NEGATIVES IN COMPARATIVES

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embedded position, we can account in a unified way for many sets of facts which is accounted for by a syntactic analysis.* pretive approach. This use of non is thus an example of a presuppositional fact which would go unrelated in either a presupposition-dependent syntax model or an internates in a higher abstract S in embedded position. By proposing an abstract S in presupposes that his statement contradicts someone else's or his own previously held belief. Though this non appears in the comparative clause in the surface, it origi-The negative element non appears in Italian comparatives when the speaker

- to the a examples; 1b shows S negation and 2b shows NP negation: similar to not in English. Thus, in 1-2, the b examples are the negative counterparts 1. Introduction. The Italian word non is often used as a negative element
- Maria viene.
- b. Maria non viene.

'M comes / does not come.'

- (2) a. Tutti gli uomini ti guardano.

Non tutti gli uomini ti guardano. 'All the men / Not all the men are looking at you.'

Eng. not, e.g. the well-known examples of 'double negation': We will refer to this use as non_1 . Other instances of non_1 do not correspond to

(3) Non viene nessuno 'No one is coming.'

and that has no English counterpart in such structures: In this paper we consider a use of non that is frequently found in comparatives

- (4) Maria è più intelligente (a) di quanto è Carlo | (b) di quanto non sia Carlo 'M is more intelligent than C is (not).'
- (5) Maria è più intelligente (a) di quanto tu credi | (b) di quanto tu non creda 'M is more intelligent than you believe (not).'

offer an analysis that accounts for these differences. One of the most obvious of mood is found in §§3.21-3.23 below. In the examples that follow, we will use distinctions is mood, where non2 typically occurs with the subjunctive. A discussion present below many semantic and syntactic distinctions between a and b of 4–5 and 'pleonastic element' and is said to be optional in comparatives. However, we the subjunctive mood with non_2 , asking the reader to ignore the choice of mood for This use, hereafter referred to as non_2 , is frequently cited as an example of a

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the time being unless otherwise indicated. After examining comparatives, we show that non_2 is not limited to comparatives, but occurs in various structures, many of which have counterparts with Eng. not. While we have made a detailed study only of Italian, we expect our analysis to be helpful in understanding similar uses of negative elements in other languages.

2. Pragmatics. The semantic difference between a and b in 4-5 lies in what is presupposed by the speaker, rather than in what is asserted. Before demonstrating this difference, let us explain our use of the word 'presupposition'.

The literature on presupposition refers both to logical and pragmatic presupposition. S' is a logical presupposition of a sentence S if from S we can conclude S', and at the same time from -S (read 'not S') we can conclude S' (see Horn 1969). It is also often mentioned that logical presuppositions remain unchanged under questioning (see Kiparsky & Kiparsky 1970). One way to find a logical presupposition of an S is to replace the intonation center in surface structure by a variable (see Chomsky 1971). Pragmatic presuppositions, on the other hand, are the conditions under which an S is appropriate (see G. Lakoff 1971); these involve the speaker, and often the listener, whereas logical presuppositions follow from sentences themselves without regard to speaker, listener, or context (see Keenan 1971, Karttunen 1973).

Non₂ is used when certain pragmatic presuppositions are present. In fact, questioning or negating a comparative drastically affects the possibility of non₂ (see §2.1, 2.2 below). Non₂ appears when the speaker is assuming, but has not been told explicitly (and therefore is not entirely sure), that the assertion of the comparative is contradictory to some previously held belief (most often the belief of the listener, but not always). In order to see this, consider the following context for 4a:

(6) Dario: Dimmi cosa pensi di Maria e Carlo. 'Tell me what you think of M and C.'

Paolo: Maria è più intelligente di quanto $\left\{ \begin{matrix} \hat{e} \\ r_{non \ sia} \end{matrix} \right\}$ Carlo, ma lui è molto più simpatico. 'M is more intelligent than C is, but he is much nicer.'

Since Dario has in no way revealed his opinion of Maria and Carlo, it would be very strange for Paolo to assume that Dario holds beliefs opposite from his; thus non₂ does not appear in Paolo's response.

¹ Yan Valin 1975 has put forth a pragmatic analysis of the German word doch in which he points out two main kinds of doch, stressed and unstressed. Stressed doch, when it appears in sentence-initial position, is triggered by an overt negative immediately preceding in the discourse, and is used to contradict that negative. Intrasentential stressed doch is used when one is contradicting someone's assertion or expectation (someone else's, or the speaker's own). Unstressed intrasentential doch is used when one contradicts an assumption which someone else has but really shouldn't have (he should 'know better'). The above is an oversimplification of Yan Valin's work, which is a careful study of many complexities. The important points for us are that the appearance of doch, in general, is pragmatically triggered; and that the pragmatics of intrasentential stressed doch, in particular, bear a striking resemblance to the pragmatics of none.

Now consider a context for 4b:

(7) Dario: Carlo è così intelligente che dubito che Maria possa vincerlo a scacchi. 'C is so intelligent that I doubt that M can beat him at chess.'

aolo: Ma ti sbaglil Maria è più intelligente di quanto { e non sia } Carlo e potrebbe vincerlo senza molti sforzi. 'But you're wrong! M is more intelligent than C is(n't), and she could beat him with little effort.'

Here Dario has explicitly said that Maria probably cannot beat Carlo at chess. However, he has only implied that Carlo is more intelligent than Maria. Paolo may, accordingly, assume that Dario thinks Maria is less intelligent, and thus use non₂. But if Paolo is more assertive, he may take Dario's remark as equivalent to an explicit evaluation of Maria's intelligence. In such a case, he would not use non₂. Thus two responses are possible here, with differing amounts of intensity in the speaker's contradiction of the listener's evaluation of Maria and Carlo.

Next, consider a context for 5a:

(8) Dario: Maria ha continuato a dire sciocchezze. È proprio cretina, sai? 'M continued to say stupid things. She's really an idiot, you know?'

Paolo: Ma ti shagli! Conosco Maria molto bene ed è più intelligente di quanto tu { credi. rnon creda. } 'But you're wrong! I know M very well and she's more intelligent than you think.'

Here Dario explicitly states his evaluation of Maria. Therefore Paolo responds most naturally without non₂.

(9) Dario: Non ho capito per niente quest' ultima lezione, comunque non credo che valga la pena di chiedere aiuto a Maria. 'I didn't understand this last lesson at all, but I don't believe it's worth the trouble to ask M for help.'

