# How many more?

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### Περίληψη

Η παρούσα μελέτη δείχνει ότι οι δείκτες σύγκρισης πιο, περισσότερο, και παραπάνω έχουν διαφορετικές συντακτικές ιδιότητες. Το πιο εισάγει συγκρίσεις με διαβαθμίσιμα επίθετα, επιρρήματα ή κατηγορηματικά ουσιαστικά, τα περισσότερο/λιγότερο τις ίδιες συγκρίσεις με το πιο, καθώς και συγκρίσεις ρηματικής φράσης, τα αντίστοιχα επίθετα εισάγουν μόνο συγκρίσεις ονοματικής φράσης, ενώ το παραπάνω, έχοντας την ίδια κατανομή με το αντίστοιχο τοπικό επίρρημα, εισάγει συγκρίσεις ονοματικών και ρηματικών φράσεων. Βασιζόμενη στην κατανομή, τη μορφολογική ανάλυση και τη σημασία των φράσεων αυτών, η παρούσα μελέτη καταλήγει ότι μόνο το πιο είναι γραμματικό μόρφημα αλλόμορφο του -τέρος και πραγματώνει μία κεφαλή βαθμού/σύγκρισης.

Λέζεις-κλειδιά: συγκριτικές δομές, συγκριτικός δείκτης, δομές βαθμού

#### 1 Introduction

The aim of this paper is to examine the internal structure of the comparative phrase by focusing on the properties and distribution of Greek comparative markers. §2 introduces the theoretical debate regarding the syntax of the comparative, the Greek comparative markers, and background assumptions regarding the structure of positive adjectives. §3 shows that, contra to current analyses, Greek comparative markers do not share the same properties, hence they call for distinct analyses. §4 proposes that only  $\pi io/-\tau \epsilon \rho o \varsigma$  realise a Deg<sup>0</sup> and form comparatives, whereas  $\pi \epsilon \rho i \sigma \delta \tau \epsilon \rho o$  "more"/ $\lambda i \gamma \delta \tau \epsilon \rho o$  "less/fewer" are modifiers of the degree argument of positive adjectives and  $\pi \alpha \rho \alpha \pi \acute{\alpha} \nu o$  "more, over" is a content word. §5 Concludes.

#### 2 Background on Comparative Markers

#### 2.1 The Theoretical Debate

There has been a long-standing debate regarding the syntactic status of *more* and its position in the comparative phrase. It has been argued that *more* is an XP adjoined to the gradable predicate (Neeleman et al. 2004); a quantifier modifying a covert *much*, or *many* or gradable predicate, depending on the type of the comparative (Bresnan 1973); an argument of the gradable adjective (Larson 1988, Pancheva-Izvorski 2000); or a head (Deg<sup>0</sup>/Q<sup>0</sup>) that selects a gradable predicate as it complement (Abney 1987, Corver 1997, 2005, Kennedy 1999). A pertinent question is the status of *more* as an XP distinct from the gradable predicate, or as a head in its extended projection.

### 2.2 Greek Comparative Markers

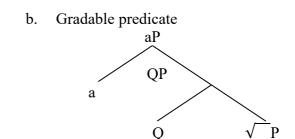
In Greek, several comparative markers have been identified. More specifically, the synthetic and the analytic comparative forms are formed with the addition of the suffix  $-\tau \epsilon \rho o \varsigma$  or the marker  $\pi \iota o$  'more', which are analysed as  $Deg^0s$  (Cheila-Markopoulou 1986, Merchant 2012). Recently, two more comparative markers have been identified:  $\pi \epsilon \rho \iota \sigma \delta \tau \epsilon \rho o$  'more' also analysed as a realisation of  $Deg^0$  (Merchant 2012) and  $\pi \alpha \rho \alpha \pi \delta v o$  'over, more' (Arregi 2013, Giannakidou and Yoon 2011, Giannakidou 2012, Matushansky and Ionin 2011). If all four comparative markers are indeed realisations of the same head ( $Deg^0$ ) a straightforward prediction is made: they should share the same distribution. In the following section, I place under scrutiny their distribution and show that this prediction is not borne out; hence I argue that, contra to previous analyses or assumptions, Greek comparative markers should not receive a uniform syntactic analysis.

Before proceeding any further with the examination of Greek comparative markers, I will present the internal structure of positive adjectives as the comparative form is "built" on the positive (Bobaljik 2012, Caha 2017, De Clercq and Wyngaerd 2017, Caha et al. 2019; a.o.).

