# The subjective mode of comparison: Metalinguistic comparatives in Greek and Korean

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**Abstract** In this paper, we present a striking parallel between Greek and Korean in the formation and interpretation of metalinguistic comparatives. The initial observation is that both languages show an empirical contrast between ordinary and metalinguistic comparatives realized in two places: (a) in the form of a designated metalinguistic comparative MORE, and (b) in the form of THAN employed. We propose (building on earlier ideas in Giannakidou and Stavrou 2009; Giannakidou and Yoon 2009) that the metalinguistic comparative is subjective and attitudinal, i.e. it introduces the point of view of an individual towards a sentence—and argue that the individual expresses invariably an attitude of preference: she prefers one sentence (the sentence itself, or the proposition it expresses) in a given context over another. The preference may come out as completely negative in certain cases, and this is manifested as yet another MORE lexicalization in Korean (*charari*), which selects *nuni*-THAN, which itself carries a negative expressive index (in the sense of Potts 2007b), we will claim. Expressive negativity is not equivalent to negation in syntax, as *nuni* alone cannot license NPIs that need negation.

If our analysis is correct, it has one important implication that goes beyond just the metalinguistic comparatives in the individual languages we are considering. It allows the generalization that metalinguistic functions in language are indeed part of the grammar. In particular, they are reflexes of grammaticalization of perspective and subjective mode, on a par with predicates of personal taste discussed by Lasersohn (2005, 2008, 2009), mood choice, and similar phenomena. In comparatives, subjective mode is manifested as an attitude of preference, with possible addition of expressive meaning.

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#### 1 Metalinguistic comparatives in English and Greek

Metalinguistic comparatives (MCs) are a topic that remained largely unexplored in the literature on comparatives for quite a while. With the exception of very brief discussions (McCawley 1968; Bresnan 1973; Embick 2007), until recently very few works addressed the question of how MCs differ, if at all, from "regular" comparisons of degrees. MCs were easy to think of as just non-canonical uses of regular comparatives, and just like with metalinguistic negation (Horn 1989), it was unclear if they belong to the realm of grammar proper to begin with.

In a number of recent works, however, we find a renewed interest in the topic (Giannakidou and Stavrou 2009; Giannakidou and Yoon 2009; Lechner 2009; Morzycki 2009). Giannakidou and Stavrou argue that MCs in Greek are indeed grammatical creatures, with a syntax and semantics distinct from that of ordinary comparatives. In Greek, MCs are introduced with the preposition *para*, which is lexically distinct from the regular clausal comparative *apoti*:

- (1) ta provlimata sou ine perissotero oikonomika {para/apoti} nomika. the problems yours are-3PL more financial than legal 'Your problems are more financial than legal.' (from McCawley 1968) 'Your problems are financial rather than legal.'
- (2) o Pavlos ine perissotero philologhos {para/apoti} glossologhos.
  the Paul is-3SG more philologist than linguist
  'Paul is more of a philologist than he is a linguist.'
  'Paul is a philologist rather than a linguist.'

Para comparatives are metalinguistic comparisons (Giannakidou and Stavrou 2009). In the English version of example (1) the metalinguistic meaning becomes prominent with the order reversal between *financial* and *more*, and the use of *rather*, as indicated in our paraphrase of the sentence. According to McCawley, the English sentence in (1) does not have the flavor of direct comparison between degrees of problems being financial and degrees of problems being legal. It is instead intended to convey the speaker's opinion, i.e. that the speaker judges or thinks that it is 'more appropriate' to say that the addressee's problems are financial, than to say that they are legal. Likewise, (2) conveys that the speaker assesses the sentence 'Paul is philologist' to be more appropriate in the context than the sentence 'Paul is a linguist'. Greek comparatives with para and English ones (with rather) in the metalinguistic reading have exactly this subjective flavor in them, while the apoti versions are mere statements of regular comparative assessment. Apoti comparatives can also be used to convey metalinguistic use, just like ordinary negation can be used metalinguistically (Horn 1989); para comparatives, however, only have this subjective metalinguistic use.

A Greek speaker has a choice of using *para* or *apoti* in the comparative (just like an English speaker has a choice to either use *rather* or not), and the choice to use *para* will reflect if she wants to make a subjective judgment to express her attitude, or not. Much of what we have to say here is about how to properly model this sense of subjectivity and perspective that comes with the choice of a speaker to use a comparative metalinguistically. McCawley's intuition (and more or less shared by all the recent works mentioned above) is that MC expresses the speaker's attitude of appropriateness-something that seems to characterize metalinguistic uses in general, for instance, also metalinguistic negation (Horn 1989; Giannakidou 1998). One obvious way to formalize this is to posit an attitude component in MC, reflecting the speaker's assessment, as was suggested initially in Giannakidou and Stavrou (2009) (more in Sect. 3). But what kind of attitude? In the cases we just examined one could say that the attitude is an epistemic one, some kind of knowledge or belief-based assessment; but it would be premature to generalize this to all para cases. Consider the following examples, and notice again the similarity of the *para* comparative with the *rather* one in English:

- (3) *perissotero* xazevi {**para**/**?apoti**} diavazi! [G] more goof-off.3SG than study.3SG 'He is goofing off rather than studying.'
- (4) kalitera na pigheno ekdromes {para/#apoti} na kathome brosta stin better SUBJ go.1SG excursions than SUBJ sit.1SG in front tileorasi! to-the TV
  'I would rather go on trips than sit in front of the TV.'
- (5) kalitera na se dino {para/#apoti} na se taizo!
   better SUBJ you dress.1SG than SUBJ you feed.1SG
   'I would rather clothe you than feed you.' (You eat a lot!).
- (6) kalitera na pethano {para/#apoti} na ton pandrefto!
  better SUBJ die.1SG than SUBJ him marry.1SG
  'I would rather die than marry him!'
  [I prefer to die than to marry him.]

These *para* and *rather* comparatives—which, as you can see, are all clauses—are considerably more removed from an assessment of accuracy or appropriateness. They are not really about which sentence the speaker believes or deems appropriate, but rather, they seem to express the speaker's strong *dispreference* towards the *para* proposition and its content, i.e. the course of action that this proposition implies. Notice the use of exclamation in our translations. In some cases the dispreference is so extreme that an event obviously dispreferred in objective terms ('to die' in (6)) is presented as more preferred than the action of the *para* sentence ('to marry him'), which, in objective terms, should be more preferred.<sup>1</sup> And notice that although *para* and *apoti* were equally acceptable in the appropriateness cases (1) and (2), as the MC

<sup>&</sup>lt;sup>1</sup>Another, very famous, example of such a comparison is the following sentence, from *Thourios Ymnos* "*Ode to freedom*", written in the 18<sup>th</sup> Century by the Greek writer and revolutionary Rigas Feraios:

becomes more preferential of an action, the choice between *apoti* and *para* becomes more constrained, and only *para* is used felicitously. Importantly, the transition to dispreference of an action correlates with the use of adverbial *kalitera* 'better' in the examples above, which is quite common. We will take both *perissotero* and *kalitera* to be realizations of what we will call in Sect. 3 metalinguistic MORE. Notice the parallel use of *would rather* in English, which is also more preferential and not simply assessing appropriateness.

It appears then that we have (at least) two kinds of MCs, those appearing to be attitudes of appropriateness of *a sentence*, and those that look more like attitudes of preference of the *content* of a sentence: the proposition, eventuality, or course of action that the sentence conveys. In the present paper, we will take both varieties to express an attitude of preference.<sup>2</sup> Preference brings in an individual's perspective towards the sentence, and this perspective is not simply predicate ordering that comes from the compared constituents; rather, it is an ordering induced by the speaker in a given context and with respect to the specific communicative goal of the context. The communicative goal will determine if the preference will be preference of sentences as objects themselves, in which case we end up with the appropriateness judgments (1) and (2); or preference of the content of the sentences, in which case we have the more emphatic statements in (3)–(6). We will cast the analysis of the appropriateness assessment MCs within Potts' theory of quotation (Potts 2007a).

The empirical basis for our discussion will be that the lexicalization of MC observed in Greek is not an accident—Korean too, we show, exhibits a metalinguistic THAN like *para: kipota*. Strikingly, Korean additionally lexicalizes a "negative" comparative morpheme, *charari*, which we will analyze as the *antiveridical* instance of the non-appropriateness variety of MC, expressing zero preference of the THAN proposition. The pattern of MC is thus rather systematic, and the choice of a speaker to use MC expressions signals transition to what we call the *subjective mode* of comparison. In some cases, the transition is accompanied with negative expressive force (which we formalize by using Potts' 2007b expressive indices in Sect. 5). The present analysis modifies our earlier accounts, by (a) offering a more detailed description of the varieties of MCs (something that the previous accounts didn't do), (b) introducing MC explicitly into the family of perspectival phenomena that involve judge variance in the sense of Lasersohn (2005, 2008, 2009) (that is, *without* introduction of the judge into the syntax), and (c) identifying the attitudinal component of MC as a preference ordering in all cases.

kalio ine mia oras eleftheri zoi para saranda xronia sklavia ke filaki.
 better is one hour free life than forty years slavery and prison
 'Better to have an hour as a free man, than forty years in slavery and prison.'

Here the variant *kalio* is used, which is a more poetic form of the comparative *kalitera* 'better', and is still in use in literary registers in Modern Greek. As is evident, *one hour* of life in freedom is deemed more preferable than *forty years* of life in slavery, though in objective terms forty years of life should be more preferable than one hour.

<sup>&</sup>lt;sup>2</sup>Giannakidou and Stavrou (2009) note that *para* can be selected by the typical verb of preference *protimo* 'prefer'.

<sup>(</sup>i) protimo ton kafe {para/apoti/apo} to tsai. I prefer the coffee {rather than/than} the tea.

Before we proceed, we think it will be useful to offer some elaboration of the metalinguistic character of the comparatives we have introduced. In this regard, it will be helpful to remind the reader of Horn's (1989) discussion of metalinguistic negation. Horn (1989) proposes that ordinary sentence negation, apart from its regular use as a truth functional denial (*It is not the case that* S), can also be used as metalinguistic negation. In this use, negation is "a device for objecting to a previous utterance on any grounds whatsoever including the conventional or conversational implicata it potentially induces, its morphology, its style or register or its phonetic realization" (Horn 1989: 363). Here are two examples:

(7) a. My brother is not a crook—I don't have a brother!
b. Speaker A: It's stewed bunny. Speaker B: It's not stewed bunny, it's *civet de lapin*! (Drozd 1995: (1))

In the first example, the *not* is negating the presupposition that the speaker has a brother. In the second example, *not* is negating the appropriateness of the linguistic expression "stewed bunny" and the speaker replaces it with what he finds a more appropriate expression. As indicated by the use of "!", this contrastive use of metallinguistic negation comes with an exclamative emphatic flavor (which is also present, at least in our MC examples in (3)–(6)). Horn (1989) glosses the metalinguistic use as *I object to U*, where *U* is an utterance or utterance type. In some languages, special negations can also be used to convey metalinguistic negation, e.g. Greek *oxi* (Giannakidou 1998; see also Giannakidou and Stavrou 2009):

 (8) Speaker A: o Petros exi tria pedia. 'Peter has three children.' Speaker B: oxi! o Petros exi oxi tria pedia, ala tessera! 'No! Peter doesn't have three children, but four!'

