(33) a. Apo pjon ine perissotero eksipnos o Petros?
than whom is cleverer (more clever) the Peter?
b. *Para ti ine o Petros perissotero eksipnos?
than what is the P more clever?
(cf. O Petros ine perissotero eksipnos para erghatikos).

(34) *Para pjon ghnorizis perissotero tin Elena?
than whom know.2sg more the Elena?

This looks suggestive evidence for co-ordinate structure constraint on *para* comparatives, unlike with regular comparatives.

4.5.3 No 'correlate ambiguity' in the *para*-comparative

Comparatives may be ambiguous if the target of comparison is expressed by the prepositional *apo* (than/from), between what we call below 'subject correlate' and 'object correlate' readings:

(35) Katalaveno tin Elena perissotero **apo ton adherfo tis.**
understand.1sg the Elena more than the brother her

Object correlate reading
(a) I understand Elena more than I understand her brother.
Subject correlate reading
(b) I understand Elena more than her brother does.

Clausal comparatives, on the other hand, are unambiguous, and allow only the object correlate reading:

(36) Katalaveno perissotero tin Elena apoti ton aderfo tis.
Unambiguous: I understand Elena more than I understand her brother.

Metalinguistic comparison with *para* follows the *apoti* pattern and allows only the object correlate reading:

(37) Katalaveno perissotero tin Elena para ton aderfo tis.
Unambiguous: I understand Elena more than I understand her brother.

Para thus behaves like a clausal comparative, a position that we will adopt here.

4.5.5 Single remnant constraint

Para comparatives, unlike *apoti* ones, require only one remnant, as shown below:

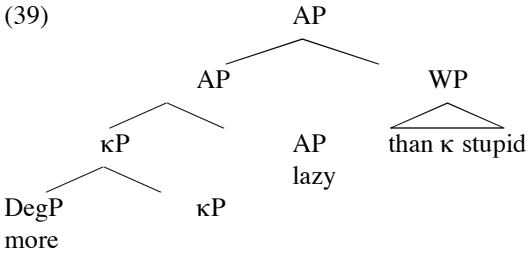
(38) a Gnorizo perissotero tin Elena **apoti** gnorizo tin aderfi tis.
b * Gnorizo perissotero tin Elena **para** gnorizo tin aderfi tis.
know.1sg more the Elena than know.1sg the sister hers
I know Elena more than her sister.

We appear to be witnessing "obligatory ellipsis" of the V, but it would be wrong to think of this as such. Rather, the impossibility of V with *para* follows if we assume that the *para* phrase must be focus-marked, i.e. it must contain a feature [F]; such a requirement, we must hypothesize, is not present with *apoti*. Hence *para*, but not *apoti*, imposes strict syntactic parallelism in its ellipsis (see Merchant 2001 on the variation regarding this point), and we end up with strictly one remnant: everything but the contrastively focused constituent is gone. Unfortunately, for reasons of space we cannot elaborate more, but we do offer some more comments in section 5. We do want to emphasize that the single remnant constraint follows from the strict syntactic parallelism holding on *para* clauses between the two contrasted elements, and is not necessarily a counterargument to the ellipsis analysis we propose here (as seems to be suggested by Lechner in his commentary).

5. An analysis of metalinguistic comparatives

A recent analysis for MC in English has been proposed by Embick 2007 (who relies on the syntax given in Bresnan 1973):

(39) (Embick 2007: (44))



The core assumption here is that the metalinguistic comparative contains in the syntax a silent adverbial element: κ. This element supplies "appropriateness". According to Embick, the synthetic form of the comparative is ruled because the degree adverbial is not linearly adjacent to the adjective (*stupid*) due to the fact that the head *k* intervenes between the head Deg and the A.