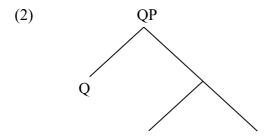
### 2.3 Background on Positive Gradable Adjectives

Assuming that gradable predicates are semantically different than non-gradable ones (cf. Kennedy 1999 *et seq.*) and by adopting syntactic proposals that explain gradability as head-movement of A to Q (Corver 1997, Matushansky 2002), I assume that the difference between gradable and non-gradable adjectives boils down on whether the adjective spells out a quantificational functional layer, in other words wether little *a* (in the sense of Marantz 2007) is inserted above Q or not (1).

a. Non-gradable predicate aP



In cases where a gradable reading is forced to a non-gradable predicate (much support in Corver's 1997 terms or scalarity coercion as in Matushansky 2002), a quantificational layer is added above a (2)



 $a \sqrt{P}$ 

Also following recent findings regarding the structure of positive adjectives, I assume that measure phrases are not arguments of the positive adjectives but predicates/modifiers of their non-thematic argument (Schwarzschild 2005, Kennedy 2007, Corver 2009).

## **3** Greek Comparative Markers

### 3.1 The distribution of Greek Comparative Markers

In this section, I will show that the three Greek Comparative Markers do not appear in the same types of comparative constructions. Depending on the type of XP the comparative marker combines with, we can distinguish comparatives as AdjP-comparisons (3), Predicative NP-comparisons (4), NP-comparisons/amount comparatives (5), VP-comparisons (6) and AdvP-comparatives (7). If all Greek comparative elements were a realization of Deg<sup>0</sup>, then we would expect them to share the same distribution across these types of comparatives. However, as sentences (3) - (7) show, this prediction is not borne out.

- (3) α. Ο Γιάννης είναι πιο/ περισσότερο/ λιγότερο/ \*περισσότερος/ \*λιγότερος/ \*παραπάνω έξυπνος από τον Μιχάλη. (predicative AdjP) "John is more/less smart than Michalis."
  - β. Ο Γιάννης είναι πιο/ περισσότερο/ λιγότερο/ \*περισσότερος/ \*λιγότερος/ \*παραπάνω έξυπνος μαθητής από τον Μιχάλη. (attributive AdjP) "John is a smarter/less smart student than Michalis."
- (4) Ο Γιάννης είναι πιο/ περισσότερο/ λιγότερο/ \*περισσότερος/ \*λιγότερος/ \*παραπάνω νοικοκύρης από τον Μιχάλη. (predicative NP) "John is more/less tidy than Michalis."
- (5) Ο Γιάννης έκανε \*πιο/ \*περισσότερο/ \*λιγότερο/ περισσότερα/ λιγότερα/ παραπάνω (λάθη) από 3 (λάθη). (amount/NP) "John made more/fewer than 3 mistakes."
- (6) Ζυγίζει \*πιο/ περισσότερο/ λιγότερο/ \*περισσότερος/ \*λιγότερος παραπάνω από 20 κιλά.  $^1$  (VP)
  - "It weighs more/less than 20kg."
- (7) Τον επισκέπτεται πιο/ περισσότερο/ λιγότερο/ \*περισσότερος/ \*λιγότερος/ \*παραπάνω συχνά από την κόρη του.
  - "S/he visits him more/less often than his daughter."

Table 1 below illustrates the distribution of comparative markers across the different types of comparative constructions. In sum,  $\pi\iota o$  "more" combines only with Adjectives, NPs and Adverbs that denote a gradable property;  $\pi\epsilon\rho\iota\sigma\delta\tau\epsilon\rho\sigma\varsigma_{Adj}/\lambda\iota\gamma\delta\tau\epsilon\rho\sigma\varsigma_{Adj}$  and  $\pi\epsilon\rho\iota\sigma\sigma\delta\tau\epsilon\rho\sigma_{Adv}/\lambda\iota\gamma\delta\tau\epsilon\rho\sigma_{Adv}$  "more" are in complementary distribution: the adjectival form is used in amount/NP comparisons whereas the adverbial form in all other types; finally,  $\pi\alpha\rho\sigma\pi\acute{\alpha}\nu\omega$  ("over, more") is found only in NP and VP comparisons.

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<sup>&</sup>lt;sup>1</sup> The construction in (i) is an NP comparison equivalent to (3) above.

<sup>(</sup>i) Ζυγίζει περισσότερα/λιγότερα από 20 κιλά. "He/She/It weighs more than 20kg."

