## COMPARATIVE STRUCTURES IN ITALIAN

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Comparatives of inequality in Italian are introduced by di or che, have a degree or an absolute negative interpretation, and have a modifying or a balancing function. Comparative di phrases are PP's generated as daughters of VP's or of AP's with a degree interpretation; like other PP's, they can modify or balance two items. Comparative che is a coördinator. When it introduces daughters of VP's or AP's, it has a degree interpretation; when it introduces a sister to S, it has an absolute negative interpretation. Because of the coördinating nature of che, it has only a balancing function.\*

Comparatives of inequality in Italian can be introduced either by di or by che:1

- (1) Mi piacciono più le poesie dei romanzi<sup>2</sup> 'I like poems more than novels.'
- (2) Mi piacciono più le poesie che i romanzi.

The choice between di and che is not free, however, since some comparatives may only have di, while others may only have che:

- (3) Dario è ancora più furbo {di/\*che} Tommaso 'Dario is even more shrewd than Tommaso.'
- (4) Mangio più carne {che/\*di} pesce 'I eat more meat than fish.'

A further difference between di and che comparatives is that, while certain di comparatives may be ambiguous as to the thematic role of the compared NP (the NP introduced by di), the corresponding che comparatives have only one interpretation. Thus, in 5, Luca may be interpreted as either the agent or the patient of amo; in 6, however, Luca may be interpreted only as patient:

- (5) Amo Marta più di Luca 'I love Marta more than I love Luca' OR 'I love Marta more than Luca does.'
- (6) Amo Marta più che Luca 'I love Marta more than I love Luca.' Finally, che comparatives may be interpreted in terms either of a degree or of an 'absolute negative', but di comparatives may have only a degree reading.
- \* We thank Mauro Scorretti for useful discussions at an initial stage of this research, and Frank Casa, Anna Ferruzzi, Enzo Lo Cascio, and Claudio Mazzola for helping us as native speakers. We are also indebted to the University of Michigan for the Rackham Grant to Augment International Academic Partnerships; without this financial help, the paper would not exist. A final thanks goes to Geoff Pullum for comments on an earlier draft.
- <sup>1</sup> The data presented in this paper are representative of standard Italian as spoken in the north of Italy.
  - <sup>2</sup> Dei is the surface form of underlying di+i, where i is the plural masculine article.
- <sup>3</sup> Other terms have been used in the literature on comparatives for the interpretation that we call 'absolute negative'; thus Bolinger 1950, 1953 distinguishes between a 'degree' and an 'exclusivity' reading, while Hellan 1981 uses the terms 'comparative' vs. 'metalinguistic' interpretation. Our terminology is intended to make clear that both types of comparatives have a quantifying function—the difference being whether the quantity has a value relative to something else in higher vs. lower degree, or a value relative to something else in presence vs. absence.

Thus 6 above, unlike 5, may also mean 'I love Marta rather than Luca.'

We will account here both for the distribution of *di* and *che* in comparative constructions and for the interpretations that they allow. In §1, we deal with *di* comparatives; in §2, with the category of *che*. Our §3 is devoted to *che* comparatives with a degree reading, and §4 to *che* comparatives with an absolute negative reading. In §5, we offer concluding remarks.

### DI COMPARATIVES

1.1. We wish to argue here that di is a preposition, and we present six arguments.

First, Italian has a homophonous preposition which occurs independently of comparatives. Our hypothesis, then, consists simply of saying that the expression of degree is a use of this preposition.

Our second argument is based on the distribution of comparative di: the types of phrases introduced by comparative di are all and only those introduced by the preposition di: NP's, infinitivals, adverbs with deictic value (e.g. ieri 'yesterday', prima 'before'), and QP's. Examples of these structures with noncomparative uses of di are given in 7, and with the comparative use of di in 8:

- (7) a. NP: Ho sentito parlare di Carlo 'I've heard people speaking about Carlo.'
  - b. Inf: L'idea di sposarlo non mi piace 'I don't like the idea of marrying him.'
  - c. ADV: La stessa ragazza di ieri è tornata a trovarti 'The same girl as yesterday returned to see you.'
  - d. QP: È arrivato un pacco di tre chili 'A three-kilo package arrived.'
- (8) a. NP: Amo Carlo più di Luca 'I love Carlo more than Luca.'
  - b. Inf: Mi piace più mangiare di bere 'I like eating more than drinking.'
  - c. Adv: Oggi è più caldo di ieri 'Today is warmer than yesterday.'
  - d. QP: Pesa più di quanto tu non creda<sup>5</sup> 'He weighs more than you think.'
- <sup>4</sup> This is not entirely accurate—since, with certain [-specific] pronouns (including qualcosa 'something', niente 'nothing', and nessuno 'nobody'), the preposition di can introduce an AP:
  - (a) Mi sembra che ci sia qualcosa di molto strano in lui 'It seems to me that there's something very strange about him.'
  - (b) Non c'è niente di gradevole in quel posto 'There's nothing pleasant in that place.'
  - (c) Non c'era nessuno di nuovo da Luca 'There was nobody new at Luca's.'

This use of di, however, cannot occur with any other type of head noun:

(d) \*Ho trovato un libro di interessante 'I found an interesting book.'

Thus, in general, di cannot introduce AP's. We do not believe that the data in (a-c) constitute a problem for our argument.

A second apparent counter-example to our claim about the distribution of di involves partitives. We return to this point below.

<sup>&</sup>lt;sup>5</sup> For an analysis of *quanto* comparatives, with evidence that the material following *di* is a QP, see Bracco 1980.

The third argument is based on the fact that the constituent following di cannot be extracted, just as the object of a preposition cannot be extracted stranding the preposition:

- (9) \*Chi è più bello di? 'Who is he more beautiful than?'
- (10) \*Chi è l'amico di? 'Who is he the friend of?'

Fourth, the clitic ne can correspond to comparative di+NP, just as it can to many PP's having di as head. Examples of ne with the value of a di PP are given in 11–12, and with the value of a comparative phrase in 13:6

- (11) a. Ho comprato un pacchetto di sigarette 'I bought a pack of cigarettes.'
  - b. Ne ho comprato un pacchetto 'I bought a pack of them.' (clitic)
- (12) a. Sono molto fiera di lui 'I'm very proud of him.'
  - b. Ne sono molto fiera 'I'm very proud of him.' (clitic)
- (13) a. È migliore di Luca 'She's better than Luca.'
  - b. Ne è migliore 'She's better than him.' (clitic)

A fifth parallelism between di comparatives and other PP's is that, in both, the NP following di may have the thematic role of either agent or patient. Ex. 5 above, repeated here as 14, illustrates the two roles in comparatives, while 15 illustrates them in non-comparative PP's.

- (14) Amo Marta più di Luca 'I love Marta more than Luca'; i.e., 'I love Marta more than I love Luca' or 'I love Marta more than Luca does.'
- (15) Ho visto il leone con Carlo 'I saw the lion with Carlo'; i.e., 'I saw both the lion and Carlo' or 'Carlo and I both saw the lion.'

Finally, comparatives introduced by *di* resemble various types of PP's in having either the function of modifying a predicate, as in 16a and 17a, or that of balancing two arguments, as in 16b and 17b:

- (16) a. Luca studia più dell'anno scorso 'Luca studies more than last year.'
  - b. Luca studia più di Giacomo 'Luca studies more than Giacomo.'

 $^6$  Not all di comparatives may correspond to the clitic ne; e.g., comparatives of the type illustrated in ex. 1 above may not:

(a) Mi piacciono più le poesie dei romanzi 'I like poems more than novels.' \*Me ne piacciono più le poesie.

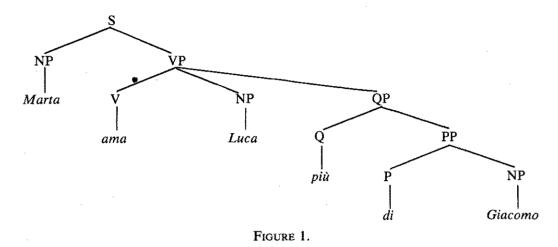
However, several types of di PP's also exist which are equally ungrammatical when cliticized with ne. These include di followed by an NP with temporal meaning, or an NP denoting a substance, or an NP denoting a measure phrase:

- (b) Vorrei andarci di domenica 'I'd like to go there on Sunday.'
  \*Vorrei andarcene.
- (c) Ho comprato un vecchio tavolo di pino 'I bought an old table of pine wood.'
  \*Ne ho comprato un vecchio tavolo.
- (d) Hanno arrostito un maiale di otto chili 'They roasted an eight-kilo pig.'
  \*Ne hanno arrostito un maiale.

The details of specifying which di + NP phrases may correspond to ne would be outside the scope of this paper. It is important here only to note that it is a property of some comparatives with di, just as it is of some PP's with di, to correspond to the clitic ne.

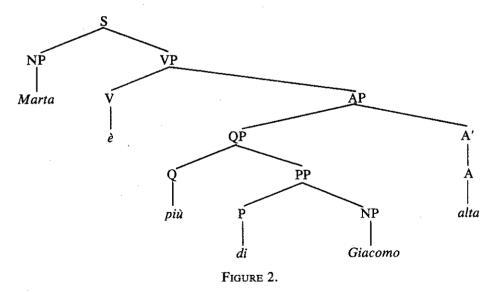
- (17) a. Luca ci va in macchina 'Luca's going there by car.'
  - b. Preferisco il tè al caffè 'I prefer tea to coffee.'