Again, notice the exclamative, emphatic flavor of the *oxi* utterance. Horn (1989) suggests that early sentence initial negation in English-learning children is a form of metalinguistic negation, and see Drozd (1995) for further development of this idea (for cases like: *No sunny outside!*, *No Leila have a turn!*, *No over!*, etc.). Our case for MC adds further to the grammatical status of metalinguistic functions.

But are we sure that *all* the sentences (1)-(6) are metalinguistic? The sentences (3)-(6), after all, have not been discussed in the context of metalinguistic phenomena before. The answer we will give to this question will have to be positive. Just like metalinguistic negations, the sentences seem to be corrective objections to aspects of the utterance. In the appropriateness assessments (1) and (2), the speaker contrasts two sentences as objects themselves, and ranks them in terms of appropriateness. In the more preferential cases (3)-(6), on the other hand, the contents of the respective propositions are contrasted, in an emphatic, exclamative-like manner. Hence, the MC shows the flexibility that metalinguistic negation does in picking up aspects of utterance including the sentence itself, while also exhibiting exclamative flavor. Notice that even phonological aspects of the utterance can be metalinguistically compared, and indeed with the more emphatic *kalitera* 'better' version:

(9) a. kalitera na pame stin *astinoMIa*, para stin *astiNOmia*! [G]
 'We'd better go to the poLIce than to the POlice!'

# b. kalitera na fame *civet de lapin*, para *vrasto lagho*!'We'd better eat *civet de lapin* than stewed rabbit!'

Here we see that the comparison targets the way linguistic expressions are pronounced (9a)—the word for 'police' is *astinoMIa*, the stressed is misplaced in the *para* clause, just like in the English example—or the (stylistic) choice of terms in the sentence (9b)—*civet de lapin* is a more refined sounding version of stewed rabbit. The parallel with metalinguistic negation should be clear, though notice that, in metalinguistic negation, objecting to the utterance and emphatic flavor are usually simultaneously present. In the MC they can be separated: the appropriateness assessment can be neutral or emphatic, depending on the context, but the preferential MC is more emphatic. We will have more to say about how to capture this difference in our analysis; for now, we just want to demonstrate that the richer landscape of metalinguistic comparatives that we have introduced is not very different in metalinguistic function and flavor from the more familiar one of metalinguistic negation.

The discussion proceeds as follows. In Sect. 2, we summarize first the syntactic properties of *para* and *kipota* comparatives that render them distinct from ordinary comparisons. This part relies heavily on our earlier works. In Sect. 3, we present our semantic analysis of MCs, updating our earlier ideas, and refining them in substantial ways. We also define a third case of MC that expresses zero preference, lexicalized in Korean charari. We then compare (Sect. 4) our analysis to Morzycki's (2009), which relies on the notion of imprecision, which we find inadequate for a number of reasons, the main one being that it cannot capture the preferential dimension of MCs, and the core fact that what are compared are sentential objects and propositions, not predicates. The same shortcoming characterizes Lechner's (2009) brief analysis (see also Lechner 2007, a preliminary version of Lechner 2009, discussed in Giannakidou and Stavrou 2009). Lechner does suggest the relevance of Potts' theory of quotation, which is a premise we further develop here for the appropriateness cases (1), (2). We conclude with a discussion of negative expressivity as it is manifested in Korean nuni in Sect. 5. Here we also show that negative expressivity as a conventional implicature cannot license strong NPIs that need negation-but zero preference manifested by charari can, as expected by our analysis. We also present here a case of negative expressivity that seems to cross the conventional implicature boundary: the negative evaluative force associated with vulgar minimizers (Postal 2002) in English.

#### 2 Empirical properties of metalinguistic comparatives in Greek and Korean

In this section, we identify the core syntactic properties of MCs by showing the parallels between the Greek *para* clauses (detailed in Giannakidou and Stavrou 2009) and Korean *kipota* clauses. Following our earlier work, we will take these properties to show that the *para* and *kipota* clause is a sentence—either a full sentence, as in the examples (4)–(6) discussed in the previous section, or an elliptical one, in which case the *than*-clause has undergone ellipsis (in the sense of Merchant 2009). The clausal nature of the MC *than*-clause will be further supported with new evidence from Korean. In the literature on Greek comparatives (Stavrou 1982; Hila-Markopoulou 2007; Merchant 2009), two types are distinguished: a **clausal** one, introduced by *apoti* 'than.wh' (with a variant *aposo* for amounts), and a **phrasal** one, introduced with *apo*. The *para* clause is a variant of the *apoti* syntactically; Giannakidou and Stavrou (2009) further show a number of asymmetries between *apoti* clausal comparatives and *para* comparatives, suggesting that MCs do not involve predicate degree abstraction of the kind we find in the regular comparative. These asymmetries will be the ones we will mostly focus on here.

Some basic background is needed on the comparison forms used. Greek grammars (e.g. Holton et al. 1997) distinguish two types: (a) a **synthetic** form, based on the bound morpheme -(o)ter attached to the adjectival stem and followed by the inflectional affix, and (b) two **analytic** forms consisting of the free morphemes *pjo* or *perissotero* 'more' (the synthetic form of the adverb *poli* 'much') followed by the adjective:

(10)	i Kiki ine psil <b>oteri</b> apoti i Ariadhni. the Kiki is taller than the <sub>NOM</sub> Ariadne	[G]
(11)	i Kiki ine { <b>pjo/perissotero</b> } psili apoti i Ariadhni. the Kiki is more tall than the <sub>NOM</sub> Ariadne 'Kiki is taller than Ariadne.'	
(12)	i Kiki pezi kithara <b>kalitera</b> apoti i Ariadhni. the Kiki play.3SG guitar better than the <sub>NOM</sub> Ariadne 'Kiki plays the guitar better than Ariadne.'	

With *para*, the degree adverbial is *perissotero*; its analytic counterpart *pjo* 'more' is either very rare or completely excluded for many speakers. Quite often, *kalitera* 'better' is used:

(13)	perissotero xazevi {para/?apoti} dhjavazi.	[G]
	more goof-off.3SG than study.3SG	
	'He is goofing off rather than studying.'	
	[I prefer to say that he is goofing off than to say that he is studying.]	
(14)	kalitera na se dino {para/#apoti} na se taizo!	
	better SUBJ you dress.1SG than SUBJ you feed.1SG	
	'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!]	

(15) kalitera na pethano {para/#apoti} na ton pandrefto!
better SUBJ die.1SG than SUBJ him marry.1SG
'I would rather die than marry him!'

Korean, on the other hand, employs a comparative marker *pota* for both clausal and phrasal comparatives. In a phrasal comparative, *pota* can be analyzed as prepositional, like *apo* in Greek, and this is supported by the following three diagnostics. First, *pota* shows the ability of reflexives bound by the subject of the adjective to appear after it (Hankamer 1973); second, pied-piping in phrasal comparatives indicates the prepositional property (Merchant 2009) of *pota*; third, *pota* can introduce a

measure phrase ('2 meters'). On the other hand, *pota* is also a complementizer in a clausal comparative, which is normally preceded by a free-relative clause marker *kes*.

(16)	a. No one <sub>1</sub> is taller than himself <sub>1</sub> .	(phrasal)	[K]
	b. $amwuto_1 casin_1$ - <b>pota</b> (te) khu-ci anh-ta.		
	anyone self-than more tall-comp NEG-DECL 'No one is taller than himself.'		
(17)	a. Than whom did (you say that) Maria play(ed) guitar	better yesterda	ay?

- b. nwukwu-**pota** ney-ka malhal-ttay Mary-ka kitha-lul te who-than you-NOM say-when Mary-NOM guitar-ACC better calchinta-kohay-ss-ni? play-say-PST-Q
- (18) Kim-un 2 mithe-**pota** (te) khu-ta. Kim-TOP 2 meters-than more tall-DECL 'Kim is taller than 2 meters.'
- (19) Kim-un [Lee-ka khun-kes]-**pota** (te) khu-ta. (clausal) Kim-TOP [Lee-NOM tall-F.REL]-than more tall-DECL 'Kim is taller than Lee is tall.'

The comparative predicates ('taller') are formed in free variation with or without the comparative modifier *te* 'more' in the Korean regular comparative, just like the Greek analytic form (the synthetic form is unavailable in Korean). Hence, we assume that the standard marker *pota* is the one that contains a degree operator yielding an ordering relation between two degrees of properties, following the usual semantic analysis (Von Stechow 1984; Larson 1988; Rullmann 1995; Kennedy 1997; Heim 2000).

In striking parallel to Greek, MCs are also lexically marked in Korean—by *kipota:*, which can be morphologically analyzed as a combination of *ki* "saying" and *pota* "than":

(20)	Kim-un enehakca-la-kipota chelhakca-i-ta.	[K]
	Kim-TOP linguist-DECL-saying.than philosopher-be-DECL	
	'Kim is more of a philosopher than he is a linguist.'	
(21)	nay-ka calanun saram-un kuneyuy oppa- <b>la-kipota</b>	
	I-NOM well know person-TOP her brother-DECL-saying.than	
	Lee-i-ta.	
	Lee-be-DECL	
	'I know Lee more than her brother.'	
(22)	ku-nun kongpwuhan- <b>ta-kipota</b> nolkoiss-ta.	
	he-TOP studying-DECL-saying.than goofing off-DECL	
	'I prefer to say that "he is goofing off" than to say that "he is studyin	g".'

Importantly, clause types in Korean are distinguished by the use of sentence-ending illocutionary force markers such as interrogative *ni*, exclamative *ela*, and declarative marker *la* or *ta*. The role of these markers is to indicate the communicative purpose of a *sentence*, they therefore only attach to a propositional content rather than a pred-

icate. For instance, even when the declarative *ta* is attached to an apparent noun form as in *Sue-ta* 'Sue-DECL', it is interpreted as 'It is Sue' rather than 'Sue'. (This is expected considering that Korean is a pro-drop language and the expletive subject 'it' is only optional.) Our *kipota* comparatives, as we see, are accompanied by *la* or *ta*, which mark them formally as clausal, a point that supports the position that the MC *than* clause is a sentence. Recall, finally, that the Greek sentences with *perissotero* and *kalitera* above were indeed full finite sentences (the *kalitera* ones in the subjunctive *na*).

With this basic background, we can now proceed to show how *para* and *kipota* comparatives differ from ordinary clausal comparatives in Greek and Korean. The first three differences indicate that MC comparison is not ordinary degree comparison; the rest give further support for the position that the *para* and *kipota* constituents are sentences.