	πιο	περισσότερο <sub>ΑDV</sub> λιγότερο <sub>ADV</sub>	περισσότερος,-η,-ο λιγότερος, -η, -ο	παραπάνω
Gradable ADJs	<b>&gt;</b>	V	*	*
Gradable predicative NPs	<b>V</b>	V	*	*
NP-comparisons	*	*	V	<b>✓</b>
VP-comparisons	*	V	*	<b>√</b>
AdvP-comparisons	<b>V</b>	V	*	*

Table 1 | Distribution of comparative markers across different types of comparative constructions

### 3.1 The morphology of Greek Comparative Markers

The three elements also differ with respect to their morphology. Περισσότερο(ς) ("more" ADJ/ADV) and λιγότερο(ς) ("less/fewer" ADJ/ADV) are the synthetic comparative forms of the gradable properties πολύ(ς) ("many/much" ADJ/ADV) and λίγο(ς) ("less/fewer" ADJ/ADV) respectively.

Positive Degree	Comparative Degree
πολύ	περισσότερο
"much" (ADV)	"more" (ADV)
πολύς/πολλή/πολύ	περισσότερος/-η/-ο
"much/many" (ADJ)	"more" (ADJ)
λίγο	λιγότερο
"little" (ADV)	"less" (ADV)
λίγος/-η/-ο	λιγότερος/-η/-ο
"little/few" (ADJ)	"less/fewer" (ADJ)

Table 2 | Περισσότερο(ς) and λιγότερο(ς) are comparative forms of πολύ(ς) and λίγο(ς) respectively.

 $\Pi$ αραπάνω on the other hand is a locative adverb derived from πάνω "over" and the intensifier παρά, while the monosyllabic πιο "more" is non-decomposable. This is also evident by the fact that it alternates with the comparative morpheme  $-\tau$ ερ- (7).

- (8) παραπάνω < παρά + πάνω
- (9) μεγαλύτερος "bigger" / πιο μεγάλος "more big"

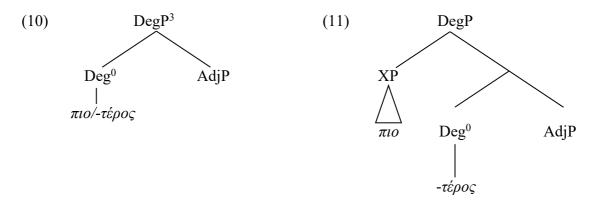
Based on the above facts we can only conclude that  $\pi \iota o$  is a (functional) head whereas  $\pi \epsilon \rho \iota \sigma \delta \tau \epsilon \rho o(\varsigma) / \lambda \iota \gamma \delta \tau \epsilon \rho o(\varsigma) / \pi \alpha \rho \alpha \pi \dot{\alpha} v \omega$  are not.

### 4 The Syntax of Greek Comparative Markers

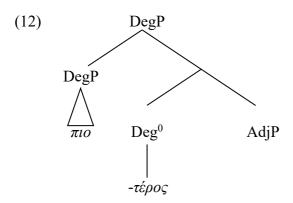
#### 4.1. The syntax of $\pi io$

As shown in the previous section, based on the limited distribution of  $\pi io$  "more", which combines only with gradable predicates, and its simple internal structure, it is safe to assume that  $\pi io$  is a head. The question that follows then is which type of head it is. Amongst theories of *more* as a head, there are two main variants regarding its position in the Degree Phrase (DegP). *More* is either analysed as a realisation of Deg<sup>0</sup> in the extended projection of the adjective and an allomorph to -er (Kennedy 1999, a.o.) or it is merged to the Spec,DegP and alternates with -er, which is merged in Deg<sup>0</sup>, due to a

criterion condition, which blocks the co-occurrence of both (Corver 2005). According to both theories, comparative semantics is borne by the Deg<sup>0</sup>. Based on the aforementioned proposals for English *more/-er*, two possible analyses could be pursued for  $\pi \iota o$  "more": one based on Kennedy's (1999) proposal illustrated in (10) and one based on Corver's (2005) proposal illustrated in (11) below. <sup>2</sup>



Let's first turn in the construction in (11). Given that comparative forms with  $\pi\iota o$  and comparatives with  $-\tau\epsilon\rho\sigma\varsigma$  have the same comparative meaning and the same distribution, it follows that either  $\pi\iota o$  carries comparative degree semantics or it is expletive, and the comparative meaning is carried by a covert  $Deg^0$ . However, as Schwarschild (2010) shows, the postulation of covert comparative heads over-generates unattested readings in several environments. Therefore, the latter is ruled out. So, the only analysis available is that  $\pi\iota o$  "more" carries comparative degree semantics. Then (11) should be reiterated as in (12). However, the structure in (12) predicts infinite DegP recursion, a prediction that is not borne out. Based on these facts, the only available option is to analyse  $\pi\iota o$  "more" as an allomorph of  $-\tau\epsilon\rho\sigma\varsigma$  as in (10). So  $\pi\iota o$  "more" is a  $Deg^0$  that alternates with  $-\tau\epsilon\rho$ —"more".