From these six arguments, we conclude that comparative di is a preposition. Thus a sentence like 18 has the structure in Figure 1.<sup>7</sup>



(18) Marta ama Luca più di Giacomo 'Marta loves Luca more than Giacomo.'

Furthermore, a sentence like 19 has the underlying structure of Figure 2.

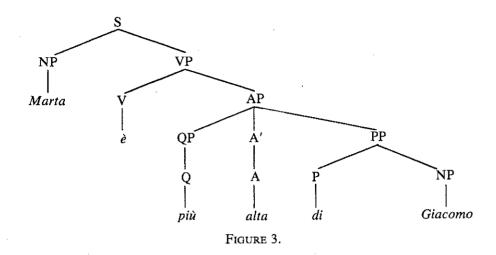


The terminal string of Fig. 2, however, is not a well-formed sentence. We propose that 19 is derived from the structure in Fig. 2 by a rule which applies to the PP inside the QP, postposing it to the end of the AP and resulting in Figure 3 (overleaf).

(19) Marta è più alta di Giacomo 'Marta is taller than Giacomo.'

The reason for the ungrammaticality of the terminal string in Fig. 2 is that Italian is consistently right-recursive; i.e., embedded sentences, as well as ex-

<sup>&</sup>lt;sup>7</sup> We follow Napoli 1983 in base-generating so-called 'comparative ellipsis' comparatives.



panded phrasal complements, are not allowed on the non-recursive side of a phrase with respect to its head. Other non-comparative constructions which show this are:<sup>8</sup>

- (20) a. \*Crede di essere il migliore del mondo ragazzo.
  he.thinks to.be the best of.the world boy
  Crede di essere il migliore ragazzo del mondo.
  'He thinks he's the best boy in the world.'
  - b. \*L' ultimo tra tutti argomento era interessante.
    the last among all argument was interesting
    L'ultimo argomento tra tutti era interessante.
    'The last argument of all was interesting.'

In sum, the QP of Fig. 1 is a degree modifier for the VP, while the QP in Fig. 2 is a degree modifier for the AP.<sup>9</sup> In both, the *di* phrase is a PP.

- <sup>8</sup> An alternative explanation for the ungrammaticality of the first sentence of each pair in exx. 20a-b, as well as for the terminal string of Fig. 2, is the head-final constraint of Williams 1982. Williams (p. 160) claims that English and German have a 'constraint barring post-head material in prenominal modifiers'. In Fig. 2, since *Giacomo* is the complement rather than the head of QP, the terminal string is ruled out. There is evidence, however, that the explanation offered above is superior to the head-final constraint for Italian. Note that, even when a complement which appears in pre-head position contains no post-head material, a phrase with a complement of its own cannot appear to the left of an N within the NP:
  - (a) un losco individuo 'a shady character'
  - (b) \*un completamente losco individuo
  - (c) un individuo completamente losco 'a completely shady character'
- <sup>9</sup> In an example like (a) below, the QP cannot be in the VP since it follows the subject NP, which is directly dominated by S:
  - (a) Mi piacciono le poesie più dei romanzi. me please the poems more than the novels 'I like poems rather than novels.'

We propose that the QP is base-generated in the VP (just as in 18); and that, in (a), it is extraposed to the end of S. Such an extraposition rule—which takes VP complements and moves them to the end of S—is needed, independently of comparatives, with *piacere* 'to please' (and similar verbs which typically take their subject to their right rather than their left):

(b) Mi piacciono i fiori in primavera 'I like flowers in the springtime.'

- 1.2. Several properties of comparative phrases with di are accounted for by positing these structures. First, di governs the accusative case, <sup>10</sup> like other prepositions:
  - (21) a. Mi fido di {te/\*tu} 'I trust you {acc./nom.}'
    - b. Sizzo ama Sofia più di {te/\*tu} 'Sizzo loves Sofia more than you {acc./nom.}'
    - c. È più alto di {me/\*io} 'He's taller than {me/I}.'

Second, given Fig. 1, it must be possible for *più di NP*, which serves there as a VP degree quantifier, to occupy the same positions that other VP degree quantifiers may occupy (e.g. *molto* 'very much'). The examples in 22a-d show that this is the case. Furthermore, *più di NP* may be questioned, just like other VP degree quantifiers, as shown in 22e:<sup>11</sup>

- (22) a. Marta ama Luca {più di Giovanni / molto} 'Marta loves Luca {more than Giovanni / very much}.'
  - b. Marta ama {più di Giovanni / molto} Luca.
  - c. \*Marta {più di Giovanni / molto} ama Luca.
  - d. \*{Più di Giovanni / Molto} Marta ama Luca.
  - e. {Più di chi / Quanto} ami Giovanni? '{More than whom / How much} do you love Giovanni?'

Likewise, given Fig. 2, più di NP, which serves there as an AP degree modifier, should be able to occupy only those positions that other AP degree modifiers can occupy. Furthermore, it should be possible to question such a comparative AP, since other AP degree modifiers can be questioned. This is exactly the behavior of più di NP:

- (23) a. Pino è {più furbo di lei / molto furbo} 'Pino is {shrewder than her / very shrewd}.
  - b. Pino è furbo {più di lei / molto}. (emphatic only)
  - c. \*Pino {più di lei / molto} è furbo.
  - d. \*{Più di lei / Molto} Pino è furbo.
  - e. {Più di chi / Quanto} è furbo Pino? {more than whom / how.much} is shrewd Pino 'Who is Pino shrewder than?'; 'How shrewd is Pino?'

Third, the NP preceding the comparative QP in Fig. 1 should not behave as though it forms a constituent with that QP. This too is the case. Thus the subject

Note further that this extraposition rule is not obligatory, although it is preferred:

<sup>(</sup>c) Mi piacciono più dei romanzi le poesie 'I like poems rather than novels.'
Mi piacciono in primavera i fiori multicolori 'I like multicolored flowers in the springtime.'

Among non-clitic NP's, only 1st and 2nd person singular pronouns exhibit more than one case at the phonetic level. The two cases are nominative vs. everything else; we call this second category 'accusative'. The nominative forms are *io* 'I' and *tu* 'you'; the accusatives are *me* 'me' and *te* 'you'.

<sup>&</sup>lt;sup>11</sup> In 22b, Giacomo may be interpreted only with the thematic role of patient, i.e. the grammatical function of direct object. This is because of its linear position in the sentence: an NP that is immediately preceded by a transitive verb, which is in turn preceded by a subject NP, is usually the direct object.

positions below are typically filled only by a single constituent, and NP più di NP cannot fill those positions.

- (24) a. Cleft sentences:
  - \*È Paolo più di Luigi che Giorgio ama 'It's Paolo more than Luigi that Giorgio loves.' (Cf. È Paolo che Giorgio ama 'It's Paolo that Giorgio loves'; \*È il libro sul tavolo che Giorgio ha messo 'It's the book on the table that Giorgio put.')
  - b. Fronting sentences:
    - \*Paolo più di Luigi Giorgio ama 'Paolo more than Luigi Giorgio loves.' (Cf. Paolo Giorgio ama 'Paolo Giorgio loves'; \*Il libro sul tavolo Giorgio ha messo 'The book on the table Giorgio put.')
  - c. Passive sentences:
    - \*Paolo più di Luigi è amato da Silvia 'Paolo more than Luigi is loved by Silvia.' (Cf. Paolo è amato da Silvia 'Paolo is loved by Silvia'; \*Le forchette sulla tavola sono state messe da Silvia 'The forks on the table were put by Silvia.')
  - d. Si-fronting sentences:
    - \*Le arance più delle mele si mangiano in Sicilia 'Oranges more than apples are eaten in Sicily.' (Cf. Le arance si mangiano in Sicilia 'Oranges are eaten in Sicily'; \*I libri sul tavolo si mettono 'The books on the table are put.')
  - e. Tough sentences:
    - \*Le arance più delle mele sono piacevoli da mangiare 'Oranges more than apples are pleasant to eat.' (Cf. Le arance sono piacevoli da mangiare 'Oranges are pleasant to eat'; \*Le forchette sulla tavola sono importanti da mettere 'The forks on the table are important to put.')

Let us now consider constituency in sentences like 19. Given Fig. 3, più A di NP should appear in sentence-initial position, as other AP's do. And this is so:

(25) Più alta ancora di Giacomo è Marta (emphatic only) 'Even taller than Giacomo is Marta.'

Altissima è Marta (emphatic only) 'Very tall is Marta.'

Fourth, given Fig. 1, we expect that the di+NP which is part of the QP in a comparative cannot appear in preposed position, just as PP's inside other VP degree quantifier phrases cannot. Likewise, it should not be possible to question comparative di+NP, just as PP's inside other VP degree quantifier phrases cannot be questioned. This is also true.

(26) Non-comparatives:

Hai visto molti di loro 'You've seen a lot of them.'

\*Di loro hai visto molti 'Of them you've seen many.'

\*Di chi hai visto molti? 'Of whom have you seen many?' Comparatives:

Ami Carlo più di Luigi 'You love Carlo more than Luigi.'

\*Di Luigi ami Carlo più 'Than Luigi you love Carlo more.'

\*Di chi ami Carlo più? 'Than whom do you love Carlo more?'

Likewise, we expect that the di+NP of a structure like Fig. 3 cannot appear in preposed position to the left of its Q—since other PP's, when their appearance inside an NP or AP depends on a Q, cannot. However, it should be possible to question comparative di+NP in a structure like 19c—since other PP's, when their appearance inside an NP or AP depends upon a Q, can be questioned. Again this is true.

(27) Non-comparatives:

Questo è il primo argomento di tutti 'This is the first argument of all.'