#### 2.1 Para and kipota cannot be used as predicate comparatives

Consider the simplest case of predicative comparative:

(23)	*i Kiki ine {pjo/perissoter	o} psili <b>para</b> i Ariadhni.	[G]
	the Kiki is more	tall than the Ariadne	
	[Intended: 'Kiki is taller the	an Ariadne.']	
(24)	*Kim-un Lee-la-kipota	khu-ta.	[K]
	Kim-TOP Lee-DECL-saying	g.than tall-DECL	

[Intended: 'Kim is taller than Lee.']

These sentences cannot mean that the degree to which Kiki/Kim is tall is greater than the degree to which Ariadne/Lee is tall. The fact that *para* and *kipota* cannot function as predicative comparatives suggests that *para* and *kipota* cannot compare predicates the way an ordinary *apoti* and *pota* clause does, a first indication that the MC clause is not a mere predicate comparison.

2.2 Incompatibility with the synthetic comparative

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

(25) \*o Pavlos ine eksipnoteros para erghatikos. [G]
 # 'Paul is smarter than he is industrious.'

The same effect has been observed for MCs in English (McCawley 1988; Embick 2007 and references). This fact shows again a deviation from the ordinary comparative in terms of regular degree abstraction, and it tells us also that the synthetic form *–oter–* does not have metalinguistic function. We will take this to mean that *–oter–* and *perissotero/kalitera* differ lexically as to whether they can have the meaning of metalinguistic MORE that we define in Sect. 3: the latter can, but the former can't.

In Korean, as we noted earlier, synthetic comparatives are unavailable, but the difference arises in terms of the availability of *te* 'more'. While *te* can indeed (optionally) appear in regular *pota* comparatives, *kipota* is incompatible with it:

# (26) \*Lee-nun pwucirenha-ta-**kipota te** ttokttokha-ta. [K] Lee-TOP industrious-DECL-saying.than more smart-DECL 'Lee is clever more/rather than industrious.'

If *te* denotes a relation between two predicates, its incompatibility with the *kipota* suggests that *kipota* comparisons are not about comparing predicates. *Te*, in other words, is like the synthetic form which cannot function metalinguistically, as we noted.

# 2.3 No para or kipota in comparison of deviation

Para is not possible in a comparative of deviation (Kennedy 1997):<sup>3</sup>

(27) i Mesoghios ine pjo vathia {apoti/\*para} i Adhriatiki ine the Mediterranean is more deep than the Adriatic is rixi.
ishallow.
'The Mediterranean Sea is deeper than the Adriatic is shallow.'

The impossibility of *para* in the comparative of deviation is another manifestation of the general inability of this type of comparative to express ordinary degree comparison. These structures also tell us that the *para* remnant must contain one term only, not more, as is the case here where two pairs are compared: the Adriatic and Mediterranean, and the predicates 'deep' and 'shallow'. Korean *kipota* follows the Greek pattern:

 (28) \*cicwunghay-nun aduriahay-ka nac-ta-kipota the Mediterranean-TOP the Adriatic-NOM shallow-DECL-saying.than kip-ta. [K] deep-DECL 'The Mediterranean Sea is deeper than the Adriatic is shallow.'

For more on the one remnant constraint see Giannakidou and Stavrou (2009), and Lechner (2009). As we are not focusing on the syntactic aspects of the *para* clauses in this paper, there is no need to repeat those discussions here. Once our analysis is laid out, however, it will become clear that the one remnant constraint also follows from the pragmatics of contrastive preference: such preference is best established if we have one dimension of contrast.

# 2.4 Para and kipota cannot introduce a measure phrase

Para is incompatible with a measure phrase:

<sup>&</sup>lt;sup>3</sup>Kennedy (1997) introduces the term 'comparison of deviation' for the following constructions that "compare the relative extents to which two objects deviate from some standard value associated with the adjective."

<sup>(</sup>i) Shawn is as tall as Mugsy is short.

<sup>(</sup>ii) The Tenderloin is as dirty as Pacific Heights is clean.

<sup>(</sup>iii) A Fiat is more dangerous than a Volvo is safe.

<sup>(</sup>iv) San Francisco Bay is more shallow than Monterey Bay is deep.

(29)	kathe pektis se afti tin omadha	exi ipsos	parapano	{apo/* para	}
	each player in this the team	have.3SG height	more	than	
	1.95				[G]
	1.95				
	'Each player on this team is tall	er than 1.95.'			

Korean kipota likewise also fails to introduce a measure phrase:

(30) \*Kim-un 2 mithe-la-**kipota** khu-ta. [K] Kim-TOP 2 meters-DECL-saying.than tall-DECL 'Kim is tall more than 2 meters.'

Such cases fail because the measure phrase cannot be (re)analyzed as a sentence, hence they constitute further evidence that *para* and *kipota* clauses cannot be phrasal.

2.5 Comparative float: metalinguistic MORE as a lexically distinct item

In metalinguistic comparison, the comparative morpheme *perissotero* can "float": it can precede or follow the contrasted constituent, and can also appear sentenceinitially, as illustrated in (31). In ordinary comparatives it can only immediately precede the adjective, as we see in (32):

(31)	a. ine (perissotero) eksipnos (perissotero) para erghatikos. is-3SG (more) clever (more) than industrious	[G]
	<ul> <li>b. perissotero ine eksipnos para erghatikos.</li> <li>more is-3SG clever than industrious</li> <li>'He is clever more than he is industrious.'</li> </ul>	
(32)	a. <sup>??</sup> perissotero ine o Janis eksipnos apoti i Maria. more is the John clever than the Maria	
	b. o Janis ine perissotero eksipnos apoti i Maria.	
	the John is more clever than the Maria	
	'John is more clever than Maria.'	

*Apoti* is less flexible with respect to *perissotero*: the comparative adverb must be in its regular pre-adjectival position. By contrast, *perissotero* can be positioned in various places when we have *para* (and see Lechner 2009 for more discussion of *perissotero* float). For the purposes of our current discussion, it is not necessary to look at these data in greater detail—recall that there is also the lexicalization *kalitera* 'better', which is morphologically a sentence embedding element and also has flexible order:

(33)	a. kalitera ftoxos ke ijiis para plusios ke arostos!	[G]
	better poor and healthy than rich and sick	
	'I would rather be poor and healthy than rich and sick!'	
	b. ftoxos ke ijiis kalitera para plusios ke arostos!	
	poor and healthy better than rich and sick	

Given the availability of *kalitera*, and the relative flexibility in the order of both *perissotero* and *kalitera*, it becomes plausible to treat metalinguistic MORE as a lexical item separate from the ordinary MORE of comparison, and this is the position we take here. Additional realizations of the metalinguistic MORE will be English *rather* and Korean *charari*, which we discuss later. Giannakidou and Stavrou (2009) say that metalinguistic MORE is an adverb, and though its precise syntactic status is immaterial for our purposes, we will follow Giannakidou and Stavrou here; more on this in Sect. 3.

2.6 No "correlate ambiguity" in the para comparative

Comparatives in Greek may be ambiguous if the target of comparison is expressed by *apo* 'than'/'from', between what Giannakidou and Stavrou (2009) call the "subject correlate" and "object correlate" readings:

(34)	katalaveno tin Elena perissotero apo ton adherfo tis. understand-1SG the Elena more than the brother her						
	<i>Object correlate reading</i> (a) I understand <u>Elena</u> more than I understand <u>her brother</u> .						
	Subject correlate reading						
	(b) <u>I</u> understand Elena more than <u>her brother</u> does.						

Clausal comparatives, on the other hand, only allow the object correlate reading—in this case because of the accusative case. MC with *para* follows the *apoti* pattern:

- (35) katalaveno perissotero tin Elena apoti ton adherfo tis. <u>Unambiguous:</u> 'I understand <u>Elena</u> more than I understand <u>her brother</u>.'
- (36) katalaveno perissotero tin Elena para ton adherfo tis.
   <u>Unambiguous</u>: 'I understand <u>Elena</u> more than I understand <u>her brother</u>.'

*Para* thus behaves, again, like a clausal comparative. In Korean, the situation is parallel: *pota* shows correlate ambiguity, but *kipota* does not:

(37)	na-nun	kunyeuy	oppa- <b>pota</b>	Elena-lul	te cal ihayha	-nunpyeni-ta.
	I-TOP	her	brother-than	Elena-ACC	better unders	tand-tend-to-DECL
(38)	na-nun	kunyeuy	oppa-la-kip	ota	Elena-lul	te cal
	I-top	her	brother-DEC	L-saying.th	an Elena-ACC	better
	ihayha	-nunpyen	i-ta.			
	underst	tand-tend	to-DECL			
	Unamb	oiguous: I	understand I	Elena more	than I underst	and her brother.

This confirms that MCs with kipota are clausal comparatives, just like para.

To conclude, we saw in this section that in both Greek and Korean, MC is realized as a clausal comparative, and that Greek and Korean employ THAN markers that are lexically distinct from the THAN used in regular clausal comparatives. These are two impressive similarities because Greek and Korean are genetically not related; and if metalinguistic functions were merely pragmatic (Horn 1989), we wouldn't expect such systematicity in lexicalization and syntax. We also saw that the use of metalinguistic THAN correlates with the analytic comparative morpheme (*perissotero* 'more', *kalitera* 'better', *charari* in Korean); the synthetic comparative does not give rise to metalinguistic readings. We now turn to our analysis, which makes use of these two pieces of syntax: metalinguistic MORE, and metalinguistic THAN.

# 3 Metalinguistic MORE: an individual's preferential attitude

3.1 Two kinds of metalinguistic comparatives, rather, and would rather

As we mentioned at the beginning, MCs, compared to ordinary comparatives, feel more subjective in the sense that they bring in the speaker's perspective and attitude. Recall also that MCs come in two varieties: those that seem to be more about the appropriateness assessment of a sentence, and those that are more (emphatically) preferential. We repeat here representative examples of each kind with appropriate translations:

- (39) Appropriateness assessment metalinguistic comparative
  o Pavlos ine perissotero filologhos {para/apoti} glossologhos. [G]
  the Paul is-3SG more philologist than linguist
  'John is a philologist rather than a linguist.'
  Paraphrase: In the present context, I prefer the sentence 'Paul is a philologist' to the sentence 'Paul is a linguist'
- (40) Emphatic preferential metalinguistic comparative
  - a. *kalitera* na pethano {**para/#apoti**} *na* ton pandrefto! better SUBJ die.1SG than SUBJ him marry.1SG 'I would rather die than marry him.'
    - Paraphrase: It is more preferable to me to die than to marry him.
  - *kalitera* na pijeno ekdhromes {**para/#apoti**} *na* kathome brosta better SUBJ go.1SG excursions than SUBJ sit.1SG in front stin tileorasi.
     to-the TV

'I would rather go on trips than sit in front of TV.'

In English the two varieties can be distinguished with the kind of *rather* used: bare *rather* creates a (possibly neutral) appropriateness assessment; and *would rather* seems to be more emphatic, like the preferential variety. With the emphatic preferential *kalitera* 'better' comparative, we noted that *apoti* is excluded.