4.2. The syntax of περισσότερο(ς) "more" and  $\lambda_{1}$ γότερο(ς) "less/fewer"

Based on the data in §3, we concluded that  $\pi \epsilon \rho \iota \sigma \delta \tau \epsilon \rho o(\varsigma)$  "more" and  $\lambda \iota \gamma \delta \tau \epsilon \rho o(\varsigma)$  "less/fewer" are XPs and more specifically they are the comparative form of the quantity words  $\pi o \lambda \delta (\varsigma)$  "many, much" and  $\lambda \delta (\varsigma)$  "few, little". The adjectival forms are

<sup>&</sup>lt;sup>2</sup> For expository purposes I ignore the double comparative head hypotheses (De Clercq and Wyngaerd 2017, Makri 2018). Either analysis can be reiterated in a double comparative head framework.

<sup>&</sup>lt;sup>3</sup> Kennedy (1999) actually assumes that  $Deg^0$  accommodates either a null morpheme for positive adjectives or comparative morphemes (more/-er) for comparative adjectives. This is slightly different from the analysis of positive adjectives we assume here as the latter involves an additional layer.

used in NP comparisons whereas the adverbials in all other environments. A question contingent on the XP status of the adverbial  $\pi \epsilon \rho \iota \sigma \delta \tau \epsilon \rho \sigma$  "more" and  $\lambda \iota \gamma \delta \tau \epsilon \rho \sigma$  "less/fewer" is whether they are adjuncts to the gradable predicate they adjoin to (Bresnan 1973, Neeleman et al. 2004) or not. If *more* is an adjunct, then it is expected to have a less rigid word-order with respect to the XP it modifies, e.g. to be able to precede or follow it (13-a). Furthermore, it is expected to extrapose independently from the XP it adjoins to (13-a) and vice versa (14-a) (Neeleman et al. 2004). As expected, these predictions are borne out when  $\pi \epsilon \rho \iota \sigma \delta \tau \epsilon \rho \sigma$  "more" and  $\lambda \iota \gamma \delta \tau \epsilon \rho \sigma$  "less/fewer" are used in VP comparisons, however, this is orthogonal to their status as comparative markers —the same pattern would be observed with any other (non-)comparative adverb (in (13) and (14) compare sentence a to sentences b and c below).

- (13) a. (Περισσότερο/ λιγότερο) η Μαρία (περισσότερο/ λιγότερο) αγαπά (περισσότερο/ λιγότερο) τον Γιάννη (περισσότερο/ λιγότερο) "Mary loves John more/less"
  - b. (Παθιασμένα) η Μαρία (παθιασμένα) αγαπά (παθιασμένα) τον Γιάννη (παθιασμένα)
    - "Mary loves John passionately"
  - c. (Πιο παθιασμένα) η Μαρία (πιο παθιασμένα) αγαπά (πιο παθιασμένα) τον Γιάννη (πιο παθιασμένα)
    - "Mary loves John more passionately"
- (14) α. Αγαπά η Μαρία περισσότερο/ λιγότερο τον Γιάννη.
  - "Mary loves John more/less"
  - b. Αγαπά η Μαρία παθιασμένα τον Γιάννη.
    - "Mary loves John passionately"
  - Αγαπά η Μαρία πιο παθιασμένα τον Γιάννη.
    - "Mary loves John more passionately"

As we can see, the same pattern is replicated even when the comparative quantity words modify adjectives: (15) shows that the adverb may precede or follow the adjective it modifies. Sentences (16-a) and (17-a) show that the gradable predicate may extrapose without the comparative word, (16-b) and (17-b) show that the comparative quantity words may extrapose without the gradable predicate.<sup>4</sup> Finally, sentences (16-c) and (17-c) show that the comparative word forms a constituent with the standard - if it extraposes it must pied-pipe the standard.