\*Di tutti questo è il primo argomento 'Of all this is the first argument.'

Di quanti questo è il primo argomento? 'Of how many is this the first argument?'

Comparatives:

Marta è più alta di Giacomo 'Marta is taller than Giacomo.'

\*Di Giacomo Marta è più alta 'Than Giacomo Marta is taller.'

Di chi è più alta Marta? 'Than whom is Marta taller?'

We conclude that the structures proposed above, and illustrated in Figs. 1–3, are well motivated. Let us turn now to some additional problems.

- 1.3. Thus far, in most examples of sentences like 18, the quantifier più and the preposition di are adjacent. This is not always the case, however, as seen in ex. 1 and the following:
  - (28) Marta ama più Luca di Giacomo 'Marta loves Luca more than Giacomo.'

To account for similar constructions in English, Bresnan 1973 proposes a rule of quantifier preposing that has the effect of deriving 29b from 29a:

- (29) a. She's intelligent more than pretty.
  - b. She's more intelligent than pretty.

However, the quantifier is not the only item that may be preposed. In English, the AP which contains a quantifier may be preposed to relate sentences such as the following (see Dieterich & Napoli 1982):

- (30) a. She would play the piano more likely than (she would) sing madrigals.
  - b. She would more likely play the piano than (she would) sing madrigals.

The same is true in Italian, where an adverbial or adjectival phrase can be preposed:

(31) ADV: Marta suona il piano più spesso del flauto 'Marta plays the piano more often than the flute.'

Marta suona più spesso il piano del flauto.

ADJ: Considero Luca più intelligente di Giacomo 'I consider Luca more intelligent than Giacomo.'

Considero più intelligente Luca di Giacomo.

In these examples, an optional rule has applied to the comparative phrase following più, moving it out of the QP and to the end of the S. If such a rule does not apply, we get:

(32) Marta ama più di Giacomo, Luca. Marta suona più spesso del flauto, il piano. Considero più intelligente di Giacomo, Luca.

Note that the extraposition rule which moves the comparative phrase out of the QP is not dependent in any way upon the application of QP/AP preposing. Thus, in 33a, QP/AP preposing has not applied; yet PP extraposition optionally (and preferably) applies. To see this, consider subject/predicate inversion. If such inversion and PP extraposition both apply, we get 33c:

- (33) a. Maria è più intelligente di Carlo 'Maria is more intelligent than Carlo.'
  - b. È più intelligente di Carlo, Maria (emphatic only).
  - c. È più intelligente Maria di Carlo.

Furthermore, this extraposition is not limited to comparative QP's, as shown in 34a, nor even to QP's in general. In 34b, extraposition moves a complement from inside AP to the end of S (in both 34a and 34b, subject/predicate inversion has also applied):

- (34) a. È molto bella Maria di faccia 'Maria is very pretty in the face.' (Cf. È molto bella di faccia Maria.)
  - b. È senz' altro bella Maria di faccia 'Maria is without a doubt pretty in the face.' (Cf. È senz' altro bella di faccia Maria.)

However, QP/AP preposing is not an unrestricted movement rule: it can move a QP/AP leftward only across one maximal projection, and only if that maximal projection is its sister. That QP/AP may be preposed only across a maximal projection is shown in 35; that it can be preposed only across a single node is shown in 36; and that this node must be its sister is shown in 37:

- (35) a. Giorgio canta più di Marta 'Giorgio sings more than Marta.' \*Giorgio più canta di Marta.
  - b. Giorgio ama i bambini più di Marta 'Giorgio loves the children more than Marta.'

\*Giorgio ama i più bambini di Marta.

- (36) a. Incoraggio a nuotare Giorgio più di Luca 'I encourage Giorgio to swim more than Luca.'
  - b. Incoraggio a nuotare più Giorgio di Luca.
  - c. \*Incoraggio più a nuotare Giorgio di Luca.
- (37) a. Amo la sorella di Luca più di Marta 'I love Luca's sister more than Marta.'
  - b. Amo più la sorella di Luca, di Marta.
  - c. \*Amo la sorella più di Luca di Marta.
- 1.4. With QP/AP preposing in mind for structures like 18, we can now discuss an additional consequence of our analysis. Given the structure in Fig. 1, and given the fact that PP's can be complements of N's—as well as the fact that

più (or even better, meno 'less') may appear without a dependent di+NP we might expect to find that some sentences with più and di + NP are ambiguous between a comparative and a non-comparative reading for the di phrase; and we do find such examples. Thus 38a, below, has two readings. If passive applies, i bambini di Carlo moves into subject position in the non-comparative interpretation (38b), but only i bambini moves in the comparative interpretation (38c):

(38) a. Luca apprezza meno i bambini di Carlo.

Non-comparative di-phrase reading: 'Luca appreciates less the children of Carlo' (i.e. [NP i bambini di Carlo].

Comparative di-phrase reading: 'Luca appreciates less the children than Carlo' (i.e. [NP i bambini] [PP di Carlo].)

b. I bambini di Carlo sono apprezzati meno da Luca 'The children of Carlo are appreciated less by Luca.'

c. I bambini sono apprezzati meno di Carlo da Luca 'The children are appreciated less than Carlo by Luca.'

Again, 39a has two readings. If passive applies, i bambini di Carlo may be fronted in the non-comparative interpretation (39b), but only i bambini in the comparative interpretation (39c):

(39) a. Si possono apprezzare meno i bambini di Carlo. Non-comparative di-phrase reading: 'One can appreciate less the children of Carlo.'

Comparative di-phrase reading: 'One can appreciate less the children than Carlo.'

b. I bambini di Carlo si possono apprezzare meno 'The children of Carlo can be appreciated less.'

c. I bambini si possono apprezzare meno di Carlo 'The children can be appreciated less than Carlo.'

Finally, 40a also has two readings. In 40b, stufi dei ragazzi may be compared to an A' of the non-comparative interpretation; but in 40c, the string consisting only of stufi can be compared to an A' in the comparative interpretation:

(40) a. Sono meno stufi dei ragazzi. Non-comparative di-phrase reading: 'They are less fed up with the boys (i.e. [AP meno [A' stufi [PP dei ragazzi]]].)

Comparative di-phrase reading: 'They are less fed up than the boys' (i.e. [AP meno [A' stufi] [PP dei ragazzi]].)

b. Sono meno stufi dei ragazzi che stufi della situazione 'They are less fed up with the boys than fed up with the situation.'

c. Sono meno stufi che stanchi dei ragazzi 'They are less fed up than tired of the boys.'

1.5. We argued above that the di which introduces a comparative phrase is a preposition, partly because comparative di can introduce all and only the same categories as the regular preposition di. Apparent counter-examples are seen in 41: although di appears to be introducing an NP, the sentences are ungrammatical. Note that we cannot attribute this ungrammaticality to semantics, since the corresponding sentences with comparative che are grammatical:

- (41) a. \*Mangio più carne di pesce 'I eat more meat than fish' (Cf. Mangio più carne che pesce.)
  - b. \*Vendo più mele di pere 'I sell more apples than pears' (Cf. Vendo più mele che pere.)

The data above are not, however, true counter-examples, since the category following di and che in 41 is not an NP, but rather a PP, where the preposition is phonetically empty. More generally, we propose that a noun without a specifier but with a partitive sense is dominated by PP. We offer five arguments to this effect.

First, partitive nominals without specifiers correspond to the clitic *ne* (the PP clitic) rather than to *lo/la/li/le* (the direct object clitics). This is seen in 42–43 below, where the (b) but not the (c) examples correspond semantically to the (a) examples:<sup>12</sup>

- (42) a. Mangio mele di continuo 'I eat apples all the time.'
  - b. Ne mangio di continuo 'I eat some all the time.'
  - c. Le mangio di continuo 'I eat them all the time.'
- (43) a. Scrivo poesie tutti i giorni 'I write poems every day.'
  - b. Ne scrivo tutti i giorni 'I write some every day.'
  - c. Le scrivo tutti i giorni 'I write them every day.'

Second, transitive prepositions cannot take PP complements in Italian; by transitive prepositions, we mean P's that obligatorily take a complement (in contrast to P's like su 'up' and giù 'down'). Likewise, transitive P's cannot precede a partitive noun which lacks a specifier (as seen in 44), which indicates that the phrasal category that dominates the partitive is PP:

- (44) a. \*Mi piacciono le torte con mele 'I like cakes with apples' (Cf. ... con le mele.)
  - b. \*Vado da bambini molto spesso 'I go to children very often' (Cf. ... dai bambini ...)

The remaining arguments show that partitive nouns without specifiers are not NP's. Thus they cannot be the subjects of passive sentences:

- (45) a. Luca ha ricevuto i bambini 'Luca received the children.'
  - b. I bambini sono stati ricevuti da Luca 'The children were received by Luca.'
- (46) a. Luca ha ricevuto bambini tutto il giorno 'Luca received children all day long.'
  - b. \*Bambini sono stati ricevuti da Luca tutto il giorno 'Children were received by Luca all day long.'

Further, they cannot be the subjects of tough sentences:

<sup>&</sup>lt;sup>12</sup> The (b) examples of 42-43 correspond to the (a) examples, but also to sentences with partitives that have specifiers: *Mangio delle mele di continuo*; *Scrivo delle poesie tutti i giorni*. The (c) examples correspond to sentences with definite direct objects: *Mangio le mele di continuo*; *Scrivo le poesie tutti i giorni*.