In the appropriateness assessment, the speaker seems to compare the two sentences as objects—'Paul is a philologist' and 'Paul is a linguist', as indicated in the paraphrase above. Following Potts (2007a), we will take it that what appears within the quotes is the quoted sentence, i.e. the presentation of the sentence, and not just its name. Emphatic preferential MCs, on the other hand, do not involve quotation of sentences, but directly compare the contents of the sentences, i.e. two propositions (or the course of actions the propositions imply; we do not think the difference is crucial, so we will not make much of it). Next, we give examples of the two kinds of MCs in Korean:

- (41) Appropriateness assessment metalinguistic comparative Lee-nun pwucirenha-ta-kipota ttokttokha-ta. [K] Lee-TOP industrious-DECL-saying.than bright-DECL 'Lee is more bright than industrious.' [In the present context, I prefer the sentence 'Lee is bright' to the sentence 'Lee is industrious']
- (42) Emphatic preferential metalinguistic comparative ku-wa kyelhonha-nuni (charari) nay-ka cwuk-keyss-ta. him-DAT marry-rather than rather I-NOM die-will-DECL 'I would rather die than marry him.'

In both Greek and Korean, in the appropriateness assessment, I am not denying that Lee is industrious—at least not by entailment. The sentence may be uttered in a context in which I believe that Lee is not industrious, but it is also compatible with a context where I believe that he *is* to some degree industrious. This is so because, as we said, the MC operates on the sentences, and not the propositions the sentences express.

If the speaker wants to express an emphatic negative preference, Korean offers yet another lexicalization: *nuni* with *charari*. Here the speaker is strongly unwilling to accept the first proposition (that I marry him) by juxtaposing it with another dispreferred proposition (that I die). This latter proposition (that I die) is obviously the most dispreferred under normal circumstances, but in the context, it appears as more preferable than the *nuni*-clause. What is important here is the lexicalization in Korean (but not in Greek or English) of this negative variety of MC in the forms of *charari* and *nuni*.

One could imagine that the negativity may be due to the use of a predicate like *die*. However, the contrasting attitude between *kipota* and *nuni* becomes visible also in the following cases, where the propositions ('I stay home' and 'I go out with you') have no inherent negativity:

(43)a. onulpam ne-wa naka-kipota cip-ey iss-keyss-ta. [K] tonight you-with go out-saying.than home-LOC stay-will-DECL 'I prefer to stay home rather than to go out with you tonight.' (because I am tired.) b. onulpam ne-wa naka-**nuni** (charari) cip-ey tonight you-with go out-rather than rather home-LOC iss-keyss-ta. stay-will-DECL 'I would rather stay home than go out with you tonight.' (because I hate you.) 'I prefer to stay home than to go out with you tonight.' (because I hate you.)

The use of *kipota* indicates that the speaker is considering both options—i.e. staying home, and going out with the addressee tonight—but only chooses the latter for some

reason that is not offensive to the addressee, e.g. because she is tired. But the variant with *nuni* causes an irrecoverable offense to the addressee: the latter option ('going out with you') is very undesirable for the speaker because of a negative emotion towards the addressee (that I hate you). In Greek, the effect of *nuni* and *charari* is achieved with *para* and *kalitera* and there is no additional lexicalization. In English, again we have the neutral bare *rather* corresponding to the *kipota* version and *would rather* corresponding to the negative emphatic preference.

So, we must develop an analysis that will be able to adequately characterize three varieties of MC: (a) those that seem to be appropriateness judgments, (b) those that seem to be emphatic preferential judgments and could, but need not, associate with a very negative attitude; and finally (c) those preferential judgments that appear to convey both negative preference and attitude. The previous accounts of MCs focused on the first variety only, but in this paper we will be thinking of MCs as a whole.

#### 3.2 Metalinguistic comparatives as expressing an individual's preference

We will start with the semantics provided in Giannakidou and Stavrou (2009) (which we adopted in Giannakidou and Yoon 2009), since we will be essentially improving on that analysis.

#### 3.2.1 Giannakidou and Stavrou (2009): individual anchors and attitudes

Giannakidou and Stavrou (2009) argue that MC statements are attitudinal in nature, and that the attitude is typically anchored to the speaker. By choosing to use a comparative with *para*, the speaker expresses a disbelief or disapproval towards the *para*-proposition, and she takes the proposition expressed by the main clause to be more appropriate, desirable, or preferable. Giannakidou and Stavrou suggest that the MC has an attitudinal component in it, and locate the attitude in the lexical semantics of metalinguistic  $MORE_{ML}$ . This is a comparative MORE distinct from the MORE of ordinary degree comparison. The metalinguistic attitude is anchored to an individual (the *individual anchor* below), and the anchor is typically the speaker:

(44)  $[[MORE_{ML}]] = \lambda p \lambda q \exists d[R(\alpha)(p)(d) \land d > max(\lambda d'[R(\alpha)(q)(d')])]$ where R is a gradable propositional attitude supplied by the context: either an epistemic attitude such as belief; or an attitude expressing preference (desiderative or volitional);  $\alpha$  is the individual anchor (see Farkas 1992; Giannakidou 1998, 1999) of the attitude.

(Giannakidou and Stavrou 2009: (40))

Lexicalizations of  $MORE_{ML}$  are the analytic comparative words *perissotero*, *kalitera* and *rather*, *would rather*;<sup>4</sup> as we said earlier, the synthetic cannot have the  $MORE_{ML}$ 

<sup>&</sup>lt;sup>4</sup>*Would rather* has been characterized as a positive polarity item in the literature:

<sup>(</sup>i) # I would not rather be in Montpelier.

If *rather* and *would rather* are the English counterparts to  $MORE_{ML}$ , then it would be unexpected to negate them because metalinguistic functions are not known to operate on top of other metalinguistic functions. Hence positive polarity need not be stipulated as an additional lexical property of *would rather*, but is simply a consequence of its metalinguistic nature.

meaning since it is not used metalinguistically. Syntactically, as will become evident in Sect. 3.2.2,  $MORE_{ML}$  is a function that takes two sentential arguments, the *para* one being syntactically selected by it.

In the semantics above,  $MORE_{ML}$  relates two propositions—the proposition expressed by the main clause p, and the proposition q of the *para* clause—in terms of how much they are R-ed by the speaker  $\alpha$ . R is taken to be something equivalent to " $\alpha$  believes p to be appropriate", " $\alpha$  prefers p", or " $\alpha$  is willing to assert p". The individual anchor is borrowed from the earlier work of Farkas (1992) and Giannakidou (1998) on mood choice. It is important to note that the attitude is not introduced in the syntax, and the individual anchor need not be syntactically present (Giannakidou and Stavrou 2009: 67–68). In the default case, the anchor is the speaker:

 (45) Context: Nicholas and Ariadne are discussing the working habits of Paul: Nicholas: o Pavlos ine perissotero eksipnos para ergatikos.
 'Paul is intelligent more than he is industrious.' Ariadne: oxi! o Pavlos ine perissotero ergatikos para eksipnos.
 'No. Paul is industrious more than he is intelligent.'

Here we see the problem of "faultless disagreement" that we find typically with the predicates of personal taste discussed in Lasersohn (2005); see also Lechner (2009). Following Lasersohn, we will take it that Ariadne and Nicholas are not disagreeing above about content, but about truth assignment; by using 'no', Ariadne is not denying that Nicholas finds the proposition 'Paul is intelligent' more preferable in the context than the proposition 'Paul is industrious'. Crucially, when Nicholas utters the sentence, the individual anchor of comparison is Nicholas, and when Ariadne utters it, she is the anchor. Hence it makes sense to say that MC utterances are autocentric in nature (Lasersohn 2009), a fact that will correlate in Sect. 5 with potential expressive meaning that, typically, ties to the speaker. Since the individual anchor is implicit—*not* corresponding to a syntactic argument—we can think of it like Lasersohn's *judge*, i.e. the individual who is a parameter for the evaluation of predicates of personal taste (see Lasersohn's more recent papers for comparison with Stephenson 2007, where the judge is a syntactic argument).<sup>5</sup> But we will adhere to the term *anchor of comparison* because we find it more accurate for MCs.

Hence, the two important insights of the original analysis are, first, that MCs become part of what we can think of as *perspectival* phenomena—i.e. phenomena that grammaticalize an individual's point of view, and rely on an individual for truth assignment. Second, metalinguistic MORE is defined as a separate lexical item from the

<sup>&</sup>lt;sup>5</sup>Sometimes the anchor of comparison can be given by a syntactic argument—if we have real embedding:

i Maria pistevi oti o Janis ine perissotero eksipnos para ergatikos.
 'Mary believes that John is more bright than intelligent.'

 <sup>(</sup>ii) kathe fititis pistevi oti o Pavlos ine perissotero glossologhos para filologhos.
 'Every student believes that Pavlos is a linguist rather than a philologist.'

These sentences have the *according to the speaker* reading, where it is the speaker's assessment that John is more intelligent than he is industrious. But (i) also has a reading where the anchor of comparison is Mary, and (ii) has likewise a reading where the anchor of comparison ranges over *every student*. This is expected since we have overt embedding under a propositional attitude verb, which makes the embedded subject an available comparison anchor.

ordinary comparative MORE (which is typically introduced by the synthetic form), with an attitudinal component in it. In what follows, we want to retain these basic insights, but improve on what the attitudinal component is, and how exactly it can be best represented. We will also be more specific about the nature of the arguments p and q that MORE<sub>ML</sub> takes.

#### 3.2.2 Preference of a proposition or of a sentence

Giannakidou and Stavrou (2009) claim that the R component is "either an epistemic attitude such as belief; or an attitude expressing preference (desiderative or volitional)". Here we will eliminate the disjunction, and treat the R uniformly as an attitude of preference. There are two reasons that motivate this move. First, as we mentioned several times already, the purpose of opting for the MC relies on the intent of the speaker to compare the two sentences. Second, we cannot go for a purely epistemic assessment, since only a subcase of MCs seem to convey that, and these can also be understood as expressing the speaker's preference towards a sentence, given the particular goal of the context.

Our core idea will be this:  $MORE_{ML}$  is a function that takes two sentences (in the appropriateness assessment) or two propositions (in the emphatic preferential case) as its input, and orders these as the one more desirable than the other according to the anchor of comparison's judgment in the particular context of use. The context normally establishes a goal under discussion—e.g. to assess one's abilities, to determine one's actions, to express one's preferences. Given the goal, which differs from context to context, the anchor may express a different judgment, but in every case the judgment comes out as a preference attitude such that the main sentence or proposition is more desirable than the *than* sentence or proposition.