Paolo: Secondo me fai male, dovresti chiederglielo. Maria è più intelligente di quanto tu { non creda. } 'As I see it, you're making a mistake; you should ask her. M is more intelligent than you (wouldn't) believe.'

Here Dario is not explicit as to his evaluation of Maria's intellect. Thus Paolo assumes that she is more intelligent than Dario thinks, and uses non₂ accordingly. However, if Paolo takes Dario's remark as a strong indication of his evaluation of Maria's intellect, then he need not use non₂.

These four contexts show that non_2 appears when there is a bit of uncertainty or indefiniteness about the speaker's assumption. But it cannot appear if there is absolutely no justification for the speaker's assumption (as in 6)—or if the speaker need not assume anything, since explicit statements of the listener's opinions have been made (as in 8). The comparative without non_2 can appear in all contexts, but is a second choice in 7 and 9, where a speaker's assumption seems appropriate for the use of non_2 .

The evidence above shows that non₂ is not possible in all comparatives of inequality (contrary to the analyses by Seuren 1969 and by Antinucci & Puglielli 1971). Rather, non₂ is present in some comparatives and not in others.

Furthermore, non₂ is similar to Eng. only (see Horn) in that both express an expectation. So in Horn's example, Only Muriel voted for Hubert, the speaker reveals that he expected someone in addition to Muriel to vote for Hubert. Non₂ reveals that the speaker expects his statement to contradict someone's previously held belief.

Various constraints on the distribution of non_2 can be explained by this presuppositional analysis. The rest of §2 is devoted to those constraints.

- 2.1. Questions. When comparatives like 4 are questioned, non2 does not appear:
- (10) È più intelligente (a) di quanto è Carlo? / (b) *di quanto non sia Carlo? 'Is she more intelligent than C is?'

Here the speaker is asking the listener whether a comparison of inequality is true; hence the speaker cannot simultaneously be expecting to contradict the beliefs of the listener (since non-rhetorical questions do not contradict, but only ask for information). Non_2 does not appear in questioned comparatives like 10, then, because a proper context is not present. If these questions are negated, yielding a question conducive to an affirmative response from the listener, the comparative with non_2 is still impossible:

(11) Non è più intelligente (a) di quanto è Carlo? / (b) *di quanto non sia Carlo? 'Isn't she more intelligent than C is?'

Again 11b is rejected on semantic grounds; i.e., one does not expect the listener to agree (which expectation is revealed by the matrix non_1) and simultaneously expect to contradict him (which expectation is revealed by the embedded non_2).

Likewise, when comparatives like 5 are questioned, non2 is often ungrammatical:

(12) È più intelligente (a) *di quanto tu credi? / (b) *di quanto tu non creda? 'Is he more intelligent than you think?'

Ex. 12a is bad because one does not normally ask someone for a confirmation of something he does not believe; and 12b is bad because the speaker will not ask the listener to confirm the opposite of what he expects him to believe. However, if the belief is one which the listener may or may not still hold, the speaker can question the comparatives both with and without non_2 :

(13) E più intelligente (a) di quanto tu credevi? / (b) di quanto tu non credessi? 'Is she more intelligent than you thought?'

Ex. 13a is good because it is natural to ask the listener to confirm whether or not a past belief was correct; and 13b is good because it is natural to ask the listener now to confirm the opposite of what we expect he used to believe.

Likewise, the following is natural:

(14) E più intelligente (a) di quanto hi crede? (b) di quanto hi non creda? 'Is she more intelligent than he believes?'

It is semantically acceptable to ask information about whether someone is more intelligent than a third person believes, or than you expect a third person believes. Thus a context for 14b (with non₂) can be found.

If the distribution of non_2 were determined uniquely by factors other than semantic ones, it would be difficult to explain the acceptability of 13b and 14b in contrast to the unacceptability of 10b and 12b. But with semantic criteria, one can explain the above distributional facts simply.

2.2. NEGATION. It is common to find inequalities in which the matrix verb is negated; e.g.,

(15) Maria non è più intelligente (a) di quanto è Carlo / (b) di quanto tu credi / (c) di quanto crede Dario 'M is not more intelligent than C is / than you think / than D thinks.'

It is also possible to find inequalities in which the verb in the lower clause is negated in the normal sense. Thus 16 is an example of the lower verb being negated by non_1 , while 17 is an example of non_2 :

- (16) Io sono stata all'estero più giorni di quanti Maria non è andata a lavorare 'I've been abroad more days than M has not gone to work.' (E.g., M hasn't gone to work for 10 days and I've been abroad 11 days.)
- (17) Io sono stata all'estero più giorni di quanti Maria non sia andata a lavorare 'I've been abroad more days than M's gone to work.' (E.g., M has gone to work for 10 days and I've been abroad 11 days.)

However, it is not possible to have non_2 when the matrix verb is negated—although it is possible, in such cases, to have non_1 . Thus, corresponding to 15-17, we have 18-20. Non_2 appears in 18 and 20 (with the subjunctive), non_1 in 19 (with the indicative):

- (18) Maria non è più intelligente (a) *di quanto non sia Carlo / (b) *di quanto tu non creda / (c) *di quanto non creda Dario 'M is not more intelligent than C is / than you think / than D thinks.'
- (19) Io non sono stata all'estero più giorni di quanti Maria non è andata a lavorare 'I haven't been abroad more days than M hasn't gone to work.' (E.g., M hasn't worked for 10 days, and I've been abroad fewer than 10 days.)
- (20) *Io non sono stata all'estero più giorni di quanti Maria non sia andata a lavorare.

We must account for the unacceptable sentences here, where non_2 cannot appear. Consider first 18b: by saying Maria is not more intelligent than the listener believes, the speaker is agreeing with the listener. Thus there is no expectation of contradicting him. On semantic grounds, then, non_2 is excluded. Likewise in 18c, the speaker is saying Maria is not more intelligent than Dario believes. Thus he cannot simultaneously expect to contradict Dario, and non_2 is bad.