- (47) a. È schifoso mangiare i fichi marci 'It's disgusting to eat the rotten figs.'
  - b. I fichi marci sono schifosi da mangiare 'The rotten figs are disgusting to eat.'
- (48) a. È schifoso mangiare frutta marcia 'It's disgusting to eat rotten fruit.'
  - b. \*Frutta marcia è schifosa da mangiare 'Rotten fruit is disgusting to eat.'

Finally, unlike NP's, partitive nouns without specifiers cannot be the subjects of *si*-fronting sentences:

- (49) a. Non si possono mangiare le mele acerbe 'One can't eat unripe apples.'
  - b. Le mele acerbe non si possono mangiare 'Unripe apples can't be eaten.'
- (50) a. Si possono mangiare mele a volontà 'One can eat as many apples as one wants.'
  - b. \*Mele si possono mangiare a volontà 'As many apples as one wants can be eaten.'

Having given five arguments to demonstrate that nouns with a partitive sense and without specifiers are not NP's, but rather PP's, we can now see why 41a-b are ungrammatical: di, a transitive preposition, cannot precede a PP.

To sum up, we can account for all di comparatives with one rule typical of comparative constructions (QP/AP preposing), plus other mechanisms independently motivated in the grammar. We now turn to the analysis of che comparatives.

## CHE COMPARATIVES

- 2.1. As mentioned in our introduction, sentences in which a comparative phrase is introduced by *che* may have two distinct readings, which we will call 'degree' and 'absolute negative'. Both readings are comparative in the sense that they express some property of an element in relation to that same property of another element. The distinction between the two types of construction is that, in degree comparatives, a property is present in both elements, but to greater and lesser degrees; in absolute negative comparatives, however, a property is present in one element but absent in the other. While many sentences are ambiguous between these two readings, they typically have favored interpretations. Thus, in 51–52, both (a) and (b) are ambiguous; but the sentences in (a) are more immediately or readily interpreted as degree comparatives, and those in (b) as absolute negative comparatives:
  - (51) a. Luca è più furbo che intelligente 'Luca is more shrewd than intelligent.'
    - b. Luca è furbo più che intelligente 'Luca is shrewd rather than intelligent.'
  - (52) a. Luca ama più Martina che Camilla 'Luca loves Martina more than Camilla.'

b. Luca ama Martina più che Camilla 'Luca loves Martina rather than Camilla.'

We argue here that, regardless of the reading, the comparative element che is a coördinator. First, unlike di, che can introduce the maximal projection of any major category: 13

- (53) a. Amo più Luca che Giacomo 'I love Luca more than Giacomo.'
  - b. Le mele mi piacciono più gialle che rosse 'I like yellow apples more than red ones.'
  - c. Guidava più lentamente che prudentemente 'He drove more slowly than carefully.'
  - d. È meglio darlo a Michele che a Matteo 'It's better to give it to Michele than to Matteo.'
  - e. Desideravo partire più che rimanere 'I wanted to leave rather than stav.'
  - f. È meglio essere insultati che umiliati 'It's better to be insulted than humiliated.'
  - g. Spero di andarci pattinando più che correndo 'I hope to go there skating rather than running.'
  - h. È meglio se se ne va che se rimane malvolentieri 'It's better if he leaves than if he stays against his will.'
  - i. Vuole sapere che cosa desideri più che di che cosa hai bisogno 'He wants to know what you want rather than what you need.'
  - j. Amo chi è con me più che chi è contro di me 'I love whoever is with me rather than whoever is against me.'

Che can also introduce minor and non-phrasal categories, although it is more difficult to find natural examples of this sort. Ex. 54a illustrates a minor category; 54b uses the non-phrasal category V:

- (54) a. Amo più questi che quei colori 'I love these more than those colors.'
  - b. Ho più corso che passeggiato 'I more ran than walked.'

The only other type of item that can introduce all major categories plus some minor ones, and at both the phrasal and non-phrasal levels, is the coördinator, e.g. e 'and', o 'or', and ma 'but'. If che is a coördinator, the above data are expected.

Yet another level that may be compared with che is found within the word:

However, we take the position that the PAST participle is not phrasal; thus we put it under 54b below, in an example of che introducing a lexical node. Note that past participles cannot correspond to clitics:

<sup>&</sup>lt;sup>13</sup> That 53f involves VP rather than V (or AP rather than A) is seen by the fact that the passive participle in Italian can correspond to the clitic lo, to which only phrasal categories may correspond:

<sup>(</sup>a) —È stato umiliato? 'Was he humiliated?'

<sup>-</sup>Sì, lo è stato 'Yes, he was.'

<sup>(</sup>b)  $-\dot{E}$  and ato? 'Has he gone?'

<sup>-\*</sup>Sì, lo è 'Yes, he has.'

- (55) a. Luca è più anti- che pro-comunista 'Luca is more anti- than procommunist.'
  - b. Marta è più sotto- che sopra-pagata 'Marta is more under- than over-paid.'

As argued by Booij 1984 for Dutch, a conjunction reduction rule may delete part of a complex word under identity with part of a following word, if the two words are coördinated. The same rule applies in Italian, as in 55, where its application is illustrated with different types of coördination. Examples exhibiting this process with other coördinators are:

- (56) a. Filippo non è anti- ma pro-cinese 'Filippo isn't anti- but pro-Chinese.'
  - b. La maggior parte delle persone qui sono o sotto- o sopra-valutate 'The majority of the people here are either under- or overestimated.'
  - c. Alla cerimonia ci saranno sia il vice- sia l'ex-presidente 'At the ceremony there will be both the vice- and the ex-president.'

But this morphological rule cannot apply with subordinated elements:

- (57) a. \*Luca è stato anti- prima che pro-comunista 'Luca was antibefore pro-communist.'
  - b. \*Mi piacciono più i pro- degli anti-comunisti 'I like better the pro- than the anti-communists.'

Note that 57b is a di comparative, i.e. the prepositional comparative. Thus this example clearly shows that it is the coördinating nature of 55a-b that allows the morphological rule to apply, not its comparative nature. In sum, a very strong argument that comparative che is a coördinator can be made on the basis of its distribution.

Second, *che* must introduce an item of the same syntactic category as that of the item to which the comparison is made; and both items must be phonologically present. In 51–55, *che* compares items of the same category. But the comparison is ungrammatical if the categories are not the same: <sup>15</sup>

- (58) a. \*Marta è più sveglia che ieri 'Marta is more awake than yesterday.'
  - b. \*Vuole andarci pattinando più che Giacomo 'She wants to go there on skates more than Giacomo.'

The only elements beside comparative *che* that require two categories of the same type to be phonologically present are the coördinators. Once more the data follow if *che* is a coördinator.

Let us note briefly what che is NOT. Che has several functions beside that

<sup>&</sup>lt;sup>14</sup> A further condition proposed by Booij is that what is left in the first member of the conjunction, after reduction has taken place, must be a phonological word. That the same is true for Italian may be seen in \*È più {in-/im-} che a-morale 'He's more im- than a-moral.' Here the sentence is not grammatical since the prefix in-/im- is not a phonological word, as shown in Nespor 1984.

<sup>15</sup> As expected, 58a-b are acceptable if we have di instead of che in the comparative phrase.

of introducing comparative phrases, its most common being that of complementizer. That comparative *che* is not a complementizer may be seen in 53h-j above, where it is in fact followed by a complementizer. Since a clause in Italian can be introduced by at most one complementizer, such examples would force an exception to our generalization if comparative *che* were a complementizer. <sup>16</sup>

Third, if comparative *che* introduces an item with audibly distinguishable case (i.e. a 1st or 2nd person singular tonic pronoun), the case of the pronoun must be the same as that of the item to which it is compared:

(59) Sei stato scocciato tu più che {io/\*me} 'You've been disturbed more than {I/me}.'

This fact follows immediately if *che* is a coördinator, and if case assignment can somehow recognize coördination; but it presents significant complications for case assignment if *che* is any other kind of 'introducer'.

A fourth argument that comparative *che* is a coördinator comes from languages other than Italian. For some of these, strong arguments can be made that the item introducing a comparative phrase is a coördinator. Italian, then, in doing so, is simply employing a function of coördinators that is generally available in language. We give below brief evidence from six of these other languages, but our initial questioning of speakers of a variety of languages suggests that the phenomenon is very widespread.

In Latin, for example, one way to introduce a comparative phrase is with quam. If the comparison is between elements to which case is assigned, it is required that the element following quam be assigned the same case as the element preceding quam to which it is compared:<sup>17</sup>

- (60) a. Sol major est quam luna 'The sun (nom.) is bigger than the moon (nom.)'
  - b. Nulli carior est quam mihi 'To nobody (dat.) is he dearer than to me (dat.)'
  - c. Bos fortior est quam velocior 'Cows are stronger (nom.) than fast (nom.)'

This characteristic indicates that comparative *quam* is a coördinator. Furthermore, in Latin the conjunctive coördinators *atque*, *ac*, and *et* may be used instead of *quam* in sentences with a comparative sense:

(61) Longe aliter est amicus atque amator 'A friend is very different from a lover.'

Both Ancient and Modern Greek also show homophony between the element that introduces a comparative phrase and a coördinator. Ancient Greek  $\dot{e}$  is a disjunctive element meaning 'or' (both inclusive and exclusive), used also in the combination  $\dot{e}$  ...  $\dot{e}$  ... to mean 'either ... or ...' This same particle is used to introduce comparative phrases. As with *quam* in Latin, case-bearing

<sup>&</sup>lt;sup>16</sup> Recall that we eschew a rule of comparative ellipsis; thus one cannot argue that the comparative *che* introduces a higher clause than the ones introduced by se, cosa, di che cosa, and chi in 53h-j.