One can say that the inputs to  $\text{MORE}_{\text{ML}}$  are not simply the sentences, but the utterances of the two sentences, thereby capturing the metalinguistic nature of comparison (on a par with Horn's metalinguistic negation which is *I object to the utterance*; Horn 1989). Any aspect of the utterance can be metalinguistically compared, as we mentioned in Sect. 1, including phonological aspects of it. We will thus replace *p* and *q* in the original definition with upper case *P* and *Q*, which we take to be what Potts represents in his grammar as triples  $\langle \Pi; \Sigma; \alpha: \sigma \rangle$ , where  $\Pi$  is the phonological representation,  $\Sigma$  is the syntactic representation, and  $\alpha$  the semantic representations of an expression  $\sigma$  (Potts 2007a: 4). The  $\sigma$  in our cases is a sentence, so the  $\Pi, \Sigma$  and  $\alpha$  will be the phonological, syntactic, and semantic representation of a sentence.

Importantly, Potts also provides a rule that can be regarded as a semantic quotation function:

(46) If  $P = \langle \Pi; \Sigma; \alpha: \sigma \rangle$  is well-formed, then  $\langle \Pi; \Sigma; `\langle \Pi; \Sigma; \alpha: \sigma \rangle`: u \rangle$  is well-formed. (Potts 2007a: 5; rule of quotation (v))

This rule "takes any well-formed expression of the grammar and turns it into an object of type u, the type of linguistic expressions themselves. The output is itself a well-formed expression, so it too can be quoted" (Potts 2007a: 6). For example:

(47) a. Mary said 'Homer is bald'.

b. 'Homer is bald' abbreviates the following:'< [houmor Iz bold]; IP; bald(homer) : t >'

Potts says that the quotation function is like Chierchia's nominalization, or any function for that matter that would take expressions to their entity level correlates. We will argue that in the accuracy assessments, application of the quotation rule is in play. Before MORE<sub>ML</sub> applies, the quotation rule takes the sentences P and Q and turns them into objects u and u', like in the sentence above, and it is these objects that are being compared. With the preferential kind of MC, the quotation rule does not apply, and aspects of P and Q will be compared. In the typical case, the semantic content of P will be targeted, which is going to be the proposition that the sentence expresses.

The preference ordering of MC can be thought of as similar to the one we find with gradable volitional predicates such as *want* and *desire*. These gradable attitudes induce an ordering among alternative propositions—an idea that goes back to Stalnaker's claim that "wanting something is preferring it to certain relevant alternatives, the relevant alternatives being those possibilities that the agent believes will be realized if he does not get what he wants." (Stalnaker 1984: 89). Heim (1992), for example, gives the following meaning for *want*:

(48) " $\alpha$  wants that  $\phi$  is true in w<sub>0</sub> iff for every w  $\in$  Dox ( $\alpha$ )(w<sub>0</sub>): every  $\phi$ -world maximally similar to w is more desirable to  $\alpha$  in w<sub>0</sub> than any non- $\phi$  world maximally similar to w."

(Heim 1992: 193)

Dox  $(\alpha)(w)$  is the accessibility function determining a set of doxastic (epistemic) alternatives for  $\alpha$ —hence volition too relies on epistemic alternatives (rather than bouletic ones), a position adopted in Giannakidou (1998, 1999) (where it is further used to derive nonveridicality for volitional attitudes and explain mood choice). In agreement with Heim's spirit, Villalta (2008) proposes the following semantics for *want*:

(49) Semantics of *want* based on comparison of alternatives  $\llbracket want_C \rrbracket^g (p)(\alpha)(w) = 1 \text{ iff}$   $\forall q: q \neq p \& q \in g(C): \operatorname{Sim}_{w'} (\operatorname{Dox}_{\alpha}(w) \cap p) >_{\alpha,w} \operatorname{Sim}_{w'} (\operatorname{Dox}_{\alpha}(w) \cap q)$ 

In the lexical entry in this definition, Villalta posits that the verb *want* carries an index C that stands for a variable anaphoric to a contextually determined set of propositions (it is an index of type <<s,t>,t>). (This variable receives its content from the variable assignment g.) This truth condition renders Heim's comparison between p and not p a special case of comparison of p with its contextual alternatives. Villalta further proposes that volitional verbs have an additional degree argument and can be thus represented as functions from degrees to attitudinal meanings:

(50) 
$$\llbracket tall \rrbracket = \lambda d\lambda x.tall(x) \succeq d$$

(Kennedy 2007: (10))

(51)  $\llbracket \text{want} \rrbracket = \lambda d\lambda x. \lambda p. \lambda w. x \text{ wants } (p) \text{ in } w \succeq d$ 

(simplifying from Villalta 2008)

The parallel with gradable adjectives treated as properties of degrees is obvious. Following this line of reasoning, we could maintain that the R of the original definition in  $MORE_{ML}$  brings in a comparative attitude like *prefer*, where *prefer* is understood as *desire more*, that is, *desire to a greater degree*. And since  $MORE_{ML}$  only operates on two alternatives, the relation will be between its two arguments P and Q, or their entity-sentence counterparts, and not between P and a set of alternatives, as in the case of the actual attitude verb *want*. Desirability here will be determined, as we said, by the goal of the context: to assess, to praise, or to mock, and this in turn will guide which aspect of P, Q will be compared, or if we need to apply quotation first. We capture both cases in our new definitions below:

- (52)  $[[MORE_{ML}]] = \lambda P \lambda Q [P >_{Des(\alpha)(c)} Q]$  (General format) where >  $_{Des(\alpha)(c)}$  is an ordering function such that: for *P* and *Q* and degrees *d* and *d'*, the degree *d* to which  $\alpha$  desires *P* in *c* is greater than the degree *d'* to which  $\alpha$  desires *Q* in *c*;  $\alpha$  is the anchor of comparison; P and Q are Potts tuples for sentences < $\Pi$ ;  $\Sigma$ ;  $\alpha$ : *t*>.
- (53) Accuracy assessment metalinguistic comparative  $\begin{bmatrix} MORE_{ML} \end{bmatrix} = \lambda u \lambda u' [u > Des(\alpha)(c) u']$ where >  $Des(\alpha)(c)$  is an ordering function such that: for *u* and *u'* and degrees *d* and *d'*, the degree *d* to which  $\alpha$  desires *u* in *c* is greater than the degree *d'* to which  $\alpha$  desires *u'* in *c*;  $\alpha$  is the anchor of comparison; and *u* and *u'* are *quotations* of sentences P and Q.

These assign to  $MORE_{ML}$  the very basic semantics of desire-based ordering, and are flexible in allowing the context to determine all the additional parameters (anchor, degrees, and which aspects of *P* and *Q* will be compared, and whether the quotation rule will apply). In the typical emphatic preferential case, it will be the propositions expressed by *P* and *Q* that will be ordered:

(54) kalitera na pethano para na ton pandrefto! [G]
 'I would rather die than marry him!'
 *Paraphrase*: Dying is more desirable to the speaker than marrying some guy.

In the case of the appropriateness assessment, we will have an ordering that says that "given a certain goal in the context c: the degree d to which the quoted sentence u is desirable is greater that the degree d' to which the quoted sentence u' is desirable":

(55)	0	Pav	los	ine	perissotero	filologhos	para	glossologhos.	[G]
	the	e Pau	1	is-3SG	more	philologis	t than	linguist	

In the context c, the degree d to which the speaker desires the sentence 'Paul is a philologist' is greater than the degree d' to which he desires the sentence 'Paul is a linguist'.

Potts defines quotation-taking realizations of attitude verbs (see especially the discussion in Sect. 5 of Potts 2007a), but given that, following Giannakidou and Stavrou (2009), we do not posit an attitude in the syntax of the MC, we need not go that far here. If our analysis is correct, then we can view the metalinguistic comparative as another area in grammar where quotation plays a role.

We will finalize this part of the analysis now with schematic syntactic derivations.

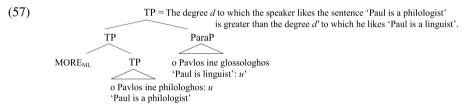
Metalinguistic comparative comparing propositions:

(56)

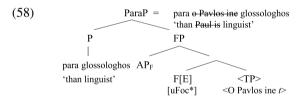
TP = The degree d to which the speaker desires to 'go on trips' is greaterthan the degree d' to which he desires to 'sit in front of the TV'.<math display="block">TPParaP MORE<sub>ML</sub>
TP
na kathome brosta stin tileorasi: Q kalitera
'to sit in front of TV' 'to sit in front of TV' 'to go on trips'

The syntax here gives two full sentences (the subjunctive *na* clauses are full (finite) CPs in Greek). MORE<sub>ML</sub> is realized as *kalitera* 'would rather'.

Metalinguistic comparative comparing sentences ('accuracy assessment')



In this case, the quotation rule (45) applies first, creating objects u, u' from the sentences given by the TPs. Then  $MORE_{ML}$  will compare these two objects. At the same time, the *para* clause undergoes ellipsis, and its structure is given below:



We have ellipsis of the TP in the *para* clause, consistent with the fact that clausal comparatives involve TP ellipsis in Greek. *Para* clauses can also be full sentences as we just saw.  $MORE_{ML}$  will take the sentences as input and operate on any aspect of them the speaker will choose. We see that there is no degree operator in the *para* clause.

The remaining question is: what is the contribution of *para* and *kipota*? Giannakidou and Stavrou (2009) suggest that *para* and *kipota* are being lexically selected by  $MORE_{ML}$ —which in itself can be taken to constitute further evidence for the distinct status of  $MORE_{ML}$  among comparative morphemes (since it has its own selection pattern). We offer here the following featural specification for  $MORE_{ML}$ :

(59) Greek MORE<sub>ML</sub> : [CAT: [Adverb]; SEL: [*para*]] Lexicalization of: *kalitera*, *perissotero* 'better, would rather'

Here we have an adverb, in the structures above adjoined to the main clause, *selecting* the *para* clause, which makes it a selector in the fashion of complement selection.

Marcel den Dikken (p.c.) raises the question of how this is to be reconciled with the fact that MORE<sub>ML</sub> is structurally represented as a TP adjunct. Here we have the perennial problem of comparatives: how to explain the fact that the THAN clause is an argument of MORE while it is syntactically an adjunct (i.e. in terms of not allowing extraction; in a more recent account like Bhatt and Pancheva 2004 it is late-merged as an adjunct). And how can an adverb like MORE<sub>ML</sub> "select" a complement (which makes it look more like a head)? Kennedy (1997) characterizes the THAN clause as a "selected" adjunct, a characterization that can apply also to the argument of *weigh* in *John weighs 150 lbs*—again an adjunct with respect to extraction, but clearly an argument of *weigh* since it cannot be omitted. We don't have more to add here, but notice that it is not necessary that MORE<sub>ML</sub> be an adverb—certainly English *would rather* is an attitude verb, thus a head, and not an adverb. But even in this case, the problem remains of how to capture the *than*-clause of *would rather* as its second complement while it is syntactically an adjunct.

In Sect. 5, we show further that the THAN-particle, at least in some cases, contributes expressive content. But first, we will finalize the analysis by providing the semantics of the negative preferential  $MORE_{ML}$  that we showed is lexicalized in Korean as *charari*.