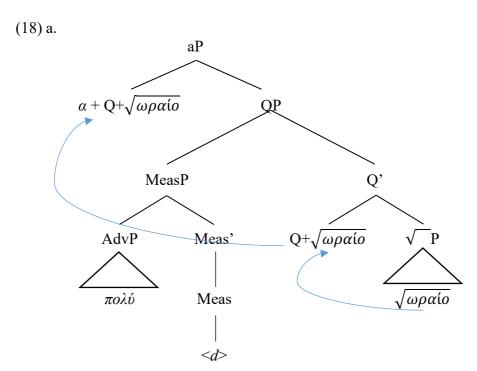
- (15) Ο Γιάννης είναι (περισσότερο) εφευρετικός (περισσότερο) απ' ό,τι νόμιζα. "John is more inventive than I thought."
- (16) α. Εφευρετικός, θεωρώ ότι είναι περισσότερο από τη Μαρία ο Γιάννης.
  - b. Περισσότερο από τη Μαρία, θεωρώ ότι είναι εφευρετικός ο Γιάννης.
  - c. \*Περισσότερο θεωρώ ότι είναι εφευρετικός από τη Μαρία ο Γιάννης. (For a-c: "I believe that John is more inventive than Mary")
- (17) a. Εφευρετικό, θεωρώ περισσότερο από τη Μαρία τον Γιάννη.
  - b. Περισσότερο από τη Μαρία, θεωρώ εφευρετικό τον Γιάννη.
  - c. \*Περισσότερο θεωρώ εφευρετικό από τη Μαρία τον Γιάννη. (For a-c: "I consider John more inventive than Mary.")

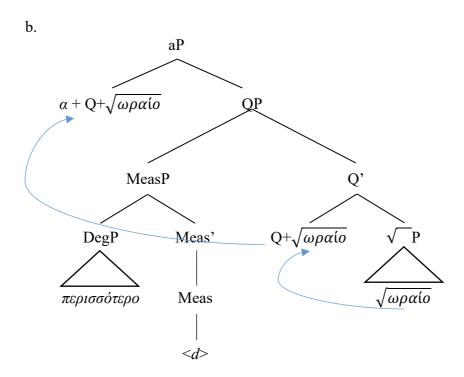
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<sup>&</sup>lt;sup>4</sup> Extraposition cannot work as a diagnostic if  $\pi$ ερισσότερο "more" and  $\lambda$ ιγότερο "less/fewer" modify an adverb: adjuncts are strong islands hence extraction out of them is ungrammatical.

The obligatory extraposition of the standard phrase along with the comparative phrase suggests that they form a constituent. On the other hand, the fact that the gradable predicate on the one hand and the comparative phrase on the other may extrapose independently suggest that the comparative phrase is an adjunct to the gradable adjective.

I would like to propose that  $\pi \epsilon \rho \iota \sigma \sigma \delta \tau \epsilon \rho o$  ("more" ADV) and  $\lambda \iota \gamma \delta \tau \epsilon \rho o$  ("less" ADV) are actually measure phrases modifying the VP or the positive AdjP. Therefore,  $\pi \epsilon \rho \iota \sigma \sigma \delta \tau \epsilon \rho o$  ("more" ADV) and  $\lambda \iota \gamma \delta \tau \epsilon \rho o$  ("less" ADV) are merged in the same position as their non-comparative counterparts  $\pi o \lambda \delta$  ("much" ADV) and  $\lambda i \gamma o$  ("little/few" ADV), cf. (18). Such an analysis predicts that gradable adjectives and coerced non-gradable adjectives modified by  $\pi \epsilon \rho \iota \sigma \sigma \delta \tau \epsilon \rho o$  ("more" ADV) or  $\lambda \iota \gamma \delta \tau \epsilon \rho o$  ("less" ADV) can have evaluative interpretations (in contrast to true comparatives formed with  $\pi \iota o$ ).





In sum, Greek clearly shows that there are two distinct ways to form a comparative construction: the former involves the use of a functional head realised as  $\pi\iota o$  or  $-\tau\epsilon\rho\circ\varsigma$ . The latter involves the use of the comparative form of a quantity word as a modifier to the positive adjective.

This proposal is further corroborated by English, where the synthetic form of comparative adjectives has an evaluative reading that is not available with the analytic form (Kennedy and McNally 2013). The analytic form in (19) entails the positive degree, namely that the subject is well prepared, whereas the synthetic form does not. This is naturally explained with the analysis proposed in this section: *more* is the phrasal suppletive adverb equivalent to  $\pi \epsilon \rho \iota \sigma \delta \tau \epsilon \rho \sigma$  "more" that adjoins to the positive degree, therefore it entails the positive. On the other hand, *better* is the comparative form therefore the evaluative reading is not available.<sup>5</sup>

- (19) a. My brother was more well prepared for the events than the rest of us were.
  - b. My brother was better prepared for the events than the rest of us were.

Corroborating evidence for the existence of a comparative adjunct *more* comes from metalinguistic comparatives, which are only formed with more instead of the analytic comparative form of the gradable predicate (Hankamer 1973, a.o.). In English these two types of comparatives coincide in adjectives that form only analytic comparatives, but they can be distinguished in adjectives that have synthetic comparative forms.