In order to understand why 18a is bad, consider 4b again: Maria è più intelligente di quanto non sia Carlo. The presupposition of the speaker in 4b is that someone does not expect Maria to be more intelligent than Carlo. Now look at 18a: if the presupposition were that someone expected Carlo to be more intelligent than Maria, and that the assertion of the inequality would contradict this expectation, then non₂ could be used. But here the assertion is that Maria, in fact, is not more intelligent than Carlo. Thus, rather than contradicting the belief (presupposed

And 20 is bad for reasons entirely parallel to those presented for the exclusion of belief. So in 18a the semantic environment for nonz is not met, and it cannot appear. to be held by someone) which non2 would reveal, the assertion agrees with that

non of 19 and that of 20 is not apparent. It is true that the verb in 19 is indicative, surface level for three reasons. First, at the surface level the difference between the reference to semantics, we might propose a constraint which says that non2 cannot non₁. This is not the case. Thus, if we delete the non₂ from 18, all the sentences are expect the comparatives from which non2 has been deleted to be acceptable after surface constraint against the appearance of non2 after a matrix non1, we would without non2 are derived from ones with non2, by a deletion rule. If there were a guished at the surface level. We also argue below that subjunctive comparatives tive mood with nong. For such speakers, we do not see how nong could be distininvolved. However, we claim in §3.22 below that some speakers may use the indicaconsider the surface mood of the verb, and thus determine which kind of non is while that in 20 is subjunctive. Thus one might propose that the constraint can appear if the matrix verb is negated. But such a constraint cannot apply at the still unacceptable: If we tried to account for the above facts on the distribution of non2 without

(21) Maria non è più intelligente (a) *di quanto sia Carlo / (b) *di quanto tu creda / you think / than D thinks.' (c) *di quanto creda Dario 'M isn't more intelligent than C is / than

appear in constructions other than comparatives; and there we see that non2 may account for the distribution of non2. follow a matrix non, in some examples. Therefore a surface constraint cannot level, since non2 does not appear there. And, finally, non2 is shown in §4 below to From 21 we see that the constraint in question cannot be operating at the surface

ruled out at some underlying level. If we are correct in claiming that the examples in §4 illustrate nong, then the fact that it can appear there after negated matrix verbs means that there cannot be an underlying syntactic constraint which throws Thus non2 does not appear in most of the examples in this section because it is

from these sentences is accounted for.2 facts about non_2 shown here. However, with semantic criteria, the exclusion of non_2 For these reasons, such a constraint cannot easily describe the distributional

The corresponding Italian examples are bad

2.3. Equality. It has often been noted that non2 cannot appear in comparisons

- (22) Maria è tanto intelligente (a) quanto è Carlo / (b) *quanto non sia Carle 'M is as intelligent as C is.'
- (23) Maria è tanto intelligente (a) quanto tu credi / (b) * quanto tu non credu 'M is as intelligent as you think.'

can appear) link two dissimilar things. 4 However, if this were the correct explana comparisons of equalities link two similar things, while inequalities (in which non, tion, one would expect non2 to appear in negated comparisons of equality like Both Seuren and Antinucci-Puglielli attribute the lack of non2 here to the fact that

(24) Maria non è tanto intelligente quanto tu credi 'M isn't as intelligent as you think.?

But in fact, it cannot appear here:

(25) *Maria non è tanto intelligente quanto tu non creda 'M isn't as intelligent as you don't think.'

an S such as 26b: Note that the semantics of 24 are very similar to 26a, and that non2 can appear it (26) Maria è meno intelligente (a) di quanto tu credi / (b) di quanto tu non credi

'M is less intelligent than you think.'

Note also that non1 of ex. 3 (which occurs only in the presence of some other negative

wrong, and there is indeed some kind of syntactic constraint against two negatives which we

element) cannot appear in the lower clause if the matrix is negated in a comparative:

- Maria non è più intelligente di nessuno 'M isn't more intelligent than anyone.'
- (f) *Maria non è più intelligente di quanto $non \ d$ nessuno 'M is not more intelligent than

facts, and the questions they pose, open for further research. indicative comparative of (f), especially in light of the acceptability of ex. 19. We leave these Why this should be so is not clear to us. We do not see any semantic reason for excluding the

³ Apparently this is not so for French. Dwight Bolinger has brought to our attention the

(a) Il est aussi bon qu'ils ne puissent l'être 'He's as good as they may be.'

The corresponding Italian sentence is bad:

- (b) *È tanto buono quanto non lo possano essere loro.
- in this paper. if they are syntactic markers of some sort, the objection to this analysis which we raise imme diately below may not be valid. Still, their analysis fails in that 4a-b, and likewise 5a-b, should status (semantic, syntactic, abstract, real lexical item) they assign to the elements 'coincidenza nong. It is very difficult to tell exactly how they intend these rules to operate, and exactly what coincidenza', and they derive 4a and 5a from the same source with an optional rule deleting not be derived from the same structure, given all the semantic and syntactic evidence presented and 'non coincidenza'. We have taken these elements to bear semantic information. However 'non coincidenza' in comparisons of inequality. They then derive non_2 of 4b and 5b from 'non Antinucci & Puglielli talk of 'coincidenza' as an element in comparisons of equality, bu

examples with two negatives: ³ Dwight Bolinger (personal communication) has brought to our attention some French

⁽b) Jean ne peut pas être plus beau que vous ne pensiez 'J can't be handsomer than you (a) Jean n'est pas plus beau qu'on ne pense 'J is not handsomer than anybody thinks.'

^{*}Gianni non è più bello di quanto non si pensi.

⁽d) *Gianni non può essere più bello di quanto voi non pensiate.

sentences (a) and (b) are different from those of the corresponding Italian ones; or else we are We think (c) and (d) are bad for semantic reasons. Thus, either the semantics of the French

Thus we conclude that non_2 is excluded from comparisons of equality for reasons other than the fact that equalities link two similar things.

Saltarelli 1974a does not mention non_2 . But we assume, from his analysis of the subjunctive mood, that he would attribute its absence in comparisons of equality to the lack of the subjunctive mood. Non_2 does not appear unless the verb is subjunctive:

(27) Maria è più intelligente (a) 'di quanto non è Carlo / (b) 'di quanto tu non credi (indicative) 'M is more intelligent than C is / than you think.'

(This is discussed in §3.22 below). Contrast 27a-b with 4b (Maria è più intelligente di quanto non sia Carlo) and 5b (Maria è più intelligente di quanto tu non creda). Since equalities cannot have the subjunctive, non₂ cannot appear:

(28) *Mariu è tanto intelligente (a) *quanto (non) sia Carlo | (b) *quanto tu (non) creda.