<sup>&</sup>lt;sup>17</sup> As one might expect, in a non-configurational language like Latin, the configurational definition of coördination is hardly relevant. We discuss this definition of coördination in §2.2.

elements which follow  $\dot{e}$  must be in the same case as the element to which they are compared. Examples involving the different uses of  $\dot{e}$  are given below, where (a) exemplifies the comparative use and (b) the disjunctive:

(62) a. Oúpote eídon ándra ameinona è Kúron 'I never saw a better man (acc.) than Cyrus (acc.)'

b. ... è hupér tōn idíōn è hupér tōn dēmosíōn ... '... either on behalf of private things or of public ones ...'

A similar parallelism between a comparative element and a coördinator is found in Modern Greek, where one way to introduce comparative phrases is with the coördinator pará:

(63) Kállio pénte ke sto khéri pará déka ke kartéri 'Better five in your hand than ten and having to wait (for them).'

Another use of pará is equivalent to the coördination found with Eng. but in the sense of 'besides':

(64) De tha dekhtó típote pará móno éna glikó yia na mi tus prosválo 'I will not accept anything but a candy, in order not to offend them.'

In Dutch, too, it can be argued that the comparative element is a coördinator. The element dan is used to introduce comparatives of inequality:

- (65) a. Ik hou van Jan meer dan van Piet 'I love Jan more than Piet.'
  - b. Hij is leuker dan slim 'He's nicer than smart.'
  - c. Ik vind het beter om te gaan dan om te blijven 'I find it better to stay than to go.'

That dan is a coördinator may be seen below:

- (66) a. Ik ga naar de film, dan naar Anneke, dan pas naar de Kring 'I go to the movies, then to Anneke's, (and) only then to the Kring.'
  - b. Ik weet niet of hij ziek is, dan wel de stad uit 'I don't know whether he is ill, or out of town.'
  - c. Hij hielp alleen mij en dan nog niet eens van harte 'He helped only me, and moreover, not even willingly.'

Finally, Napoli 1983 has argued for English that one use of *than* is as a coördinator; and Pinkham (1982:127) makes a similar suggestion for French comparative *que*.

2.2. Our conclusion that Italian comparative *che* is a coördinator has the following consequences.<sup>18</sup>

(a) Vado a letto che non ce la faccio più 'I'm going to bed since I can't manage any longer.'
Lo fai tu, che sei molto brava 'You do it, since you're very smart.'

(b) Non voglio che vederlo 'I want only to see it'; i.e. 'I don't want but to see it'; or 'I don't want anything other than to see it.'

<sup>&</sup>lt;sup>18</sup> Another prediction is that coördinator *che* might have other functions besides the comparative. We are not convinced of this; however, we suggest here two possible areas of inquiry along these lines. First, the 'loose' connector *che* in (a); and second, the *che* of the *non* ... *che* ... construction in (b). The latter has many similarities to the Eng. *not* ... *but* ... and *not* ... *other than* ... constructions:

First, items compared with *che* should flank it (with at most the comparative quantifier intervening), just as conjoined items flank *e* 'and' and disjoined items flank *o* 'or'. This is true for *che* degree comparatives: Italian has a strong preference for a surface canonical form in which degree *che* is flanked by the compared items. (In §3, we discuss this in more detail; in §4, we discuss the much weaker nature of this preference in absolute comparatives.) All the grammatical examples with *che* above illustrate this point. Let us add one more here:

(67) a. ?? Considero Giorgio più intelligente che Luigi.

b. Considero più intelligente Giorgio che Luigi 'I consider Giorgio more intelligent than Luigi.'

Second, we expect that *che* can introduce a string which does not form a constituent, so long as that string is parallel to one preceding *che*—just as *e* 'and' can. This is, in fact, the case:

(68) e: Ho messo i fiori nel vaso e i regali sulla scrivania 'I put the flowers in the vase and the gifts on the desk.'

che: Ho mandato più libri a Luca che lettere a Marta 'I sent more books to Luca than letters to Marta.'

Third, the phenomenon known as Right Node Raising (as in Maling 1972), which appears only in coördinated phrases, can appear with *che* comparatives:

- (69) a. Mi piacciono i quaderni con, più che senza, le spirali 'I like notebooks better with than without spirals.'
  - b. Considero più interessante leggere che scrivere libri 'I consider it more interesting to read than to write books.'

Fourth, Gapping, which appears only in coördinated sentences, can appear with *che* comparatives: 19

(70) Ha portato più libri Gino con la bicicletta che Luigi con la macchina 'Gino with his bicycle brought more books than Luigi with his car.'

Fifth, if comparative *che* is not immediately flanked by the compared items, and if the sentence is still acceptable, then it will have the same kind of marked quality as a sentence in which a coördinator like e is not flanked by the coordinated elements:

- (71) a. ??Maria lo capisce—e Carlo 'Maria understands it—and Carlo (too).'
- b. ?? Maria è alta, più che Carlo (emphatic only) 'Maria is tall, rather than Carlo.' (Cf. non-emphatic Maria più che Carlo è alta.) In conclusion, comparative che is a coördinator in Italian: it signals syntactic

Also, comparative *che* can appear without a comparative quantifier in structures that are implicitly comparative semantically:

<sup>(</sup>c) Preferisco andarci pattinando che correndo 'I prefer to go there skating rather than running.'

<sup>&</sup>lt;sup>19</sup> Gapping is obligatory in 70. See the discussion following ex. 108, below.

parallelism. But we do not claim that *che* falls between sister nodes which together form a constituent of the same category as the items that flank *che*. We explicitly reject this configurational definition of coördination not only for *che*, but for all the coördinators (see esp. 68 above). We believe this configuration to be typical of coördination, but not one of its defining characteristics. Instead, we define 'coördinator' in a functional sense and believe that no one syntactic configuration adequately covers all the types of coördination found in Italian (or in English, either). Still, a strong tendency exists in languages whose syntax is largely configurational, like Italian, toward a certain linear configuration for coördination: that in which the coördinator is flanked by parallel strings.

We next turn to the syntactic analysis of *che* comparatives, starting with those of degree.

#### CHE DEGREE COMPARATIVES

3.1. The base structure we propose for *che* degree comparatives of the type illustrated in ex. 6, repeated in 72a, is very close to what we proposed for *di* comparatives of the type shown in ex. 5, repeated in 72b—i.e. the structure illustrated in Figure 4.

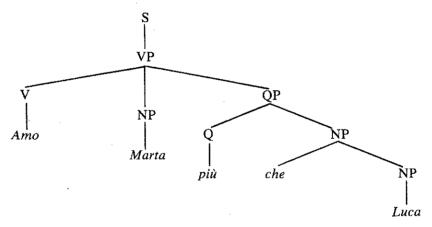


FIGURE 4.

(72) a. Amo Marta più che Luca.

b. Amo Marta più di Luca 'I love Marta more than Luca.'

As may be seen by comparing Fig. 4 with Fig. 1, an immediate difference between the two is that, with di comparatives, the complement of più is always a PP; but with che comparatives, the complement of più is whatever category che introduces. Furthermore, the categories following comparative di are restricted to those that may follow a preposition (see §1), but comparative che

<sup>&</sup>lt;sup>20</sup> For 68, one cannot appeal to a SYNTACTIC rule of coördination reduction, since no such rule exists (see Gazdar (1981). There is no contradiction here with our accepting a morphological rule of conjunction reduction in 55–56. It is quite possible, and we believe probable, that some mechanisms in one component of the grammar have no analogs in other components. For example, it may well be that deletion exists as a phonological and morphological phenomenon, but not as a syntactic or semantic one.

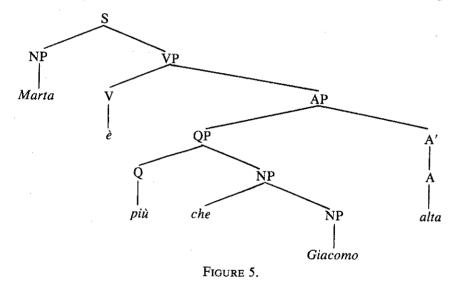
may be followed by any projection of any category (see §2). In addition, a comparative string following *che* must be in all respects of the same type as the basis of comparison preceding (più) che;<sup>21</sup> but no such parallelism is required in *di* comparatives. The linear configuration of *che* comparatives is illustrated in 73, where Y is a variable which represents the compared items and can be a string or any projection of any syntactic category:<sup>22</sup>

(73) ... Y (più) che Y ...

Given this, we can explain why there are no *che* comparatives with a surface string like the *di* comparatives in 19, repeated below as 74a. That is, a sentence like 74b, where the verb and adjective intervene between *Marta* and *Giacomo*, does not exhibit the parallelism inherent in 73:

(74) a. Marta è più alta di Giacomo 'Marta is taller than Giacomo.'
b. \*Marta è più alta che Giacomo.

There is no reason, however, why the pattern in Figure 5—an underlying structure parallel to that in Fig. 2 for di comparatives—should not be generated.



In fact, we propose that this is the underlying structure of the following:

(75) È più alta Marta che Giacomo 'Marta is taller than Giacomo.'

The terminal string in Fig. 5 is not a well-formed sentence of Italian, however, and for the same reason that Fig. 2's terminal string is not well-formed: an

<sup>&</sup>lt;sup>21</sup> 'In all respects of the same type' means that not only the syntactic category must be the same, but also the thematic role and case—if the comparison is made between elements that have thematic role, and to which case is assigned.