(20) \*The army was richer than brave. (Hankamer 1973)

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<sup>&</sup>lt;sup>5</sup> A question that arises is whether English has much-support and there is also an equivalent of  $\pi\iota o$  ('more'). The pair in (19) is not informative regarding that: the reading of (19-a) is stronger than the reading of (19-b) so it always entails (19-b). The existence of -er and its equivalence to  $-\tau\epsilon\rho\sigma\varsigma$  may implicate that in English there is also a "more" that is equivalent to  $\pi\iota o$  "more".

Furthermore, French also seems to have a form equivalent to  $\pi \epsilon \rho \iota \sigma \delta \tau \epsilon \rho \sigma$  "more" apart from the comparative degree head. Firstly, like (20) French metalinguistic comparatives cannot be formed using the synthetic comparative form (21):

(21) En fait il est plus bon/ (\*meilleur) que méchant. in fact he is more good better than wicked. "In fact, he is more good than bad." (Fuchs 2014: 90)

Even in cases where the adjective does not form synthetic comparatives we can detect the existence of two *mores*: *plus* "more" is pronounced differently depending on the construction it participates in: in a metalinguistic comparative it does not form a liaison with the gradable predicate and it is pronounced as [plys], whereas in (22-b) it is pronounced as [plyz] (Fuchs 2014: 96). The analysis that has been put forward based on the Greek data correctly predicts this phonological distinction: the *plus* that is equivalent to  $\pi io$  "more" belongs to the extended functional projection of the adjective therefore morphophonological phenomena like liaison are expected, whereas the *plus* that is equivalent to  $\pi \epsilon \rho i\sigma \sigma \delta \tau \epsilon \rho o$  "more", which is found in metalinguistic comparatives, is an adjunct.

(22) a. Il est plus [plys] idiot que méchant he is more idiot than wicked.
"He is more idiot than wicked." (metalinguistic comparative)
b. Il est plus [plyz] idiot que méchant he is more idiot than wicked.
"He is more idiot than wicked." (degree comparative)

Finally, the availability of an adjunct *plus* "more" in French is also demonstrated by extraposition facts (23)

(22) a. Pierre est plus grande que Paul. more big Peter is than Paul. "Peter is more big/bigger than Paul." grande, plus que b. Pierre est Paul. more than Paul. Peter is big "Peter is big, more than Paul."

In this section, I showed that  $\pi \epsilon \rho \iota \sigma \sigma \sigma \tau \epsilon \rho \sigma$  "more" is not a Deg<sup>0</sup> but a modifier to the positive adjective. Let us now turn to the last element that has been identified as a Greek comparative marker.

### 4.3. The syntax of παραπάνω "more, over"

The distribution of  $\pi\alpha\rho\alpha\pi\acute{\alpha}\nu\omega$  "over, more" might seem puzzling at first sight: it does not participate in the formation of comparative forms of adjectives/adverbs, it does not carry comparative morphology and its distribution partly overlaps with the distribution of adjectives (it modifies NPs) and adverbs (it modifies VPs). What is interesting though, is that it has the exact same distribution even with its locative, non-comparative readings: (22) shows that it modifies adverbs and (23) nominals. This distribution is found in other locatives as well, e.g.  $\pi\acute{\alpha}\nu\omega$  "on, above, over",  $\pi\alpha\rho\alpha\kappa\acute{\alpha}\tau\omega$  "below".

- (22) α. Ανέβα λίγο παραπάνω/ πάνω.
  - "Ascend little more/higher"/ "Come up".
  - b. Προχώρα λίγο παραπάνω/ παρακάτω.
    - "Move further up/down."
  - c. Το σπίτι τους είναι λίγο παραπάνω/ παρακάτω/ πάνω από το δικό μας. "Their house is little further than ours."
  - d. Περίμενα παραπάνω/πάνω από μία ώρα.
    - "I waited over an hour."
- (23) α. η παραπάνω/παρακάτω γειτονιά
  - "the neighbourhood further up/down."
  - b. ο παραπάνω/παρακάτω όροφος
    - "the floor above/ below"
  - c. τα παραπάνω κιλά

"the extra kilos"