Saltarelli attributes the absence of the subjunctive in equalities, but its presence in inequalities, to the notion of 'identified reference'. If a proposition has identified reference, it is in the indicative mood; if it has unidentified reference, it is in the subjunctive. Exactly what constitutes identified reference is not clear, especially in the light of examples like this (not mentioned by Saltarelli):

(29) Benchè tu l'abbia già fatto, voglio che tu lo faccia di nuovo 'Although you have already done it, I want you to do it again.'

Here abbia fatto is subjunctive, yet the proposition in which it appears relates an event that has already taken place. If an event that has taken place does not have identified reference, what does? Furthermore, Saltarelli fails to note the presence of the indicative in inequalities such as 4a and 5a, and thus does not account for the fact that, in his analysis, some inequalities do have identified reference. And, finally, if the comparative clause in 26b has unidentified reference, why don't the comparative clauses in 24-25 also? The problems with this analysis seem unsurmountable to us.

In order to see why non₂ cannot appear in comparatives of equality, whether negated or not, one must first understand that comparatives of equality using tanto ... quanto 'as ... as' occur only when the speaker is comparing with precision. One cannot use tanto ... quanto if one has only a vague presumed knowledge of the comparison. Thus consider the following context, in which tanto ... quanto can appear:

(30) Dario: Maria è bravissimal È forse la più intelligente ragazza che conosco. 'M is really smart! She's possibly the smartest girl I know.'

Paolo; Hai ragione. Ho notato le sue risposte nella lezione di matematica oggi-ed è tanto intelligente quanto tu credi. 'You're right. I

noticed her answers in math class today—and she's just as intelligent as you think.'

Now consider this context, in which tanto ... quanto cannot appear:

(31) Dario: Maria ha fatto bene oggi a scuola per la quarta volta. 'M did well at school today for the fourth time.'

Paolo: *Si, è tanto intelligente quanto tu credi. 'Yes, she's as intelligent as you think.'

In 30, Paolo knows precisely how intelligent Dario considers Maria to be. Thus tanto ... quanto can be used. In 31 Paolo infers from Dario's comment that he considers Maria intelligent, but there is no precision here as to how intelligent Dario considers Maria to be. Thus tanto ... quanto is inappropriate in Paolo's response.

Returning now to non₂, recall that it occurs when the speaker presupposes a certain evaluation of Maria's intelligence, but not when an explicit evaluation has been made (see 8, above). Tanto ... quanto requires explicit and precise knowledge, while non₂ requires inferred and imprecise knowledge; thus non₂ is excluded from comparisons of equality on semantic grounds (i.e., non₂ and tanto ... quanto are semantically mutually exclusive).

In support of this explanation, we note the following facts. In sentences where a precise knowledge of the degree of inequality is known, non_3 cannot appear:

- (32) Maria è molto più intelligente (a) *di quanto non sia Carlo | (b) *di quanto tu non creda 'M is much more intelligent than C is | than you think.'
- (33) Maria è due metri più alta (a) *di quanto non sia Carlo / (b) *di quanto tu non creda 'M is two meters taller than C is / than you think.'

Likewise, if there is an element requiring precise knowledge of another person's belief, non₂ cannot appear:⁶

(34) *Maria è più intelligente di quanto tu non creda con assoluta certezza. 'M is more intelligent than you believe with certainty.'

All these examples are good without non2 and with the indicative mood, as we would expect.

3. Underlying structure. Sentences 4a and 5a differ from 4b and 5b by the contexts in which they may appear, and by the presence or absence of non₂. Since non₂ reveals a certain presupposition of the speaker, there is a question whether a syntactic difference is required between the a and b examples of 4-5. Kiparsky & Kiparsky, in their very important paper, offer a syntactic difference to parallel the presuppositional difference between factive and non-factive complements. On the other hand, G. Lakoff claims that presupposition-free syntax is not possible, and points to several syntactic processes that seem to be conditioned by presuppositions. 7

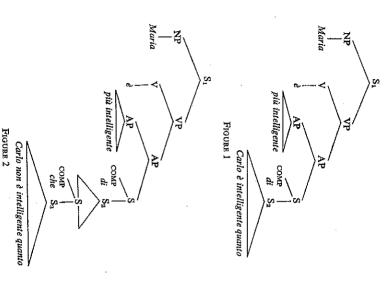
⁵ We do consider Saltarelli's proposals important because they shed light on the use of the subjunctive in general. (See §3.2, below, for a brief discussion of the subjunctive.) His proposals are important also for the analysis of comparatives specifically, since they suggest that comparatives with the indicative (though he does not mention them) are semantically distinct from comparatives with the subjunctive—a suggestion we agree with fully.

⁶ Our notion of precision is distinct from Saltarelli's notion of identified reference, as shown by contrasting 34 with the following: *Voglio che lui creda* [subjunc.] con assoluta certezza 'I want him to believe with certainty.'

⁷ The most convincing of these examples is the deletion of the future auxiliary will, an example he credits to Kim Burt. Note that his example involving comparatives (p. 337, bottom) does not call for an explanation involving presuppositions if Bresnan 1973 is correct.

to presuppositions, we would hope to be able to offer a syntactic difference to Since a presupposition-free syntax is much less powerful than one that can refer tactic difference sheds light on the facts given in §3.2 below. parallel the presuppositional one in these sentences. And in fact, proposing a syn-

this study are omitted.8 respectively. Those for 5a-b appear as Figures 3-4. Details not directly relevant to The underlying structures we propose for 4a-b are given here as Figures 1-2



more clause than that of the corresponding comparatives without non2. In Figs. 2 In the comparatives where non2 appears, the underlying structure contains one

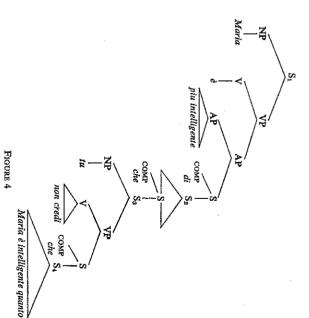
nor have we indicated what kind of complement (subject, object) S_3 is in S_2 . This and 4 this extra clause is labeled S_2 . We have not attached any lexical item to S_2 , a There is evidence that più derives from underlying più tanto. For a detailed analysis of the

head of comparative clauses in Italian, see Nespor (Ms). For an analysis of comparatives in English, see Bresnan.