It is important to note that (39) preserves the idea that MC involve degree abstraction over the predicate associated with the adjective—only the predicate is here modified by κ. This assumption, however, is one that we questioned in this paper, and have already presented evidence against. MC, we have been arguing, contrasts two propositions; and the MC morpheme, which we will indicate here as MORE, was shown to behave like a sentential adverb rather than a κP or an AP modifier. Embick's structure is also not consistent with what we have seen, namely that syntactically the comparative with *para* behaves more like a co-ordinate structure (unlike regular comparatives; recall the extraction facts in ((33) and
(34)). We need an analysis that will capture (a) that *para* is licensed by the presence of an adverbial comparative; (b) that this comparative adverbial does not compare degrees of (the denotation of) the adjective, but degrees of appropriateness of statements, or preference, and (c) that MC looks like co-ordination.

We believe that the following semantics for MORE of metalinguistic comparison will capture the core properties we have observed:

(40) $[[\text{MORE}_{ML}]] = \lambda p \lambda q.\ \exists d[R(a)(p)(d) \wedge d > \max(\lambda d'[R(a)(q)(d')])]$
where R 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); *a* is the individual anchor (Farkas 1992; Giannakidou 1998, 1999) of the attitude: typically, the speaker in an unembedded sentence.

According to (40), metalinguistic MORE_{ML} takes two propositional arguments: *p* (the proposition of the main clause), and *q* (the proposition of the *para*-clause). MORE_{ML} compares the two propositions in terms of the degree that the speaker believes them to be appropriate, prefers, or is willing to assert them. The *para* clause gives the second argument of MORE_{ML}.

It is important to note that the speaker's attitude is given in the semantics and is not present in the syntax in any way. Also important it is to note that the individual anchor is not syntactically present either, as can be seen in the following contrast (brought to our attention by Winnie Lechner):

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

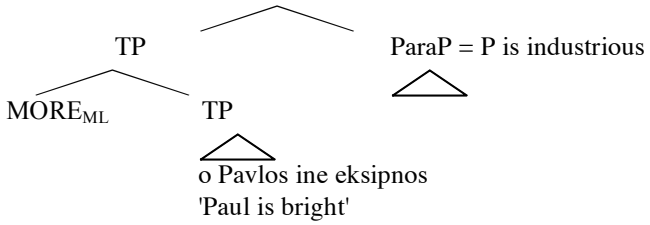
(42) a. A: O El Greco ine perissotero expresionistis para maneristis.
El Greco is more of an Expressionist than a Mannerist.
b. B: Oxi. O El Greco ine perissotero modernistis para maneristis.
No, he is not. El Greco is more of a Modernist than a Mannerist.

With an overt indexical like *to me*, as we see, denial is not felicitous; but with MC, in English as well as Greek, it is. Hence we must conclude that the attitude bearer is not syntactically present in the MC.

Following the semantics jus described, the syntax of *para* comparatives looks like follows:

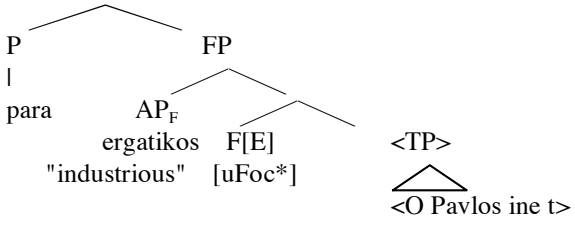
(43) O Pavlos ine perissotero eksipnos para ergatikos.
Paul is bright more than he is industrious.

(44) TP= ∃d. it is appropriate (for me) to the degree d to say that Paul is smart ∧
d> max (λd'. it is appropriate (for me) to the degree d' to say that P. is industrious)



The structure of the *para* clause is as follows.

(45) ParaP= para ~~o Pavlos ine~~ ergatikos 'than ~~Paul is~~ industrious'



Para embeds an FP, followed by TP ellipsis (Merchant 2006). The specFP hosts the remnant of ellipsis which is moved there from a lower position. The remnant must follow the general condition on ellipsis that says that the denotation of the remnant must be a member of the focus value (Rooth 1992) of the elided TP:

(46) [[remnant]] ∈ [[TP]]^f

Additionally, in order to explain why only one remnant is allowed, as we noted earlier, we must say that there is a focus feature [uFoc*] on the F head that licenses the ellipsis (and contains [E]; Merchant 2001), and that the moved element must be F-marked. In our crucial contrast below, the V is excluded because the VP as a whole is not F-marked—only the object *tin aderfi tis* 'her sister' is.