Corroborating evidence that  $\pi\alpha\rho\alpha\pi\acute{\alpha}\nu\omega$  "over, more" is no different from its locative counterpart comes from the formation of word  $\pi\alpha\rho\alpha\pi\alpha\nu\acute{\iota}\sigma\iota\sigma\varsigma$  "additional". The suffix -  $i\sigma\iota\sigma\varsigma$  combines with [+concrete] nominals referring to (a) animals), (b) location (c) human beings or parts of the body (d) objects or products (e) plants (f) time (Anastasiadi-Simeonidi 2015). Therefore, the fact that  $\pi\alpha\rho\alpha\pi\acute{\alpha}\nu\omega$  "over, more" can function as a base for derivatives with the suffix  $-i\sigma\iota\sigma\varsigma$  indicates that it is not a functional comparative/degree morpheme. As Anastasiadi-Simeonidi (2015) points out, the suffix  $-i\sigma\iota\sigma\varsigma$  combines with nominals and three adverbs:  $\pi\alpha\rho\alpha\pi\acute{\alpha}\nu\omega$  "more",  $\pi\alpha\rho\alpha\pi\lambda\acute{\alpha}\gamma\iota\alpha$  "side" and  $\alpha\nu\tau\acute{\iota}\kappa\rho\nu$  "opposite". One can assume that it combines directly with the adverbs or following Berthonneau's (1989: 493) analysis for similar phaenomena in French, these function as nominals (24). So, the formation of  $\pi\alpha\rho\alpha\pi\alpha\nu\acute{\iota}\sigma\iota\sigma\varsigma$  "additional" is shown in (25).

(24) α. Το παραπάνω δε βλάπτει.

"The excess does not harm."

- b. Τον αντάμειψε και με το παραπάνω.
  - "S/he rewarded him to excess."
- (25) παραπάνω<sub>Adv</sub> → παραπάνω<sub>N</sub> → παραπανίσιος<sub>Adj</sub>

Based on these facts, I would like to propose that  $\pi\alpha\rho\alpha\pi\acute{a}v\omega$  is not a functional word forming comparatives. Instead, it is a content word with locative and comparative interpretations. <sup>6</sup>

#### 5 Conclusions

In this paper I showed that amongst the Greek comparative markers that have been identified in the literature, only  $\pi io$  and  $-\tau \epsilon \rho o \varsigma$  are a realization of a degree head. The other elements that have been identified in the literature as comparative markers

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<sup>&</sup>lt;sup>6</sup> One could argue that παραπάνω "over, more" is under a grammaticalisation process and that it will eventually evolve to another comparative marker. I leave to future investigation the examination of this hypothesis.

actually have different properties. Περισσότερο "more" and λιγότερο "less/fewer" are the comparative forms of the quantity words  $\pi o \lambda \dot o$  "much" and  $\lambda i \gamma o$  "little/few" respectively, and they share the same distribution as their non-comparative counterparts as modifiers of the degree argument of the positive adjectives. Finally,  $\pi \alpha \rho \alpha \pi \dot a v o$  "more/over" is a locative adverb, which receives degree interpretations, similarly to other content words (well, different). The proposal that Greek more-s actually correspond to different constructions is further corroborated by cross-linguistic facts.

#### References

- Abney, Steven Paul. 1987. "The English Noun Phrase in its Sentential Aspect." PhD diss, MIT.
- Anastasiadi-Simeonidi, Anna. 2015. "Επιθηματοποίηση και η έκφραση του χώρου και του χρόνου στη Νέα Ελληνική" ("Suffixation and the expression of space and time in Modern Greek". In *Proceedings of Patras International Conference of Graduate Students in Linguistics*, edited by Katerina Fragkopoulou, Foteini Kalamida, Timon Kardamas, Konstantina Kordouli, Michalis Marinis, Christina Panagiotou, and Nicole Vassalou. Patras: University of Patras.
- Arregi, Karlos. 2013. The syntax of Comparative Numerals. In *NELS 40: Proceedings* of the 40th Annual Meeting of the North East Linguistic Society Vol. 1, edited by Seda Kan, Claire Moore-Cantwell, and Robert Staubs, 45-58. Cambridge, MA, USA.
- Berthonneau, Anne-Marie. 1989. "Composantes linguistiques de la référence temporelle. Les compléments de temps. Du lexique à l'énoncé." PhD diss., Paris VII.
- Bobaljik, Jonathan D. 2012. *Universals in Comparative Morphology: Suppletion, superlatives, and the structure of words.* Cambridge, MA: MIT Press.
- Bresnan, Joan. 1973. "Syntax of the Comparative Clause Construction in English". *Linguistic Inquiry* 4(3):275-343.
- Caha, Pavel, De Clercq, Karen and Guido Vanden Wyngaerd. 2019. The Fine Structure of the Comparative. *Studia Linguistica*, 73(3):470–521.
- Caha, Pavel. 2017. Explaining Bobaljik's Root Suppletion Generalization as an Instance of the Adjacency Condition (and Beyond). In *Language Use and Linguistic Structure: Proceedings of the Olomouc Linguistics Colloquium 2016* edited by Joseph Emonds and Markèta Janebová, 193–208. Olomouc: Palacky University Olomouc.
- Cheila-Markopoulou, Despina. 1986. "Τα συγκριτικά της Νέας Ελληνικής: Συντακτική ανάλυση του συγκριτικού βαθμού των επιθέτων και των επιρρημάτων. ("The Modern Greek Comparatives: A syntactic analysis of the comparative form of MG adjectives and adverbs"). PhD diss., National Kapodistrian University of Athens.
- Corver, Norbert. 1997. "The Internal Syntax of the Dutch Extended Adjectival Projection." *Natural Language and Linguistic Theory* 15(2):289–368.
- Corver, Norbert. 2005. "Double comparatives and the comparative criterion." *Recherches Linguistiques de Vincennes* 34:165–190.
- Corver, Norbert. 2009. "Getting the (syntactic) measure of Measure Phrases". *The linguistic Review* 26(1):67-134.