<sup>&</sup>lt;sup>22</sup> Regula & Jernej 1965 state that *che* comparatives are restricted to comparing words of the same morphological category. This is not strictly true, as seen in (a), where the comparison is made between an NP and a pronoun—surely not elements that belong to the same category morphologically. However, a certain parallelism is present:

<sup>(</sup>a) Amo più Luca che te 'I love Luca more than you.'

Similarly, Lepschy & Lepschy (1977:107) point to a parallelism of the elements compared with che; they note that the two terms must be 'compared directly and not by means of another term', e.g. an adjective.

expanded complement may not appear on the non-recursive side of a head within its maximal projection. Thus the NP complement of più must move to the right of A', yielding 74b, the structure of which is given in Figure 6.

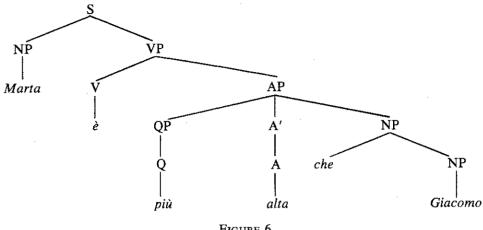


FIGURE 6.

To derive 75 from Fig. 6, two independently motivated rules apply; one is subject/predicate inversion. The other is the rule we discussed with regard to 28 and 33c above; this moves the comparative phrase (in those cases, the PP) to the end of S. In Fig. 6, the comparative phrase che + NP is an NP; i.e., we extrapose NP to the end of S. If subject/predicate inversion applies before the movement of che + NP, we obtain 75. If it applies after the movement, we obtain 76 (which is ruled out by 73):

(76) \*È più alta che Giacomo(,) Marta 'She's taller than Giacomo, Marta.'

The structure in Fig. 5 will account in general for those che comparatives in which the comparison is between categories that can take quantifiers, such as adjectival or adverbial phrase—where the comparative QP gives the degree of the relevant phrase. Thus the underlying structure in Figure 7 will yield 77 by movement of the AP complement of più to the right of A'.

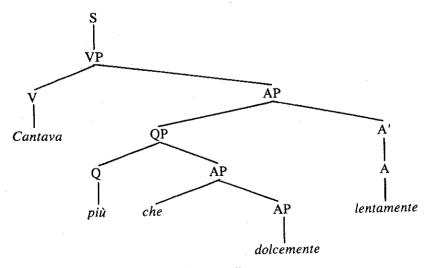


FIGURE 7.

(77) Cantava più lentamente che dolcemente 'She sang more slowly than sweetly.'

Note that 78, while a fine example of an absolute negative comparative, <sup>23</sup> does not have a degree reading:

(78) Cantava lentamente più che dolcemente 'She sang slowly rather than sweetly.'

This example cannot be generated from 77, because the necessary postposing of the QP is disallowed even with non-comparative degree modifiers of the adjective:

(79) \*Cantava lentamente molto 'She sang slowly very much.'

The different derivations for sentences like 72a vs. 75 and 77 account for the fact that, in the first type, più and che may appear adjacent to one another, but in the second type they cannot. Thus più che appears as a sequence with a degree reading in 80; here the categories compared cannot take quantifiers, and the underlying structure must be like that in Fig. 4:

(80) Degree reading or absolute negative reading:

Amo Marta più che Luca 'I love Marta {more/rather} than Luca.' Desideravo partire più che rimanere 'I wanted to leave {more/rather} than to stay.'

Amo chi è con me più che chi è contro di me 'I love whoever is with me {more/rather} than whoever is against me.'

But *più che* cannot appear as a sequence with a degree reading in 81, where the comparative QP originates in the specifier position of the first item of the comparison (as in 76).<sup>24</sup>

(81) Absolute negative reading only:

Le mele mi piacciono gialle più che rosse 'I like yellow apples rather than red.'

Cantava lentamente più che dolcemente 'She sang slowly rather than sweetly.'

Sono stati insultati più che umiliati 'They were insulted rather than humiliated.'

Of course, the degree reading emerges for both types if più is not adjacent to che. Thus in 80, QP preposing and extraposition of the che phrase to the end of S yields the following.<sup>25</sup>

(82) Degree reading only:

Amo più Marta che Luca.

Desideravo più partire che rimanere.

Amo più chi è con me che chi è contro di me.

<sup>&</sup>lt;sup>23</sup> The proper derivation of absolute negative comparatives like 78 will become clear in §4; cf. Fig. 8, below.

<sup>&</sup>lt;sup>24</sup> One might expect to find \*È alta Marta più che Piero 'Marta is tall rather than Piero' with an absolute negative reading only. However, its ungrammaticality follows from our analysis of absolute negatives in §4. See the discussion of 105, below.

<sup>&</sup>lt;sup>25</sup> The absence of an absolute negative reading here will be accounted for in §4. See the discussion of 111.

Furthermore, we can start with an underlying source like that in Fig. 5 and arrive at 83 after extraposition of the *che* phrase (cf. fn. 25).

(83) Degree reading only:

Le mele mi piacciono più gialle che rosse 'I like apples more yellow than red.'

Cantava più lentamente che dolcemente 'She sang more slowly than sweetly.'

Sono stati più insultati che umiliati 'They were more insulted than humiliated.'

3.2. Now that we have presented our analyses of the two types of *che* degree comparatives (i.e., QP's that modify VP's and QP's that modify AP's—exactly as with *di* comparatives), we turn to further support for these analyses. Let us begin with those properties shared by *di* and *che* comparatives.

First, the QP/AP preposing rule proposed in §1.3, for di comparative sentences like 28, should apply to che comparatives. Furthermore, the optional rule which moves the compared phrase out of the QP and to the end of S, independent of QP/AP preposing, should apply to a che degree comparative (moving the che phrase to the end of S). We took these two claims as given in our analysis of 82 above. Indeed, both rules do apply in che degree comparatives there. However, in contrast with di comparatives, if the compared phrase is not extraposed to the end of S, the result is ungrammatical. Thus 84, which has only a degree reading, contrasts with 85, which has only an absolute negative reading.<sup>26</sup>

- (84) Degree reading only:
  - a. Amo più Luca che Giacomo 'I love Luca more than Giacomo.'
  - b. Ama più scherzare che parlare 'He loves to joke more than to talk.'
  - c. Ho mandato più lettere a Luca che cartoline a Marta 'I sent more letters to Luca than postcards to Marta.'
- (85) Absolute negative reading only:
  - a. Amo più che Giacomo, Luca 'I love Luca rather than Giacomo.'
  - b. Ama più che parlare, scherzare 'He loves to joke rather than to talk.'
  - c. Ho mandato più che cartoline a Marta, lettere a Luca 'I sent letters to Luca rather than postcards to Marta.'

The fact that 85 cannot have a degree reading is expected, however, since these sentences do not contain a string of the type given in 73.

Note that 82 and 84 both involve only QP preposing. That AP can be preposed in *che* degree comparatives just as in *di* comparatives is shown below, where we see from 86b that the output must conform to 73:

- (86) a. Va in biblioteca più spesso che in spiaggia 'He goes to the library more often than to the beach.'
  - b. \*Va più spesso che in spiaggia in biblioteca.
  - c. Va più spesso in biblioteca che in spiaggia.

<sup>&</sup>lt;sup>26</sup> The presence of an absolute negative reading in 85 will be accounted for in §4. See the discussion of 98, below.

However, some problems exist with adopting for *che* comparatives the precise rule of QP/AP preposing offered for *di* comparatives; these are that not all the restrictions we demonstrated in our original discussion of the rule are observed in *che* degree comparatives. The first condition proposed in §1 was that QP/AP can prepose past a maximal projection only; the second, that QP/AP can prepose past only one such node. That neither condition holds for *che* comparatives can be seen from 87 below and 84c above:

- (87) a. Ho mangiato più che bevuto 'I've eaten rather than drunk.'
  - b. Ho più mangiato che bevuto 'I've eaten more than I've drunk.'

Ex. 87 shows that the QP may move to the left of a lexical node (here V),<sup>27</sup> and 84c that QP may move leftward across two maximal projections. We thus propose that the correct way to formulate the restrictions on QP/AP preposing for both di and che degree comparatives is the following: QP can prepose past one or more categories of the same type and level as those introduced by di/ che. Since di may introduce only one node, and that node is always a maximal projection, it follows that QP can move across only a single maximal projection in di comparatives.

One condition proposed for QP preposing in §1 was that it could move only across a sister node. This is also true for *che* comparatives:

- (88) a. Amo la sorella di Luca più che Martina 'I love the sister of Luca rather than Martina.'
  - b. Amo più la sorella di Luca che Martina 'I love the sister of Luca more than Martina.'
  - c. \*Amo la sorella più di Luca che Martina.

A second property shared by *di* and *che* degree comparatives is constituency. In Fig. 4, *NP più che NP* does not form a constituent and should not behave as such. This prediction is borne out (cf. 24 above for *di* comparatives).

- (89) a. Cleft sentences (good only with an absolute negative reading): È Paolo più che Luigi che Giorgio ama 'It's Paolo rather than Luigi that Giorgio loves.'
  - b. Fronting sentences:
    - \*Paolo più che Luigi Giorgio ama.
  - c. Passive sentences:
    - \*Paolo più che Luigi è amato da Giorgio.
  - d. Si-fronting sentences:
    - \*Le arance più che le mele si mangiano ora 'Oranges rather than apples are eaten now.'
  - e. Tough sentences:
    - \*Le arance più che le mele sono piacevoli da mangiare 'Oranges rather than apples are pleasant to eat.'