#### 3.3 Negative preferential comparatives in Korean

Recall that Korean lexicalizes a  $MORE_{ML}$  that expresses negative preference: *charari*. *Charari* typically subcategorizes for *nuni*. In Korean grammars, *charari* is defined as "an adverb used when selecting a relatively better option than the other one, while implying that both options are not so preferable" (Dictionary of the *National Institute of Korean Language* 2008). Hence *charari* plausibly conveys some kind of negation, though it is not itself morphologically negative.

In our description earlier of what the *charari* sentences say, we said that *charari* expresses strong dispreference. We now define *charari* as the negative variant of  $MORE_{ML}$ , imposing a total dispreference of the *nuni* argument. Since this is a subspecies of the preferential MC, we can define *charari* as operating on the propositions p and q directly. The q proposition is supplied by the *nuni*-clause. The negative component is added as a conjunct in the underlined part in the formula below:

(60) Antiveridical MORE<sub>ML</sub> (Neg-MORE<sub>ML</sub>)  $\begin{bmatrix} charari \end{bmatrix} = \lambda p \lambda q [p >_{Des(\alpha)(c)} q \land \alpha \text{ desires } q \text{ to } d': 0)]$ where >  $_{Des(\alpha)(c)}$  is an ordering function such that: for p and q and degrees d and d', the degree d to which  $\alpha$  desires p in c is greater than the degree d' to which  $\alpha$  desires q in c; and  $\alpha$  is the anchor of comparison.

Our definition renders *charari* a MORE<sub>ML</sub> that asserts zero preference of q by  $\alpha$ . Zero preference will render *charari* antiveridical (though there is no negation, as we see). Antiveridicality alone will be sufficient to license NPIs as we see in Sect. 5. Since the value of d' is set to zero, it follows that the other proposition p will be preferred to a low degree because we are being guided by zero; this is indeed the case in the typical examples like *I'd rather die than marry you*, where dying is not terribly preferred. The low threshold of zero thus explains the general flavor of these MCs as involving comparisons of propositions that are both not desired. Greek *kalitera* is obviously compatible with the NEG-MORE<sub>ML</sub> meaning, as is English *would rather*, as we noted in Sect. 3.1. But *kalitera* and *would rather* do not always express zero preference, as we noted earlier.

To sum up, we proposed in this section an analysis of MC as an indicator of an attitude of preference in the comparative. This preference is lexicalized in the form of  $MORE_{ML}$  that we defined, and this has various lexicalizations in languages, including *kalitera* (Greek), *rather* and *would rather* (English), and *charari* (Korean). By choosing to use one of these devices, the speaker decides to enter the subjective mode of comparison, and therefore compares not degrees of properties, but degrees to which she prefers a proposition, a sentence, or aspects of the sentence over (aspects of) another sentence. The choice to use subjective or objective mode in the comparative is thus not simply viewing a state of affairs from within (subjective) or from the outside (objective)—as is often claimed in the literature (Stephenson 2007, for example)—but it is a choice of an individual (usually the speaker) to conceptualize comparatives as preference-based orderings of sentential material, or simply as property comparisons.

By embedding MC morphemes into the realm of perspectival phenomena, our analysis achieves a comprehensive coverage of this kind of metalinguistic interaction, and we believe that much of what we say here can be used for metalinguistic negation too (see Giannakidou and Stavrou 2009 for a sketch of how this can be done). Before we move on now to our final task, which is to show that the MC can be enriched with expressive meaning, we want to pause and compare our analysis to Morzycki's (2009) account, which is based on imprecision.

#### 4 Metalinguistic comparative is not about imprecision

Morzycki (2009) discusses English MCs of the appropriateness variety, and proposes that MCs are "imprecision" regulators. Building on Lasersohn (1999) he suggests the cross-categorial approximative relation below, which holds between two sufficiently similar objects in the model.

- (61) George is more dumb than crazy.
- (62)  $\alpha \approx_{d,C} \beta$  iff, given the ordering imposed by the context *C*,  $\alpha$  resembles  $\beta$  to (at least) the degree *d* and  $\alpha$  and  $\beta$  are of the same type.

The idea is that the interpretation function of an expression like *dumb* is relativized to degrees of precision, and ends up denoting the set of alternatives with predicates. Since the standard of similarity is construed as a degree d in the interval between 0 and 1, an absolutely precise interpretation of *dumb* is a singleton set with only *dumb* as a member, whereas an absolutely imprecise interpretation gives out a set with all predicates of the right type. As shown below, the size of a set is determined by the degree of precision that the context requires.

(63) a. 
$$[dumb]^{0.9,C} = \{dumb, ignorant, dopey, foolish, slow-witted, ...\}$$

b.  $[dumb]^{0.8,C} = \{dumb, ignorant, dopey, foolish, slow-witted, confused, incurious, intellectually-lazy, criminally-reckless, ... \}$ 

Given this, Morzycki suggests the following semantics for MCs:

(64)  $[[more_{MC} \alpha \ than \ \beta]]^{d,C} =$  $\{ \lambda x \lambda w [max\{d': \exists a[a \in [[\alpha]]^{d',C} \land a(x)(w)] \} >$  $max\{d'': \exists b[b \in [[\beta]]^{d'',C} \land b(x)(w)] \} ] \}$ 

Here *more*<sub>MC</sub>  $\alpha$  *than*  $\beta$  is defined as the maximum degree of precision at which the extension of  $\alpha$  contains something true of x is greater than the maximum degree of precision at which the extension of  $\beta$  contains something true of x. For instance, *more*<sub>MC</sub> *dumb than crazy* would be the following.

(65)  $[\![more_{MC} dumb than crazy]\!]^{d,C}$   $= \{\lambda x \lambda w [max\{d' : \exists a[a \in [\![dumb]]^{d',C} \land a(x)(w)]\} > max\{d'' \exists b[b \in [\![crazy]]^{d'',C} \land b(x)(w)]\}]\}$   $= \{\lambda x \lambda w [max\{d' : \exists a[a \approx_{d',C} dumb \land \alpha(x)(w)]\} > max\{d'' \exists b[b \approx_{d'',C} crazy \land b(x)(w)]\}]\}$ 

In this framework, a sentence like *George is more dumb than crazy* means that the degree of precision that George could be said to be dumb is higher than the degree of precision that George could be said to be crazy. The degree of precision is calculated via the approximative relation  $\approx_{d',C}$  which denotes a *sufficient similarity* between two objects. Morzycki claims that a methodological advantage of understanding MCs as a representation of imprecision is the flexibility of these sets that may vary depending on both contexts and degrees of imprecision.

But is metalinguistic comparison truly a matter of (im)precision? In the light of our preceding analysis, and given that not all MC are accuracy assessments, the imprecision theory cannot provide the appropriate basis for a theory of MC phenomena as a class. It misses the variation we illustrated, and therefore fails to observe what lies at the foundation of MC: preferential ordering of *sentential* material.

By insisting on a predicate analysis, the imprecision account suffers from two main problems. The first one is overgeneration. Morzycki posits a parallel semantics between MCs and regular degree comparatives in that both involve predicate degree abstraction. This, however, does not explain the fact that the synthetic comparative cannot function as  $MORE_{ML}$ . If we go the route of the predicate analysis, we do not see how we can prevent, without stipulation, the synthetic form from metalinguistic use: any comparison between predicates can become metalinguistic if an approximative relation is licensed in the context.

The second problem lies with the very assumption of the approximative relation. We saw in this paper that we can have perfectly fine MCs with completely unrelated predicates like *die* vs. *marry*, and *tall* vs. *intelligent*, which we add below:

- (66) a. kalitera na pethano para na ton pandrefto! [G] 'I would rather die than marry him!'
  - b. i Maria ine perissotero pjili para eksipni. the Maria is more tall than intelligent

#### 'Mary is more tall than she is intelligent.'

Hence, although one may think that approximation is relevant when we compare *dumb* and *crazy*, metalinguistic comparison does not generally appear to be constrained by approximation, and we can have totally unrelated predicates in the sentences compared, as above. In fact, it is often this dissimilarity that creates the emphatic metalinguistic effect. This freedom is expected under our account, where sentential constituents are compared, and therefore no inherent relation is posited between the predicates used: the only relation they have is the one given by  $MORE_{ML}$ . But in Morzycki's account, the approximative relation is a *licensing* factor: it requires comparison along the same dimension, thus failing to predict the greater variability we observe.

In sum, the imprecision approach fails to register the preference dimension, the propositional character, and the empirical variation of MC, while erroneously predicting a direct relation between predicate and metalinguistic comparison. We move on now to capture an additional dimension of the MC *than* particle. We will argue, following our earlier proposal in Giannakidou and Yoon (2009), that the MC-THAN contains expressive content.

#### 5 The expressive dimension of metalinguistic comparative

When a speaker chooses to use a comparative metalinguistically, she chooses to make a preferential comparison, as we said, and selects from the lexicon  $MORE_{ML}$  as the appropriate vehicle to do that.  $MORE_{ML}$  in turn subcategorizes for a clause that will be introduced with *para*, *kipota*, and in the case of *nuni*, *charari*. We will argue here that *nuni* is more emphatic, above and beyond the preferential dimension and zero negativity that we posited. The lexical choice to use *nuni* is not a mere reflex of syntactic selection, but rather also a reflection of the speaker's emotive stance.

*Nuni* will be claimed to add the speaker's heightened emotional perspective—a property typical of the class of expressive expressions such as *damn* and *bastard*, studied in Potts (2005, 2007b). The hallmark property of expressives is that when uttered, they have "an immediate and powerful impact on the context" (Potts 2007b: 1). Almost invariably, "a speaker's expressive indicates that she is in a heightened emotional state. They can tell us if she is angry or elated, frustrated or at ease, powerful or subordinated" (Potts 2007b: 8). Potts calls this property *perspective dependence*, and given the perspective-inducing property of MC that we argued for in our analysis, it seems natural that MCs may associate with expressive content.

In Giannakidou and Yoon (2009) we gave a number or diagnostics for expressivity, and we will not repeat that discussion here. We also showed there that *para* and *kipota* can be neutral, and we will take this to mean that they do not always contribute expressive content. *Nuni*, however, is different, and we will discuss in this section why.

First, we present in Sect. 5.1 some independent evidence for expressive use in Korean that can be identified as clearly negative or clearly positive. Once we establish that lexicalization of designated expressivity is indeed systematic in Korean, we will claim in Sect. 5.2 that *nuni* contains a negative expressive index. This is not equivalent

to negation, hence *nuni* by itself cannot license NPIs; but if *charari* is used, NPIs are fine, as expected. We close the discussion with commentary on the interaction between expressive meaning and the appearance of NPIs, as seen in the class of NPIs known as "vulgar" minimizers, after Postal (2002).