(tanto); again, see Bresnan. For our purposes, however, the exposition of our arguments is clarified by beginning at the underlying level seen in Figs. 1-4. At a deeper level, the comparative S forms a constituent with the comparative quantifier più

> più intelligente 둫 comp di Ś Maria è intelligente quanto

FIGURE 3



and has varying meanings. In Fig. 2, S2 means roughly 'Someone is surprised is because S2 represents an ABSTRACT sentence, which is never lexically realized that ...'; in Fig 4, it means 'I expect that ...'

modern Spanish.⁹ Morgan 1969 proposes that, in underlying structure, presupposisubjunctive clauses that appear unembedded in surface structure in Latin and abstract verbs of supposition, with many characteristics of performatives. tions are conjoined to the left of performatives. These presuppositions have Figs. 2 and 4 is not new. R. Lakoff 1968 argues for abstract higher S's to dominate 3.1. Defense of the abstract S. The proposal of an abstract S such as S_2 in

that this S exists in underlying structure. In fact, a lexically realized S may occur in the same position as our abstract S_2 : While we propose an abstract S for semantic reasons, there is syntactic evidence

- (35) Maria è più intelligente di quanto la gente presume che non sia Carlo 'M is more intelligent than people assume C is(n't).
- (36) Ho apprezzato quel gesto più di quanto tu ti aspettavi che non avrei fatto 'I appreciated that gesture more than you expected that I would."

Thus a sentence node clearly can intervene between the main clause and the

(-ndo forms). Consider the following sentences: An argument in support of our abstract S is supplied by the behavior of gerunds

- (37) a. Ho visto Maria guidando per la strada 'I saw M while I was driving Ģ Ho incontrato quella ragazza lavorando nella fabbrica 'I met that girl down the street.
- Ho scoperto Carlo giocando nella soffitta 'I discovered C while I was while I was working in the factory." playing in the attic.'
- . Parlavo alla ragazza facendo smorfie 'I was talking to the girl while I was making faces."

Gerunds can have their subject deleted under identity only with the higher subject, 10 not with an object, as seen here.

is assumed, the subjunctive is used. Lakoff claims that this shows that linguistic facts cannot be or the indicative, and that the choice of mood depends upon the context. Thus, if the speaker posit an embedded abstract S dominating the clause which appears in the subjunctive when the be considered. We are not familiar with the Latin situation; but perhaps it would be justified to described solely by grammatical means, but that the context in which language is spoken must 'assumes responsibility' for the assertion of the clause, the indicative is used; if no responsibility if ... ' or 'I do not take credit for ... ' speaker assumes no responsibility. In such a case, that S might have the meaning 'I am not sure 9 R. Lakoff (1972:923) notes that some embedded clauses in Latin appear with the subjunctive

10 Only surface subjects that are not derived subjects may control a gerund. Thus (a)

(a) *Maria è stata vista da te guidando per la strada 'M was seen by you driving (you/her) down the street.

In fact, NP's that are not subjects may control the subject deletion of gerunds, such as the dative mi 'me' with the psychological verb sorprendere 'surprise': Mi sorprende che sia così basso, considerando l'altezza del papà 'It surprises me that he

briefly in Napoli (MS). Note that these gerunds are not to be confused with the progressive Exactly how these facts on deletion of the subjects of gerunds may be handled is touched on is so short, considering the height of his father.'

form of the verb. They do not derive from underlying stare V-ndo 'be V-ing', as shown by meanings of (b) and (c):

Studiando si può imparare tutto 'By studying, one can learn everything.

Now consider the following, with comparatives of the type seen in 5:

- (38) Tua moglie è meno fedele di quanto, rendendomi conto dell'importanza della importance of fidelity in marriage for you, you are ready to imagine.' sei pronto a immaginare 'Your wife is less faithful than, realizing the fedeltà nel matrimonio per te, (a) tu non sia pronto a immaginare | (b) *tu
- (39) Tua moglie è meno fedele (a) di quanto tu non sia pronto a immaginare, (b) are ready to imagine, realizing the importance of fidelity in marriage della fedeltà nel matrimonio per te 'Your wife is less faithful than you *di quanto tu sei pronto a immaginare, rendendomi conto dell'importanza

subject of the gerund. Yet this gerund is acceptable in 38a and 39a,11 the examples with non2, and not in 38b and 39b, the examples without non2. Thus some S with do we have a 1st-person subject which could have controlled the deletion of the te, must have had io 'I' as subject at some point, since rendendomi is a reflexive gerundial phrase, rendendomi conto dell'importanza della fedeltà nel matrimonio per In these examples only the comparative with non2 is acceptable. The subjectless the b examples. This S is our abstract S, which here might have had the meaning form with the 1sg. clitic mi 'me'. Nowhere in the surface of the sentences of 38-39 lsg, subject must appear in the underlying structure of the a examples, but not of I presume/expect/think.'

verbs would be the same for comparatives with and without non2. identity with the subject of a deleted performative verb, since the performative Note that this gerundial phrase cannot have had its subject deleted under

mative verb, consider the following sentences: As further evidence that this gerundial phrase is not dependent upon the perfor-

Rendendomi conto dell'importanza della fedeltà nel matrimonio per te, (io immaginare | (b) *di quanto tu sei pronto a immaginare 'Realizing the importance of fidelity in marriage for you, (I say that) your wife is less dico che) tua moglie è meno fedele (a) *di quanto tu non sia pronto a faithful than you are ready to imagine.

NP in an initial performative S can appear in sentence-initial position: However, gerunds which have had their subject deleted under identity with some Here we see that the gerundial phrase cannot appear in sentence-initial position.

- (41) Considerando il modo in cui agisce, (io dico che) tua moglie è meno fedele in which she acts, (I say that) your wife is less faithful than you believe. (a) di quanto tu credi | (b) di quanto tu non creda 'Considering the way
- Rendendomi conto del modo in cui agisce, (io dico che) tua moglie è meno fedele (a) di quanto tu credi / (b) di quanto tu non creda 'Realizing the way she acts, (I say that) your wife is less faithful than you think.'

Gerunds dependent upon the performative verb cannot in fact appear after di

heavy pauses around the gerundial phrase. Probably the awkwardness is caused by the length of the gerundial, which makes one prefer to postpose it, as in 39a 11 Ex. 38a sounds a bit awkward, although it is perfectly acceptable when read slowly, with

quanto, in contrast to the gerund seen in 38a (though they can appear in sentence-final position):

- (43) a. *Tua moglie è meno fedele di quanto, considerando il modo in cui agisce, tu credi | tu non creda.
- Tua moglie è meno fedele di quanto, rendendomi conto del modo in cui agisce, tu credi | tu non creda.