A third property shared by *di* and *che* comparative phrases is that they cannot be questioned or preposed past their quantifiers, since complements of quantifiers in general (not just comparative quantifiers) cannot be so treated. Thus 90 is parallel to 26:

<sup>&</sup>lt;sup>27</sup> See the second paragraph of fn. 13, above.

(90) \*Che Luigi ama Carlo più 'Than Luigi he loves Carlo more.' \*Che chi ami Carlo più? 'Than whom do you love Carlo more?'

3.3. However, di and che degree comparatives differ in several properties. We now discuss these, showing that they are expected, given Fig. 4, formula

73, and Fig. 5.

First, in §1.1 on di comparatives, we showed that QP immediately dominated by VP (as in Fig. 1) can occupy the same positions as other VP degree quantifiers, and that QP originating in the specifier of AP (as in Fig. 2) can occupy the same positions as other AP degree modifiers. But this range of positions is not available for che degree comparatives, because of the canonical form restriction in 73. Thus the sentences below, which are parallel to the di sentences in 22b, 22e, and 23b, are all rejected with a degree reading.

(Absolute negative only): (91) a. Marta ama più che Giovanni, Luca 'Marta loves Luca, rather than Giovanni.'

- b. \*Più che chi ami Giovanni? 'More than whom do you love Giovanni?'
- c. \*Pino è intelligente più che Carolina 'Pino is intelligent more than Carolina.'

Second, unlike di+NP phrases, degree che+NP phrases cannot be ambiguous as to the thematic role of the NP. Rather, given 73, we expect an NP following che to have the same thematic role as the NP which immediately precedes (più) che. This prediction is borne out as shown in 92, which may be interpreted with the (a) reading (where the relevant NP is a patient) but not with the (b) reading:

(92) Luca ama Camilla più che Costanza 'Luca loves Camilla more than Costanza'; i.e., (a) 'Luca loves Camilla more than he does Costanza' or (b) [impossible reading] 'Luca loves Camilla more than Costanza does '

Note that 73 would allow a sentence like 93, in which a che degree comparative phrase follows the subject and has agentive role. However, this sentence is excluded because the position following the subject is not a possible QP position—as may be seen from the fact that 22c, repeated here as 94, is also ungrammatical:

(93) \*Luca più che Filippo ama Costanza 'Luca more than Filippo loves Costanza.'

(94) \*Marta {più di Giovanni / molto} ama Luca 'Marta {more than Giovanni / very much} loves Luca.'

Third, unlike di, we expect that che will be able to introduce partitives (which are PP's; see §1.5). And indeed it can:

(95) Mangio più mele che arance 'I eat more apples than oranges.'

Fourth, di comparatives can have both a modifying and a balancing function, as demonstrated in 16 above; but che degree comparatives should have only the balancing function, because of the parallelism requirement given in 73. This is true:

(96) \*Luca studia più che l'anno scorso 'Luca studies more than last year.'

Fifth, like *di* but for a totally different reason, it should not be possible for *che* to be stranded.<sup>28</sup> That is, coördinators (*e*, *o*, *ma*, and *che*) cannot be stranded:

(97) Ami Marta più che Gino 'You love Marta rather than Gino.'
\*Chi ami Marta più che? 'Who do you love Marta rather than?'

In sum, the analyses in Figs. 4–5 and the output condition of 73 find strong support in the data.

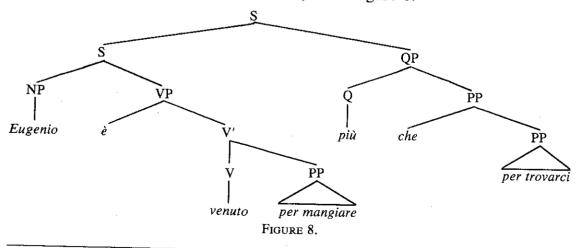
# CHE ABSOLUTE NEGATIVE COMPARATIVES

**4.1.** We now propose an analysis of *che* comparatives with an absolute negative reading, by which the presence of an element or property is opposed to its absence. As we said above, the absolute comparison is simply one that uses the extreme values of polarity, which is the distinctive feature of all comparatives.

While *che* is a coördinator in both degree and absolute negative comparatives (see §2), the syntactic behavior of the latter is distinct in several respects. Examples are given below of the different positions that the absolute negative comparative QP may occupy:

- (98) a. Eugenio è venuto per mangiare più che per trovarci 'Eugenio came to eat rather than to visit us.'
  - b. Eugenio è venuto più che per trovarci, per mangiare.
  - c. Eugenio più che per trovarci è venuto per mangiare.
  - d. Più che per trovarci, Eugenio è venuto per mangiare.

These possible positions for absolute negative comparatives are the same as those occupied by other absolute quantifying expressions, e.g. invece che 'instead of'. Since the latter type of phrases typically function as parentheticals, we propose that absolute negative comparatives are generated as parentheticals. Thus we place them as sisters to S, as in Figure 8.<sup>29</sup>



<sup>&</sup>lt;sup>28</sup> Ambiguities of the sort found for *di* in 38 above do not arise for *che*—since, if there are non-comparative uses of the coördinator *che* (cf. fn. 18 above), these uses never result in a linear string which satisfies 73.

<sup>&</sup>lt;sup>29</sup> We follow Emonds 1976 in placing parentheticals as sisters to S.

One argument to confirm the parenthetical nature of absolute comparatives is their intonation pattern. Like parentheticals and unlike other types of comparison, the absolute negative QP must exhaustively form an intonational phrase; i.e., it must have its own intonation contour.

A second argument is that the structure in Fig. 8 predicts that *più che X* with an absolute negative reading may have the same interpretations as other parentheticals with similar absolute quantifying meanings. For example, one (mystifying) characteristic of *invece che* is that it can never introduce a single constituent which consists of an NP, regardless of its position, unless that NP has the thematic role of patient:<sup>30</sup>

- (99) a. \*Luca mangia la torta invece che Marta 'Luca eats the cake instead of Marta.'
  - b. \*Luca invece che Marta mangia la torta.
  - c. \*Invece che Marta, Luca mangia la torta.

This restriction applies to a patient NP, and does not prevent comparison with the subject in general:

(100) È stato accusato Giorgio invece che Mario 'Giorgio was accused rather than Mario.'

The restriction does not apply with an NP in a longer string, but only when invece che introduces nothing but a single NP:

(101) Finirà col portare i libri Giorgio colla bicicletta, invece che Luca col motorino 'Giorgio with his bicycle will end up bringing the books, rather than Luca with his scooter.'

Thus the restriction is that the NP in *invece che NP* must be interpreted as patient. This same restriction holds for *più che NP* in absolute negative comparatives:<sup>31</sup>

- (102) a. \*Luca mangia la torta più che Marta 'Luca eats the cake rather than Marta.'
  - b. \*Luca più che Marta mangia la torta.
  - c. \*Più che Marta Luca mangia la torta.
- (103) È stato imbrogliato Giorgio più che Mario 'Giorgio rather than Mario was cheated.'
- (104) Ho paura che i nervi te li romperà Pierino col pallone più che Mariella col morbillo 'I'm afraid that Pierino with his football will annoy you rather than Mariella with her measles.'

We can now explain why 81 can have an absolute reading, but the example in fn. 24 above, repeated below, cannot:

(105) \*È alta Marta più che Piero 'Marta is tall rather than Piero.'

In 81, all the sentences have unmarked word order; all end with an absolute negative *più che* phrase, and none involves an NP in the *più che* phrase. Thus they can be generated from a structure like Fig. 8. But in 105, the source is immediately problematic, since the comparison is between NP's which do not

<sup>&</sup>lt;sup>30</sup> Exx. 99a-c do have good readings in which *Marta* is patient. Our asterisk indicates that these sentences are not good unless Marta is edible.

<sup>31</sup> Exx. 102a-c have readings similar to those for 99.

have the thematic role of patient. Thus 105 is ungrammatical for the same reason as 106, with *invece che*:

(106) \*È alta Marta invece che Piero 'Instead of Piero, Marta is tall.'

A third characteristic that absolute negative comparatives share with *invece* che parentheticals is that, if a verb is present, it is in an untensed form:

- (107) Vado al cinema invece che {lavorare/\*lavoro} 'I'm going to the movies instead of working.'
- (108) Amo Luca più che {amare/\*amo} Andrea 'I love Luca rather than loving Andrea.'

The reason for the restriction here eludes us (but see Thompson 1972 for similar, though not identical, ones in English). The important point is that absolute negative comparatives observe the same baffling restriction as *invece che* parentheticals.

Note that the restriction exemplified in 107–108 applies in surface-level syntax. Gapped sentences exist with *invece che* parentheticals, and with absolute negative comparatives, in which one might well posit an underlying tensed verb if one were to take a transformational approach to Gapping. Likewise, if an interpretive approach were taken, one might again interpret the gap as a tensed verb. Examples which demonstrate this point have been given above in 101 and 104. Thus the restriction is not at the underlying level, nor is it semantic in nature.

Interestingly, an infinitival verb may appear in the absolute quantifying expressions of 107–108, and an NP with the thematic role of agentive may appear in the absolute quantifying expressions of 101 and 104; but we never find both at once:

(109) \*Scrivo io {invece che / più che} scrivere Maria 'I'm writing {instead of / rather than} Maria writing.'

Once more, although we cannot account for the restriction, it is significant that the same one holds for absolute negative comparatives as for other absolute quantifying expressions.