(47) a Gnorizo perissotero tin Elena **apoti** gnorizo tin aderfi tis.
b * Gnorizo perissotero tin Elena **para** gnorizo tin aderfi tis.
know.1sg more the Elena than know.1sg the sister hers
I know Elena more than her sister.

Ghnorizo tin aderfi tis thus is not a felicitous remnant because it is only partially F-marked. (The F head following *apoti*, we must say, does not contain [uFoc*] and the V is OK.). Two verbs can indeed be contrasted, of course:

(48) [Gnorizo] perissotero tin Kiki para [tin sibatho].
know.1sg more the Kiki than her like.1sg
I know Kiki rather than like her.

In this case we see that the clitic *tin* is allowed because it forms one phonological unit with the verb, and hence the verb plus clitic complex is, as a whole, F-marked. For reasons of space we cannot expand more on the syntax of *para* clauses here, but it should be obvious that these clauses obey a parallelism regulated syntactically by focus in ways that other ellipses are not.

In our account, *para* denotes the identity function, just like regular *than*, as is commonly assumed (see Kennedy 1997 and references). The fact that *para* is triggered by $MORE_{ml}$ is captured as *para* being selected by $MORE_{ml}$.

(49) $MORE_{ml}$ [_ TP {paraP/apotiP}]

It is important again to bear in mind that in our account, the *para* clause does not contain abstraction over degrees of the clause predicate. This explains why the *para* comparative cannot be used as a predicative comparative. Here we present some additional evidence that there is no d variable in the *para* clause:

(50) *O Janis ine perissotero eksipnos para nomizi i Maria oti ine ergatikos.
the John is more clever than thinks Mary that he is industrious.
John is more intelligent than May thinks he is industrious.

Here we cannot abstract over degrees to which Maria knows that John is industrious, thus *para* is ruled out.

Before we move on, we would like to address the alternative suggested by Winnie Lechner in his commentary. Lechner suggests the following semantics for $MORE_{ml}$.

(51) $[[MORE_{ML}]]c = \lambda j_e \lambda \alpha_u \lambda \beta_u \lambda x_e [\exists d [\neg d=0 \wedge (SEM (\alpha)) (d) (x) \wedge M(j)(c)(\alpha) > M(j)(c)(\alpha)$
"x is α to some degree d and the degree to which the linguistic expression α is appropriate/suitable (=M) in a context c exceeds the degree to which the linguistic expression β is appropriate/suitable in c."
(Lechner's commentary: (34)).

Here $MORE_{ML}$ applies to "a silent pronoun denoting the judge first" [the notion of judge is equivalent roughly to our "individual anchor" and is due to Lasersohn 2005], and then "picks up two metalinguistically contrasted terms" (Lechner: p. 6). There are two aspects that make this particular implementation undesirable: First, this semantics is designed for predicative cases only, e.g. *more intelligent than industrious*, and it is not transferable to other types of arguments, i.e. PPs, DP, CP, TPs, which are indeed possible with MC as we showed at the beginning. Our own definition is flexible enough to capture this versatility. Second, Lechner's definition, we fear, does not give the correct truth conditions. Rather, the truth conditions come out too weak, and this mainly because (51) fails to relate α and β to x in any way. Even for the predicative cases, this semantics will not work. Consider, e.g. the end product of the application of (51) to our sentence *Paul is more industrious than intelligent:*

(52) Lechner's commentary: (36c, d):
c. $\exists d [\neg d=0 \wedge$intelligent (d) (Pavlos) $\wedge$ M(judge)(c)('intelligent') > M(j)(c)('industrious')
d. "Pavlos is intelligent to some degree and the degree to which 'intelligent' is appropriate/suitable in a context c according to the judge exceeds the degree to which 'industrious' is appropriate/suitable in c according to the judge".