### 5.1 Negative and positive expressives in Korean

Korean makes extensive use of expressive expressions in that a particular emotion of an attitude holder can be delivered by any kind of sentential category. This includes the use of nouns, verbs, functional adverbs, case particles, and even complementizers. These emotively charged expressions are generally divided into three categories: positive/honorific, neutral, and negative/antihonorific.

To begin, let us briefly observe the phenomena in nouns. Certain Korean nouns, normally ones in frequent use, have a variety of synonyms (e.g. positive(POS), neutral(NEU), and negative(NEG) flavors of 'person', 'meal', 'death', 'face', etc.) the selection of which is determined by what kind of emotional attitude an individual has that she wants to express. To illustrate, there are multiple noun forms for 'figure' in Korean. First, 'figure' with a positive attitude is *cathay*, which only co-occurs with positive adjectives such as 'goddess-like', 'angelic', or 'beautiful'; except that it is extremely rarely modified by negative adjectives to import an ironic nuance. In contrast, 'figure' with a negative attitude is conveyed by *molkol* which can be modified only by negative adjectives like 'ugly' or 'hideous'; once again rare occurrences with positive adjectives are used for irony.

- (67) a. kunye-nun √ arumtawun /# phyengpemhan /# hyungchukhan she-TOP beautiful / normal / hideous cathay-lul turenayss-ta. figure.POS-ACC revealed-DECL
  - b. kunye-nun 
    arumtawun / 
    phyengpemhan / 
    hyungchukhan she-TOP beautiful / normal / hideous
    mosup-ul turenayss-ta.
    figure.NEU-ACC revealed-DECL
  - c. kunye-nun #arumtawun / #phyengpemhan / ✓ hyungchukhan she-TOP beautiful / normal / hideous
     molkol-ul turenayss-ta.
     figure.NEG-ACC revealed-DECL
     'She revealed a beautiful/normal/hideous figure.'

As we see, these biased nouns are infelicitous with neutral modifiers such as 'normal' or 'commonplace'; and a combination of opposite attitudes gives rise to effects of irony or hyperbole, which clearly indicates that these nouns are inherently marked with either positive or negative emotion. On the other hand, there is an unbiased counterpart *mosup* which can be modified by any kind of adjectives, negative, neutral, or positive.

More crucially, an emotional attitude can be conveyed in a variety of sentential categories besides nouns. The honorific inflection (u)si on verbs or copula has been

claimed to convey a kind of expressive meaning (Kim and Sells 2007; see also Potts and Kawahara 2004 for Japanese honorification as expressive meaning; cf. Han 1991; Park 1992; Pollard and Sag 1994; Choi 2003 for pragmatic analyses; Kim and Yang 2005 for syntactic constraint). In contrast, the anti-honorific inflection of *peri* on verbs expresses a negative attitude (Joe and Lee 2002; Choe 2004; see also Canstant et al. 2009 for analysis of *chimat* in Japanese).

At the same time, a positive attitude is revealed by the selection of honorific case markers such as *kkeyse* 'NOM.HON' and *kkey* 'DAT.HON' (Yoon 2005; Lee and Ramsey 2000; Kim and Sells 2007) whereas a negative attitude is expressed by attaching an antihonorific particle *ttawi* to any type of case markers (e.g. *ne-ttawi-ka/lul/ekey*: you-ANTI.HON-NOM/ACC/DAT: 'a worthless person like you'). Similarly, it is noted that negative expressivity is triggered by the particle *na*, which creates the so called "indiscriminative" (Horn 2000) reading of the free choice item (FCI) *amwu-na* 'any-one' (Park 2009; cf. Yang 1973; Lee and Ramsey 2000).

(68) yocum-un, amwu-**na** chayk-ul chwulphanha-n-ta. these.days-CONT.TOP anyone book-ACC publish-PRES-DECL 'These days, just anyone (is allowed to) publish a book.'

The indiscriminative reading is clearly negative: 'just anyone' will include highly unqualified people, and this is brought about simply with the use of *na* (Park 2009). Furthermore, sentential endings such as declaratives (*e*: DECL.ANTI.HON, *ta*: DECL.NEU, *supnita*: DECL.HON) or interrogative particles (*ni*: Q.ANTI.HON, *nka*: Q.NEU, *supnika*: Q.HON) are level-marked depending on an attitude toward the addressee. In the following sentences, observe how an attitude matching is strictly obeyed across nouns in subject 'you' and object 'meal', verbs 'eat', and Q-particles.

- (69) a. ne pap(-ul) mek-ess-ni?
   you ANTI.HON. meal.ANTI.HON(-ACC) eat.ANTI.HON-PST-Q.ANTI.HON
   'Did you have a meal?' (to an equal or inferior addressee in an informal context)
  - b. tangsin siksa(-lul) hay-ess-nunka?
    you.NEU meal.NEU(-ACC) do.NEU-PST-Q.NEU
    'Did you have a meal? (to an equal addressee in rather formal context)
  - c. sensayngnim cinci(-lul) capswusi-ess-supnika? teacher.HON meal.HON(-ACC) eat.HON-PST-Q.HON
    'Did you have a meal, teacher?' (to a superior addressee in formal context)

Hence, we see a much more systematic conventionalization of expressivity in Korean—a systematic mapping of expressive attitude onto morphological units. The mapping involves clearly positive vs. negative, in contrast to English where expressives like *damn* could be used as positive or negative (Canstant et al. 2009). We will embed the analysis of *nuni* within this background.

# 5.2 Nuni: negative expressive force and NPI licensing

According to Potts, expressive indices are the main objects manipulated by expressive denotations. We are not going to elaborate on the whole system here, but go directly to the definition that Potts offers (Potts 2007b: (37)):

(70) An expressive index is a triple  $\langle a \mathbf{I} b \rangle$ , where  $a, b \in D_e$  and  $\mathbf{I} \in [-1, 1]$ .

Expressive indices are the foundation for expressive domains, and are contained in expressives such as *damn*. These indices encode the degree of expressivity as well as the orientation of the expressive, and they are defined via numerical intervals  $\mathbf{I} \subseteq [-1, 1]$ . We can read <a I b> as conveying that individual *a* is at expressive level I for an individual *b*. Mapping emotional attitude onto expressive intervals has the advantage of allowing flexibility from very neutral (if  $\mathbf{I} = [-1, 1]$ )—in Potts' words, "*a* has no feelings for *b*"—to very negative ones. Emotive relations emerge as we narrow down I to proper subintervals of [-1, 1]; the more positive the numbers, the more positive the expressive relationship, and conversely. For example:

(71)	a. < [[tom]] [5, 0] [[jerry]]>:	Tom feels negatively toward Jerry
	b. <[[ali]] [ <b>8, 1</b> ] [[jerry]]>:	Ali feels essentially indifferent to Jerry
	c. <[[kevin]] [0, 1] [[jerry]]>:	Kevin is wild about Jerry

Expressive indices are just entities—this explains why they are not amenable to paraphrases (ineffability), but they have propositional implications: we see that from objects like < [tom] [-.5, 0] [jerry]> we tend to infer propositions, in this case that *Tom feels negatively toward Jerry*. Importantly, the indices are built by relating two individuals by means of **I**. In our case, we will need to express the fact that an individual stands in an emotive relation to a proposition:

- (72) a. nuni: <t, ε>
  - b.  $[[nuni]]^c = \lambda p.p$  (identity function); c is the context
  - c. Expressive content of *nuni* in c: *Nuni* contains an expressive index  $\langle \alpha | \mathbf{I} \rangle$ , where  $\alpha$  is the individual anchor, *q* the proposition it embeds; and **I** ranges between [-1, -.5].

*Nuni* thus expresses a very negative emotion towards the proposition that becomes evident when *charari* is absent and the sentence still feels very emphatically negative. In Giannakidou and Yoon (2009), we argued that the other complementizers, *para* and *kipota*, have much greater freedom in their expressive interval, and can denote anything from neutral to the negative stance of *nuni*—since they can be used in the full range of MC. In the present work, we will take this to mean that *para* and *kipota* do not always contribute expressive content, but only in the case of the negative preferential use—in this case, just like *nuni*, they will associate with a negative index by convention.

In Potts' system, the negative index of *nuni* will *not* affect the truth conditional meaning—i.e. will not render the *nuni* sentence negative in the sense of antiveridical (Zwarts 1995; Giannakidou 1998), because the expressive contribution is a conventional implicature, thus cashed out at a level other than the at-issue meaning (which

we can reasonably assume is read off from LF). In other words, triggering a negative conventional implicature does not imply negating the sentence. This appears to be confirmed, at first glance, by the fact that expressive force alone does not suffice to license negative polarity items (NPIs):

(73) \*That bastard Fred said anything!

This sentence is pretty bad because the negativity that comes from the expressive interval of *bastard* is not part of the descriptive content, where truth conditions are calculated. The sentence remains veridical (i.e. positive), hence the NPI *anything* cannot be licensed. Postal (2002) notes in a similar vein that what he calls *vulgar minimizers*—swearwords like *squat, jack*—although very negative, they do not suffice to license *any*. The following examples are from Postal's paper (35a,b):

- (74) a.\*Hector sent squat to any of his ex-wives.
  - b. Hector sent zero presents to any of his ex-wives.

Semantically antiveridical expressions like *zero NP*, on the other hand, do license NPIs, as we see in *b*. Postal calls these *zero* minimizers, because they are assumed to semantically make reference to zero. The contrast suggests, in agreement with the sentence with *bastard*, that at the truth conditional level, *squat* does not contribute negation, the property necessary for the licensing of *any*.

However, Larry Horn points out to us that he doesn't get the contrast above, and Postal himself notes that there may be speaker variation. Notice also the examples below (*gratia* Larry Horn):

- (75) a. He knows squat about *any* scientific theory.
  - b. A friend of mine knows squat about any car.
  - c. ... probably knows squat about *any* pop culture that doesn't revolve around...
  - d. If she hasn't even played the game, then she knows *squat* about any of the characters.
  - e. ... leads me to believe he knows *jack* about *any* of those subjects.
  - f. I've got him hooked on college and pro basketball and he knows *jack* about any of it.
  - g. She knows jack about any minority experience.

These cases are very revealing, not so much about comparatives, which we will put aside for just a moment, but about the nature of sanctioning of English NPIs like *any*. The vulgar minimizer indeed seems to be responsible for the occurrence of *any* here. If this type of minimizer has negative expressive content as a conventional implicature, of the kind we are arguing *nuni* and *bastard* do, it appears to be surprising that *any* is "licensed", given our earlier *bastard* example where *any* is not licensed.

In order to reliably assess if expressive force alone can indeed license NPIs, we need to be careful with respect to two factors. First, we must consider that there are two modes of sanctioning for NPIs (Giannakidou 1998, 2006): one is by licensing, which requires the NPI to be in the scope of a nonveridical operator at LF; the other one is in violation of this LF scope condition, and is called *rescuing* in Giannakidou (2006):

(76)

A PI  $\alpha$  can be rescued in a sentence S, if: (a) **the global context C** of S makes a proposition S' available which contains negation  $\beta$ ; and (b)  $\alpha$  can be associated with  $\beta$  in S'.