A fourth characteristic that absolute negative comparatives share with other absolute quantifying expressions is case: in both, the case of the NP introduced by the quantifying element matches that of the NP to which it is contrasted. Thus, if the contrast is with a subject NP, the NP in an absolute quantifying expression is nominative. Otherwise, it is accusative:

- (110) a. Sei stato rovinato tu, {più che / invece che} io 'You (nom.) were ruined, {rather than / instead of} I (nom.)'
  - b. Voleva rovinare te, {più che / invece che} me 'He wanted to ruin you (acc.), {rather than / instead of} me (acc.)'
- **4.2.** Let us now discuss the rule of QP/AP preposing outlined for *di* and *che* degree comparatives, as well as the output condition proposed for the latter, with respect to *che* absolute negative comparatives.

Given the structure in Fig. 8, QP/AP preposing will have the effect of preposing QP past its sister node S if and only if the element introduced by che

is of the same level as S—i.e. either S or a lexical category. However, the sentences which are the output of this rule are a subset of the set of sentences already generated by other means (see 98d, where an absolute QP may appear in sentence-initial position because of its parenthetical nature). We cannot be sure, then, whether QP/AP preposing may apply in absolute comparatives. In the absence of evidence to the contrary, we will assume that QP/AP preposing may apply in all comparatives.

We now have an explanation for the fact that the sentences in 82 above,

repeated below, have only a degree reading:

(111) Amo più Marta che Luca 'I love Marta more than Luca.'

Desideravo più partire che rimanere 'I wanted more to leave than to stav.'

Amo più chi è con me che chi è contro di me 'I love more whoever

is with me than whoever is against me.'

Only QP/AP preposing—past the NP Marta, the VP partire, and the free relative chi è con me (plus the extraposition of the comparative che phrase to the end of S)—can yield 111. QP/AP preposing in a che degree comparative can give this result. But QP/AP preposing in an absolute negative comparative results in a sentence which BEGINS with the comparative QP, since its only sister node is S. Thus 111 will never be generated from a source like Fig. 8. Instead, the absolute comparative counterparts to 111, with preposing of the QP, are:

(112) Più che Luca amo Marta.

Più che rimanere desideravo partire.

Più che chi è contro di me amo chi è con me.

Note that the rule which postposes the comparative *che* phrase to sentence-final position never applies in absolute negative comparatives:

(113) \*Più amo Marta che Luca.

\*Più desideravo partire che rimanere.

\*Più amo chi è con me che chi è contro di me.

This is because parentheticals are islands.

With regard to the canonical form of *che* degree comparatives, we can see from 98 that absolute negative comparatives do not conform to 73. We attribute the violation of 73 to the parenthetical nature of absolute comparatives (witness the high mobility of parentheticals). But whenever a *più che* absolute negative comparative expression does follow the item(s) to which the comparison is made, there is a strong tendency for the compared items to flank the *più che*. Thus, in 103–104, the word order is not the typical unmarked order of subject-verb-object; yet it is the preferred order for this sentence, and it is precisely the order which results in *più che* being flanked by the compared items.

We end this section with the analysis of the following data.

(114) a. (Degree and absolute negative reading):

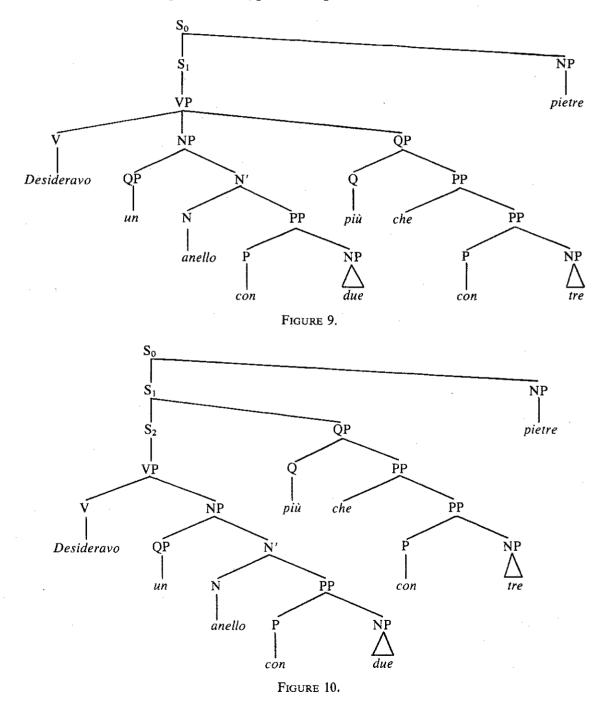
Desideravo un anello con due, più che con tre, pietre 'I wanted a ring with two {more/rather} than with three stones.'

b. \*Desideravo un anello con, più due, che con tre pietre.

- c. \*Desideravo un anello, più con due, che con tre pietre.
- d. \*Desideravo, più che con tre, un anello con due pietre.
- e. (Degree reading only):

  Desideravo più un anello con due che con tre pietre.
- f. \*Più che con tre desideravo un anello con due pietre.

We will start from the structures in Figures 9-10, underlying the two readings of 114a. Let us set aside questions of whether Right Node Raising (RNR) is a transformation or a particular type of deep structure.<sup>32</sup>



 $<sup>^{32}</sup>$  However, we follow Maling 1972 in that the right-node-raised element is Chomsky-adjoined to S.

If QP/AP preposing were to apply in Fig. 9, we would get 114d. If nothing further happened, this structure evould be ruled out with a degree reading, because of 73. If, instead, the *che* phrase were extraposed to the end of S (in this example, to the end of  $S_1$ ), we would get 114e, which is acceptable with a degree reading.

If QP/AP preposing applied to Fig. 10, we would get 114f. However, this sentence is ungrammatical. The initial position in 114f cannot be filled by an

absolute quantifying expression of any type:33

(115) a. Desideravo un anello con due invece che con tre pietre 'I wanted a ring with two instead of with three stones.'

b. \*Invece che con tre desideravo un anello con due pietre.

We suggest that such parentheticals are frozen in a RNR structure. But regardless of whether this is the correct explanation for the failure of 114f and 115b, the important point is that absolute negative *più che* expressions behave in the same way as other absolute quantifying expressions.

If whatever rule is responsible for the appearance of a parenthetical between the verb and its first complement (as in 98b) were to apply to Fig. 10, we would get 114d. However, this is ungrammatical. Once more we find that other absolute quantifying expressions are also banned from this position:<sup>34</sup>

(116) \*Desideravo invece che con tre un anello con due pietre.

If RNR structures freeze these parentheticals, then 116 and 114d are ruled out in the same way as 114f and 115b. But regardless of the validity of this explanation, the fact that absolute negative comparatives behave here like other absolute quantifying expressions supports our analysis.

There is no way that we can derive 114e from the structure in Fig. 10. Hence, the lack of an absolute negative reading is expected. No rules would generate 114b-c from either Fig. 9 or Fig. 10, since QP preposing is only across a sister

node.

Thus all the sentences in 114 are accounted for with two rules (QP preposing, and extraposition of the comparative phrase to the end of S), plus condition 73, with recognition that absolute negative comparatives can appear only where other absolute quantifying expressions can appear.

#### Conclusions

5. We have given a description of comparatives of inequality in Italian, and have shown that the element used to introduce the comparative phrase may be either di, a preposition, or che, a coördinator. We have also shown that, while di comparatives may have only a degree reading, che comparatives may have either a degree or an absolute negative reading.

To account for all the possible surface realizations of comparative constructions, we have used several independently motivated rules; in addition, we

<sup>&</sup>lt;sup>33</sup> As expected, we do not find \*{Più che | Invece che} con tre pietre desideravo un anello con due '{Rather than | Instead of} with three stones I wanted a ring with two.'

<sup>&</sup>lt;sup>34</sup> Again, as expected, we do not find \*Desideravo {più che | invece che} con tre pietre un anello con due 'I wanted {rather than | instead of} with three stones a ring with two.'

have proposed one rule and one output condition which are typical only of comparative constructions.

The rule we have proposed, QP/AP preposing, is needed to account both for some *di* and some *che* degree comparatives. For *che* absolute negative comparatives, no specific rule is needed: independently motivated rules can account for all their surface manifestations.

The preposing rule has the effect of moving a comparative QP/AP leftward across a constituent parallel to the one that follows the comparative element. The output condition prescribes the canonical form of *che* degree comparatives: the items immediately preceding (più) *che* must be parallel to the items following it.

One of the inherent characteristics of comparatives is that they incorporate the notion of polarity. This is obviously true for the absolute negative comparatives, since they oppose the existence of a property or element to its absence; but it is also implicit in degree comparatives. That is, when we compare two elements as to a shared property, and say that one of them has that property to a greater or lesser degree, we imply a scale with a positive and a negative pole along which the property is measured. One requirement for elements to be measured along the same scale is that they be of the same type—in other words, parallel.

Both QP/AP preposing and our output condition make reference to such parallelism. The essential difference between the two is that the movement rule refers to the syntactic hierarchical structure of sentences, while the second is a condition on their linear structure.

Our analysis has been proposed only for Italian, but is possibly general enough to account for comparatives in other languages. Suggestions as to some characteristics shared by Italian comparatives with languages such as Latin, Ancient and Modern Greek, Dutch, English, and French have been given in §2.1. Other works on comparatives in a number of languages—including Hankamer 1973 on English, Bracco 1980 on Italian, and Hellan 1981 on English and Norwegian—have raised issues which, we hope, will be clarified by the present study of Italian.

As a final point, so far only speculative in nature, note that, since our output condition on degree comparatives refers only to the linear order of elements, it may in principle be an adequate mechanism to account for comparatives in non-configurational languages as well.

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