- De Clercq, Karen and Guido Vanden Wyngaerd. 2017. "\*ABA revisited: Evidence from Czech and Latin degree morphology". *Glossa: a journal of general linguistics* 2(1):69.
- Fuchs, Catherine. 2014. La comparaison et son expression en français ("The comparison and its expression in French"). Paris: Éditions Ophrys.
- Giannakidou, Anastasia. 2012. "The Landscape of Greek Quantifiers." In *Handbook of Quantifiers in Natural Language*, edited by Denis Paperno and Edward L. Keenan, 285–346. Dordrecht: Springer.
- Giannakidou, Anastasia and Suwon Yoon. 2011. "The subjective mode of comparison: Metalinguistic comparatives in Greek and Korean." *Natural Language and Linguistic Theory* 29(3):621-655.
- Hankamer, J. (1973). Why there are two than's in English. In *Papers from the Ninth Meeting of the Chicago Linguistic Society* edited by Claudia Corum, P. Cendric Smith-Stark, and Ann Weiser, 179–191. Chicago, ILL, USA: Chicago Linguistic Society.
- Kennedy, Christopher. 1999. Projecting the Adjective: The syntax and semantics of gradability and comparison. New York: Garland Press.
- Kennedy, Christopher. 2007. "Vagueness and grammar: the semantics of relative and absolute gradable adjectives". *Linguistics and Philosophy* 30(1):1-45.
- Kennedy, Christopher, and Louise, McNally. 2013. Degree vs. Manner Well: A case study in selective binding. In *Advances in Generative Lexicon Theory* edited by James Pustejovsky, Pierrette Bouillon, Hitoshi, Isahara, Kyoko Kanzaki, and Chungmin Lee, 247–262. Dordrecht: Springer Netherlands.
- Larson, Richard. K. 1988. "Scope and comparatives." *Linguistics and Philosophy* 11(1):1–26.
- Makri, Maria-Margarita. 2018. "Aspects of Comparative Constructions: Comparative syntax, semantics & L1-acquisition." PhD diss., University of York.
- Marantz, Alec. 2007. Phases and words. In *Phases in the Theory of Grammar* edited by S. H. Choe, 191–222. Seoul: Dong-In Publishing Co.
- Matushansky, Ora. 2002. "More of a good thing: Russian synthetic and analytic comparatives." In *Formal Approaches to Slavic Linguistics 10: The second Ann Arbor Meeting 2001*, edited by Toman Jindřich. Ann Arbor: Michigan Slavic Publications.
- Matushansky, Ora, and Tania, Ionin. 2011. "More than one solution." In Vol. 1 of *Proceedings of the 47th Annual Meeting of the Chicago Linguistic Society*, edited by Carissa Abrego-Collier, Arum Kang, Martina Martinović, and Chieu Nguyen, 231–245. Chicago, Ill., USA: Chicago Linguistic Society.
- Merchant, Jason. 2012. "The two phrasal comparatives of Greek." accessed May 3, 2020. http://home.uchicago.edu/merchant/pubs/gk.comps.rev.pdf
- Neeleman, Adam, van de Koot, Hans, and Jenny Doetjes. (2004). "Degree expressions." *The Linguistic Review*, 21(1):1–66.
- Pancheva-Izvorski, Roumyana. 2000. "Free relatives and related matters." PhD diss., University of Pennsylvania.
- Schwarzschild, Roger. 2005. "Measure phrases as modifiers of adjectives". Recherches linguistiques de Vincennes 34, 207–228.
- Schwarzschild, Roger. 2010. "Comparative Markers and Standard Markers". In *Proceedings of the MIT workshop on comparatives*, edited by Michael Yoshitaka Erlewine and Yasutada Sudo., 87–105. Cambridge, MA: MIT, MITWPL.