Note that in 41-42 the gerundial phrases, which are dependent upon the performative verb, are acceptable in comparatives with and without non₂. This is precisely because the performative verb is the same for all the comparatives. Likewise, in 38-40 the performative verb is the same for all the examples; yet the gerundial phrase can appear in certain positions with non₂, but never without it. What is decisive for this gerundial, then, is the presence or absence of our verb of presupposition. It is the presence of this verb on which the gerundial phrase in 38-40 depends for both its appearance and its position.

Assuming now that the abstract S's shown in Figs. 2 and 4 appear in underlying structure, the facts presented in §3.2 below can be accounted for.

3.11. Defense of non_2 in underlying structure. The differing pragmatics of comparatives with and without non_2 (studied in §2 above) have led us to propose that non_2 is present in the underlying structure of the subjunctive comparatives that appear with it in the surface, but absent in the underlying structure of the indicative comparatives that appear without it in the surface. Several syntactic arguments support this proposal.

In this section, we argue not only that non_2 is present in underlying structure, but also that its position is in S_8 . In Figs. 2 and 4, we have placed non_2 in the sentential complement of the abstract S_2 . There are at least two other possible positions for it. One is in S_2 itself, the other is in S_4 , in comparatives that have an S_4 , such as Fig. 4.

Let us first consider Fig. 4 once more, and turn our attention to the features of NP's. As is well known, indefinite NP's in examples like 44 can be [±specific] in affirmative sentences, but only [—specific] in negative sentences; 12

(44) a. Laura ha un cane 'L has a dog ([±specific])'

b. Laura non ha un cane 'L does not have a dog ([-specific]).'

In comparatives, such indefinite NP's can be $[\pm specific]$ in indicative sentences with non_2 ; without non_2 , but only [-specific] in subjunctive sentences with non_2 :

- (45) a. Laura ama un problema di logica più di quanto io amo un problema di matematica 'L loves a logic problem ([+specific]?) more than I love a math problem ([±specific]).'
- b. Laura ama un problema di logica più di quanto io non ami un problema di matematica 'L loves a logic problem ([± specific]?) more than I love a math problem ([-specific]).'

Thus the specificity of such an indefinite NP, in a comparative with or without non_2 , is the same as in a non-comparative negative or affirmative sentence, respectively. If the interpretation of indefinite NP's depends on the surface presence of a negative element, then 44-45 supply no argument for the underlying presence of non_2 in some comparatives. But if this interpretation depends on the underlying presence of a negative element, then 44-45 give an argument for the underlying presence of non_2 in the comparative in 45b. Since we do not at present have a way to choose between these possibilities, we leave the question open.

Second, non_2 with subjunctive in comparatives may appear with negative-polarity items, while indicative comparatives without non_2 cannot. In 46-47 we see that pur 'even' is a negative-polarity item which cannot appear in a non-negated S, regardless of mood. In 48 we see that non_2 in comparatives allows this negative-polarity item, while non-negated comparatives do not:

- (46) (a) *Dico che tu puoi [indic.] immaginarlo, / (b) *Penso che tu possa [subj.] immaginarlo, pur con tutta la fantasia del mondo 'I say/think that you can imagine it, even with all the fantasy in the world.'
- (47) (a) *Puoi immaginarlo, / (b) Non puoi immaginarlo, pur con tutta la fantasia del mondo 'You can/can't imagine it, even with all the fantasy in the world.'
- (48) La situazione in Africa è peggiore (a) *di quanto si arriva a immaginare, | (b) di quanto non si arrivi a immaginare, pur con tutta la fantasia del mondo 'The situation in Africa is worse than one can imagine, even with all the fantasy in the world.'

The constraint on pur in this usage is that the VP of its clause be negated. This constraint is on underlying, not on surface, structure:

(49) (a) *Non dico che tu puoi immaginarlo, | (b) Non penso che tu possa immaginarlo, pur con tutta la fantasia del mondo 'I don't say/think that you can imagine it, even with all the fantasy in the world.'

In 49a potere 'be able' is never negated at any level; thus pur cannot appear with it. But in 49b, with the reading in which negative transportation has applied, pur can appear. However, potere is not negated in surface structure in 49b; thus the constraint is on underlying structure. Looking at 48 now, we can see that in 48a, the indicative comparative without non, there is no negation of arrivare in underlying structure; but in 48b, the subjunctive with non, there is.

A third argument in favor of placing non_2 in S_3 depends upon the conjunction of negated sentences with *neanche* 'neither', and runs parallel to the one above about negative-polarity pur. Consider the following:

(50) (a) *Tu sei convinto / (b) Tu non sei convinto che Maria è intelligente, e neanche Giorgio ne è convinto 'You are/aren't convinced that M is intelligent, and G isn't convinced of it either.'

Neanche can occur here only if the first occurrence of the repeated verb is negated. This constraint holds at an underlying level, not at the surface. Thus if the negative in 50b is removed by negative transportation, neanche may still appear. Contrast these sentences:

¹² The following argument is used by Huckin 1974 to support the proposal that *than* is negative in English. Note that the Italian facts differ from the English; thus our conclusion is the opposite from Huckin's. That is, we conclude that some Italian comparatives are underlyingly negated, and others are not.

(51) (a) *Non dico | (b) Non penso che tu sia convinto che Maria è intelligente, e that M is intelligent, and G isn't convinced of it either. neanche Giorgio ne è convinto 'I don't say/think that you are convinced

good with the reading in which non2 has been moved by negative transportation lying level (since dire 'say' does not allow negative transportation). But 51b is from the predicate essere convinto 'be convinced' to the predicate pensare 'think' Here 51a is bad because non_2 has never negated tu set convinto che S at any under-Now consider these comparatives:

(52) Maria è più intelligente (a) *di quanto tu sei convinto | (b) di quanto tu non sia convinto, e neanche Giorgio ne è convinto 'M is more intelligent than you are convinced, and G isn't convinced of it either.'

that in 52a is not. Thus non2 must negate S3 in Fig. 4. means that the first essere convinto in 52b is negated in underlying structure, while The fact that neanche can occur in 52b (with non2), but not in 52a (without non2)

explained by negative transportation. However, essere convinto is a predicate that then the fact that it appears in S₃ (with credere 'believe') in the surface might be for not placing it in S₄. Another argument is as follows. If non₂ were in S₄ in Fig. 4. identical to that of 53b: does not allow negative transportation. That is, 53a does not have any reading The above argument against placing non_2 in S_2 in underlying structure also holds

- (53) (a) Tu non sei convinto che Maria è interessante 'You are not convinced that M is interesting.
- (b) Tu sei convinto che Maria non è interessante 'You are convinced that M isn't interesting.'