The semantics here does not guarantee that the degree to which it is appropriate for a judge to say that *John* is intelligent exceeds the degree to which it is appropriate for a judge to say that *John* is industrious (in a context c).

It could be that indeed in c the predicate 'intelligent' is more suitable than the predicate 'industrious', but this is a characterizing statement for the context c, thus non-monotonic. Unless the context is downward entailing independently, we do not get an inference to the effect that the predicate at hand is more appropriate for *every* individual in the domain of c (or of any individual at all for that matter; a predicate can be suitable in a context independent of the individuals in the domain of that context, especially in Lechner's definition that does not offer a link between appropriateness of the predicates and x, as we noted). The semantics we offered in (40), on the other hand, by treating the arguments of MORE_{ML} as propositions does not run into this problem, and gives the correct truth conditions.

6 Extension to metalinguistic negation

They key idea in our account, as just noted, is that MC establishes a relation between two propositions. In this final section we attempt a generalization of this idea to metalinguistic contrasts in general, and consider briefly the case of metalinguistic negation (MN). In many languages, Greek included, ordinary negation can be read metalinguistically (Horn 1989). When this happens, negation is contrastive and corrective, as indicated below:

(53) **Dhen** ine eksipnos **ala** ergatikos.
He is not bright but industrious.

(54) **Dhen** m' aresi to psari **ala** to kotopulo.
I don't like fish but chicken.

In Giannakidou 1998 it is argued that the morpheme *oxi* in Greek lexicalizes MN:

(55) Ine **oxi** eksipnos **ala** ergatikos.
He is not bright but industrious.

(56) Sinithos taksidevi **oxi** me aeroplano ala me treno.
Usually travels.3sg not with the airplane but with the train.
He usually travels not with the airplane but with the train.

When *oxi* is used, the second term of contrast is required, as expected by a contrastive device:

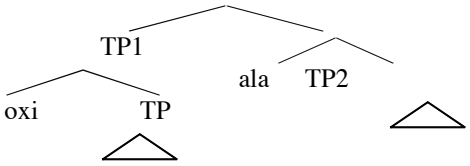
(57) # Ine **oxi** eksipnos.
He is not intelligent

If MN is grammaticalized in the form of *oxi,* then Horn's 1989 claim that MN is a purely pragmatic device cannot be right. In Giannakidou 1998, *oxi* is treated as an adverb that expresses constituent negation. Here, we will revise this position and propose that oxi is a binary operator that takes two propositional arguments:

(58) $[[\text{oxi}_{\text{ML}}]] = \lambda p \lambda q. \neg R(a)(p) \wedge R(a)(q)$
where R is the attitude "correct to say"

Hence, a sentence like (54) above, is derived as follows; note here that we have true coordination with *ala* 'but':

(59) TP = It is not correct for me to say that I like fish and it is correct to say that I like chicken



In this analysis, MN, being inherently contrastive, has a different grammatical status from regular negation, which corresponds to the unary logical connective familiar from propositional logic. This may sound like a radical conclusion, and we await further research to establish whether, crosslingustically, we find similar patterns of contrastive negation.

7 Conclusions

The common features between metalinguistic negation and comparative that we argued for here are:

- Both MC and MN are binary: they contrast two propositions.
- Both MC and MN contribute a propositional attitude that relating to appropriateness/belief.
- Both MC and MN involve clausal ellipsis and are akin to coordinate structures.

Hopefully, we have securely established at least some of these claims, though much more remains to be done. For reasons of space we will have to end the discussion here, leaving many questions open, most prominently the question of whether the third claim holds crosslinguistically, and whether metalinguistic negation also involves ellipsis (as we are assuming). We will close, with one final research question for English: is *rather* comparable to *para* and *oxi*?

(60) Ine **oxi** eksipnos **ala** ergatikos.
He is industrious **rather than** bright.
(61) M' aresi oxi to psari **ala** to kotopulo.
I like chicken **rather than** fish.

This seems to be the case, at least at this initial stage. If indeed *rather* turns out to be like *oxi,* then we may have evidence for coordination comparative in English.

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