#### (Giannakidou 2006)

This condition—also known as *indirect licensing* (Giannakidou 1998)—acknowledges that in some cases, NPIs can be sanctioned through additional pragmatic reasoning that globally triggers a negative inference (see also related discussion in Horn 2002). Rescuing is a secondary option for some NPIs with broad distribution; and there is crosslinguistic variation: English is considerably more liberal than Greek in allowing rescuing. English NPIs like *any*, *at all*, and minimizers can be systematically be rescued, and we can think of them as very liberal NPIs. The respective Greek and Korean NPI classes are much more restricted, and only get licensed in the syntaxsemantics (for more details see Giannakidou 1998, 2006; and Giannakidou and Yoon 2010). If rescuing is more restricted in Greek and Korean, we expect then that *nuni* will not be able to rescue NPIs that need to be in the scope of negation, since it does not contribute negation in the LF. And this is indeed what we will see in a moment.

The second thing we need to be careful about when it comes to the vulgar minimizer—and now the contrast with \**That bastard Fred said anything!* becomes relevant—is that, as Horn suggests, the vulgar minimizer seems to create a negative statement; but in the *bastard* case, negativity remains at most a conventional implicature.

- (77) John knows *squat* about women. This means something like:
  - (i) John knows nothing about women.
  - (ii) John knows something about women, but *what he knows is very little or is not useful enough in the context, so it is worth almost nothing.*

As suggested in the paraphrases, the vulgar minimizer does not create an assertion fully equivalent to a negative assertion, although we are also not simply dealing with negative expressive force of the *bastard* kind. With the minimizer, negativity is moving towards conventionalization as negative evaluation in the at issue meaning.<sup>6</sup> Hence, the vulgar minimizer cases do not bear on the question of whether expressive force *as an implicature* can license NPIs.

Now notice that non-vulgar minimizers, in English, Greek and Korean, fail to license or rescue NPIs:

(ii) He lives in the middle of nowhere.

Means: 'He may be a doctor, but I, the speaker, think he is not a good one.' (Giannakidou 2000)

Such uses of n-words (which appear systematically in many languages) are indeed useful to think about in terms of conventionalized negative expressivity, on a par with vulgar minimizers.

<sup>&</sup>lt;sup>6</sup>Something similar, we think, happens in the following cases with n-words:

This road leads nowhere. Means: 'This road leads to some place, but I, the speaker, deem this place not useful for our purposes.'

Means: 'He lives somewhere, but I, the speaker, evaluate the area as something not significant.' (iii) He is no doctor!

(78) a.\*kseri leksi ja tipota!
b.\*He knows a word about anything!
c.\*ku-nun amwukes-eytayhayse-to hancato an-ta!
[K]

A minimizer like *say a word* apparently does not conventionalize negative force the way the vulgar minimizer does: *\*John knows a word* does not trigger the negative evaluative reading of *John knows squat*. And in Greek and Korean, even vulgar minimizers do not suffice to sanction NPIs, because Korean and Greek NPIs are considerably more resistant to rescuing than English *any, at all, minimizers.*<sup>7</sup>

(79)	*kseri skata ja kamia epistimoniki theoria. 'He knows shit about any scientific theory.'	[G]
(80)	*ku-nun amwu kwahakiron-eytayhayse-to kayppwul-to he-TOP any scientific theory-about-even dog's horn(squat)-even	[17]
	an-ta. know-DECL 'He knows shit about any scientific theory.'	[K]

Given the contrast with Greek and Korean, two things could be responsible for the pattern we observe in the Horn examples in (75): *any* could be free choice (see fn. 7), or it could be rescued by negative evaluative force that is becoming part of the at issue meaning in the English vulgar minimizer. This is still not equivalent to negation (hence the contrast with the Greek, Korean NPIs that need to be formally licensed in the LF scope of a nonveridical operator).

We can thus safely maintain that negative expressive force as a conventional implicature is not sufficient to license NPIs. We illustrate this now with *nuni*:

(81)	*na-nun [kuren-saramtul <b>amwuto</b> manna- <b>kipota</b> ] honca issko I-TOP such-people anyone meet-rather.than alone be	
	sip-ta. want-DECL	[K]
	'I would rather be alone than meet anyone among such a crowd.'	
(82)	*na-nun [kuren il-lo <b>kkwumccektoha-kipota</b> ] kamanhi issko I-TOP such task-for budge an inch-rather.than still stay sip-ta. want-DECL 'I would rather stay still than budge an inch to do such a task.'	
(83)	*na-nun [kuren-saramtul <b>amwuto</b> manna- <b>nuni</b> ] honca issko sip-ta. I-TOP such-people anyone meet-rather.than alone be want-DI	ECL

<sup>&</sup>lt;sup>7</sup>Notice instead that the FCI *opjodhipote* is marginally OK:

 <sup>&</sup>lt;sup>?</sup>kseri skata ja opjadhipote epistimoniki theoria.' He knows shit about any scientific theory.'

The data in Giannakidou (2001) show that FCI generally are *not* licensed in the scope of negation, hence the acceptability of the FCI in (i) can be used as evidence that the vulgar minimizer *skata* does not contribute negation.

'I would rather be alone than meet anyone among such a crowd.'

 (84) \*na-nun [kuren il-lo kkwumccektoha-nuni] kamanhi issko I-TOP such task-for budge an inch-rather.than still stay sip-ta.
 want-DECL
 'I would rather stay still than budge an inch to do such a task.'

As noted earlier, the non-licensing of strong NPIs in MCs is a welcome result for our analysis, since it is consistent with our assumption that there is no negation in the comparative clause. Here it is important to emphasize that the NPIs we are looking at are *strong*, which means that they are licensed narrowly only within the scope of antiveridical operators (e.g. negation). Greek and Korean happily exhibit the strong NPI kind. The stronger Greek NPIs—KANENAS and minimizers—systematically remain ungrammatical in the *para* clause:

- (85) \*kalitera na mino spiti moni mou, para na miliso me KANENAN! [G]'I would rather stay home by myself than talk to anybody.'
- (86) \*kalitera na mino siopili, para na po KOUVENDA!'I would rather be silent than say a word.'

Things change in Korean, however, when we insert *charari*. In the semantics we gave for it, *charari* asserts zero preference of q, and this makes it antiveridical:

(87) "Speaker  $\alpha$  desires q to the degree d and d = 0" entails that " $\neg$ desire( $\alpha$ )(q)"

We thus expect that if *charari* is present, strong NPIs will be licensed, and this is indeed the case:

- (88) na-nun [kuren-saramtul amwuto manna-nuni] charari honca issko I-TOP such-people anyone meet-rather.than rather alone be sip-ta. [K] want-DECL 'I would rather be alone than meet anyone among such a crowd.'
  (89) na-nun [kuren il-lo kkwumccektoha-nuni] charari kamanhi issko LTOP such task-for budge an inch-rather than rather still be
- I-TOP such task-for budge an inch-rather.than rather still be sip-ta.
   want-DECL
   'I would rather stay still than budge an inch to do such a task.'

Native speakers seem to feel that the negativity of *nuni*-clause is weaker without *charari*, and definitely not strong enough to allow strong NPIs. But with *charari*, strong NPIs become fine because they have a legitimate licenser. It is not necessary to embark on a general discussion on NPIs at this point, and we refer to Giannakidou (2006, 2011), and Giannakidou and Yoon (2010) for more details and explanations of the various distributions of polarity items, and their appearance in comparatives. What matters for us at present is the contrast between regular MC and the zero preference MC that lexicalizes in Korean, and which allows for strong NPIs, as expected by our analysis, which renders it antiveridical.

In agreement with the Greek and Korean pattern, notice that *would rather* which, as shown earlier, allows minimizers (which are liberal NPIs in English) can nevertheless not license strong NPIs such as *either*:

(90)  $*^{??}$ I'd rather remain silent than talk to John either!

If *rather* is  $MORE_{ML}$ , then *any* and minimizers are good with it because they are rescued, but *either*, as a strong NPI, cannot be rescued, hence the ungrammaticality. The only kind of NPI allowed in the MC comparative is the weakest type, the one that is *not*, or at least not *always*, subject to semantic licensing. This allows the hypothesis that comparatives, as a class, need not be considered a licensing environment for NPIs (and we refer here to Giannakidou and Yoon 2010 for empirical elaboration of this point).

To sum up this section, our analysis claims that metalinguistic comparatives, in addition to the preference ordering which is hosted in the comparative morpheme, may also have a conventional implicature of negativity, which can be manifested as a negative expressive index on the THAN particle. This conventional implicature of negativity is not equivalent to introducing negation in the at issue (truth-conditional level) meaning, as was shown by the fact that *nuni* and English expressives like *bas*-*tard* cannot license NPIs. Finally, the case of vulgar minimizers in English indicated that, in certain expressions, negative expressivity can cross the implicature realm, and be gradually conventionalized as part of the at-issue meaning, as a form of negative evaluation. This suggests, in our opinion, a dynamic interaction between at issue and expressive content that can be useful in addressing questions about not only the nature of expressive content, but also about the way expressive content is represented in the class of minimizer NPIs across languages.

#### 6 Conclusion

In this paper we offered an analysis of metalinguistic comparatives in language as indicators of subjective mode in the comparative. Subjective mode consists of bringing in an individual's attitude (the 'anchor of comparison') in order to express her preference of a sentence, or of a proposition, over another. We adopted the view of the anchor as an index of evaluation with no overt syntactic reflex. We further suggested a connection between metalinguistic comparatives and expressive content in arguing that the *than*-particle may carry a negative expressive index (in the sense of Potts 2007b). Our evidence was drawn from Greek and Korean data. The parallel in metalinguistic comparatives between these two typologically unrelated languages is too systematic to be ignored.

We emphasized that MCs are not merely statements of accuracy (as assumed e.g. in Morzycki's 2009 imprecision account, and earlier accounts), or at least they cannot be understood simply as such as a whole. We exposed a broad set of metalinguistic comparative cases that ranged from (a) judgments of appropriateness, to (b) judgments of preference, to (c) judgments of zero preference. The core intent in all cases, we argued, was the anchor's desire to privilege the main clause proposition over the *than* proposition.

Ultimately, our analysis makes the case that we need to add metalinguistic comparatives to the set of phenomena that we think of as perspectival. If our move is correct for metalinguistic comparatives, then perhaps *all* metalinguistic phenomena, e.g. metalinguistic negation, should be understood as having their source in preferential attitude plus possible expressive content that we argued for here. The use of metalinguistic negations of the form *No way I would do that!*, which have been discussed in the literature (Horn 1989; Drozd 1995) lend preliminary support to the our hypothesis about a connection between metalinguistic functions and expressive content, and future research will show if this generalization is generally viable. Here, our wish was to lay out a sufficiently clear foundation for a meaningful discussion of metalinguistic phenomena as a juncture between sentence meaning, and a grammatically rich notion of speaker meaning.

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