Yet essere convinto can appear with non2 in comparatives:

Maria è più intelligente di quanto tu non sia convinto 'M is more intelligent than you are convinced.'

placement with credere in Fig. 4. For these reasons, we conclude that non_2 negates S_3 in underlying structure.¹³ of Fig. 4 (i.e., 5b), negative transportation cannot be the correct explanation for its If non_2 in 54 is to be accounted for in the same way as non_2 in the surface sentence

that ever and any appear in English comparatives, while negative elements like nobody do not Italian, and negative elements may appear in Italian comparatives: For this reason he proposed an underlying not which gets deleted. There are no parallel facts in 13 For speakers of English, many questions may arise at this point. First, Ross 1969 notes

(a) Non è più alto di nessuno 'He isn't taller than anyone (no one).'

in English, as do other examples of constituent negation: Furthermore, we would like to point out that never and not at all do appear with comparatives

- 9 Better late than never. (*ever)
- And, for some speakers, comparatives like (d) are acceptable: It's better that he did it late than not at all. (*It's better that he did it late than at all.)
- (d) She's taller than you wouldn't believe.

ently depending on negativity. Inequalities, he points out, act like negated S's with respect to Second, Grosu 1972 has pointed out that coordination reduction in English behaves differ-

> which follow from our analysis, and which would be difficult to explain otherwise 3.2. Explanatory power of this analysis. In this section we present several facts

abstract S which dominates the S with non2.14 facts follow automatically if the subjunctive is required by the abstract V in the the verb following it is subjunctive; but without non_2 , we have the indicative. These 3.21. Subjunctive. Looking at examples 4-5, one notes that when non2 appears,

it provides no argument for or against our analysis. this rule. In Italian, however, coordination reduction is the same regardless of negativity. Thus

tives in English. In both cases, the facts in Italian are different. Note that già 'aiready' is not an affirmative-polarity item in Italian. It may appear in the indicative only with affirmative verbs. But it may appear in the subjunctive with negated verbs: paratives, and that affirmative-polarity items like already and still are excluded from comparathat normally negated elements like can't stand or can't help appear without the not in comproposes that, in English comparatives of inequality, than is a negative element. He points out Third, Huckin, in a study that covers the Ross and Grosu arguments plus many others,

- 36 L'ha già fatto 'He's already done it.'
- *Non l'ha già fatto 'He hasn't already done it.'
- Penso che (non) l'abbia già fatto 'I think that he has/hasn't already done it.'

Likewise, gid may appear with non_2 in subjunctive comparatives, as well as without non_2 in indicative ones:

(h) Ha avuto un successo maggiore (1) di quanto ha già avuto nel passato [indic.] / (2) *di passato (subj.) 'He had a greater success than he already had in the past.' quanto non ha già avuto nel passato [indic.] / (3) di quanto non abbia già avuto

comparatives: Note also that certain negative-polarity items, like affatto 'at all', cannot appear with nonz in

(i) *Maria è più alta di quanto tu non creda affatto 'M is taller than you don't believe at

preceding.) Thus (i) is self-contradictory and unacceptable. that the speaker does not have such precise knowledge. (See 32-34 above, and the comments This is because affatto requires a precise knowledge of the listener's belief in (i), but non2 shows

cannot imagine what the parallel semantic reading of (I) would be: may suggest only that the modality of English comparatives is like that of negated S's, rather tions often alleged to depend upon the affirmative/negative contrast in English may well depend languages may be causing all these apparent gross differences. Huckin notes that many distincnot suffice for the comparatives in both languages. Still, some slight difference between the two out that, while it is possible to propose a semantic reading for (j) of (k), as Huckin does, than that English comparatives of inequality are indeed negated. And we would like to point instead upon a modality contrast. If this is so, the data on English presented in this footnote Given the above contrasts between English and Italian, it may well be that one analysis can-

- (j) John is taller than Bill.
- (k) John is -er much tall than Bill is not -er much tall
- (l) John is less tall than Bill.

Thus the analysis of English inequalities which claims they are negative meets many problems

it must be only [+specific] una ragazza is [-specific] in (a). For some speakers, una ragazza is [\pm specific] in (b); for others, non-specific NP's in certain cases; e.g., Cerco una ragazza (a) che sappia [subj.] il giapponese because quanto is an indefinite antecedent. The subjunctive mood may be used after indefinite (b) che sa [indic.] il giapponese 'I'm looking for a girl who knows Japanese.' For all speakers, 14 Dwight Bolinger has suggested to us that the subjunctive may appear after di quanto

If it is quanto that triggers the subjunctive, then we would expect, for those speakers who

In many varieties of Italian, the subjunctive seems to be lexically controlled; i.e., certain verbs, complementizers, NP's, and adjectives call for the subjunctive in their complements, regardless of anyone's presuppositions about that complement. Thus, in 55, everyone may know that the world is round, yet some speakers still use the subjunctive, because for them the lexical item *credere* controls the mood of the complement:

(55) Maria deve credere che il mondo sia [subj.] rotondo, perchè lo è 'M musi believe that the world is round, because it is.'

In many other varieties of Italian, the subjunctive seems to be lexically controlled by some verbs, but presuppositionally controlled in the complement of others. Kiparsky & Kiparsky note briefly that German factive complements are in the indicative, while non-factives may often be in the subjunctive. Rivero 1971 makes similar claims for Spanish. Saltarelli 1974a,b claims for Italian that the indicative mood occurs when a proposition has identified reference, otherwise the subjunctive occurs.

The situation seems to us to call for a slightly different analysis of the Italian subjunctive from any of those above. Certainly for many speakers, if one considers a complement to be true (i.e. factive), the indicative is used. Such speakers prefer 56 to 55:

(56) Maria deve credere che il mondo è [indic.] rotondo, perchè lo è.

However, for other speakers, the 'intensity' of the complement on the part of the higher subject is relevant to mood. Suppose that one says:

(57) Maria crede che New York sia [subj.] bella 'M believes that New York is pretty.'

Here the speaker may well believe that New York is pretty; but the subjunctive indicates that Maria has only a vague notion of its beauty, and most probably has never been to New York. But one may say:

(58) Maria crede che New York è [indic.] bella.

Here the speaker may or may not agree with Maria; but Maria has the notion firmly in her mind, and probably has visited New York. However, even if Maria has not visited New York, but firmly believes it is a pretty city, the indicative is used:

(59) Maria crede che New York è bella—non so perchè se l'è messo nella testa, perchè non c'è mai stata 'M thinks that New York is pretty—I don't know how she got that idea in her head, because she's never been there.'

read una ragazza in (b) as being only [+specific], that only the subjunctive could be used after quanto. However, this is not true. All speakers we have found accept both the indicative (without non2) and the subjunctive (with it) in these inequalities. So unless one argues that the quanto of subjunctive inequalities is [-specific] and that of indicative inequalities is [-specific], one cannot explain the possibility of the indicative mood after quanto. The same objection holds for comparatives of equality, where quanto is used, but the indicative is the only acceptable mood. Furthermore, there is no indefinite NP like quanto in some of the examples of §4, where both non2 and the subjunctive appear. For these reasons, we are suspicious of Bolinger's suggested solution. And once we consider all the syntactic facts presented in §3, we reject this solution in favor of the abstract S solution.

Certainly, we cannot get into a detailed analysis here of how the subjunctive mood is used. All we wish to demonstrate is that contexts are relevant to the choice of mood for many Italians. Thus the claim that our abstract verb controls the subjunctive in its complement in our comparatives with non_2 is reasonable, since it is precisely the notion of supposing, but not knowing for sure, that is conveyed by this abstract verb.¹⁵

3.22. Subjunctive without non_2 . Thus far we have given examples with subjunctive plus non_{2i} and with indicative without non_{2i} . But the facts are not as cut and dried as our examples might lead one to believe. Actually, the preferences are as follows:

- (60) Maria è più intelligente (a) di quanto tu credi [indic.] / (b) *'di quanto tu non credi [indic.] / (c) di quanto tu non creda [subj.] / (d) '\(^{\infty}\) di quanto tu creda [subj.] 'M is more intelligent than you believe.'
- (61) Maria è più intelligente (a) di quanto è Carlo [indic.] / (b) ^{?*}di quanto non è Carlo [indic.] / (c) di quanto non sia Carlo [subj.] / (d) ^(?)di quanto sia Carlo [subj.] ^{*}M is more intelligent than C is.^{*}

Everyone agrees that 60a,c and 61a,c are perfectly grammatical. For some speakers, 60d and 61d are good, while for others they are less preferable than 60c and 61c (hence we have placed the '?' in parentheses). No one has told us they would say 60b or 61b, yet everyone thinks they might have heard someone else say it. Our analysis of the appearance of non₂ in comparatives predicts that, among speakers who use the subjunctive only with lexical conditioning, some speakers may consider the abstract verb of our abstract S not to be in the class of verbs calling for the subjunctive. Thus these speakers should use non₂ plus the indicative. There should be no possibility for the indicative with non₂, however, among those speakers who control mood semantically. We do not know if this prediction holds true, since we have found no speakers who use the indicative with non₂. But the fact that people think they have heard 60b and 61b is perfectly consistent with our analysis.

The d examples, then, are the only ones not yet accounted for. We claim that d comes from c by way of an optional rule deleting non_2 . Semantically, this seems correct, since the d examples can be used in the same contexts as the c examples, but not everywhere that the d examples can be used. ¹⁷ This distribution would be natural if the c and d examples were transformationally related.

¹⁶ Sometimes a modal verb following non₂ may be indicative or subjunctive, with no clear difference of acceptability: Epit alto diquanto tu non passa [subj.] I non puoi [indic.] immaginare 'He's taller than you can imagine.' Since modality may be expressed either by a modal verb or by mood, this fact is not surprising for those speakers whose use of mood is presuppositionally controlled. However, one problem with our analysis is that many speakers who lexically control the subjunctive after verbs like credere do not allow the indicative, even with modal verbs, in the complement of credere-type verbs. Yet these speakers do accept the above example, with or without the subjunctive. We have no explanation for these facts.

¹⁶ We are grateful to Emily Norwood Rando for pointing out this prediction to us.

¹⁷ Some speakers have a slight preference for deleting non₂ when the situation calls for extreme politeness. The kind of subtle difference implied by such a choice, between the subjunctive comparative with and without non₂, is not atypical of many choices between applying

negative sentences. In subjunctive comparatives without non2, such indefinite non₂ from those with it. First, as noted in §3.11, certain indefinite NP's may have [± specific] readings in affirmative sentences, but only [-specific] readings in NP's have only [-specific] readings: At least four syntactic arguments favor deriving subjunctive inequalities without

(62) Laura ama un problema di logica più di quanto io ami [subj.] un problema a math problem [-specific]." di matematica 'L loves a logic problem [±specific?] more than I love

and in subjunctive inequalities: an unlikely set of environments. comparative clause were underlyingly negative. If there is no underlying non_2 in (62), one must say that these indefinite NP's are [-specific] in negative sentences The [-specific] reading of the second un problema here would be explained if its

and non2, but not with the indicative without non2. These same negative-polarity items are marginally acceptable without non_2 when the subjunctive mood is used i Second, we saw that negative-polarity items may appear with the subjunctive

(63) ^{con}La situazione in Africa è peggiore di quanto si arrivi a immaginare, pur than one may possibly imagine, even with all the fantasy in the con tutta la fantasia del mondo 'The situation in Africa is worse

negated subjunctive inequality-again, an unlikely set of environments. polarity item in 46-48 and 63 can occur only with negated VP's or with a nonby a rule deleting non2. If no such rule exists, one must say that the negativethat it is almost as good as 60d and 61d, 18 are explained if 63 is derived from 48b The facts that 63 is much better than 48a (which lacks non_2 in the indicative), and

appear with subjunctive inequalities without non2:19 occurrence of the repeated verb is negated. We find that neanche can marginally Third, we saw that neanche, in an example like 52, is acceptable only if the first

(64) cm Maria è più intelligente di quanto tu sia convinto, e neanche Giorgio ne è isn't convinced of it either. convinto 'M is more intelligent than you may be convinced, and G

follow. If it is not, we need a strange set of environments for neanche-conjunction Again, if non2 is present underlyingly in 64, the facts about neanche-conjunction

as well as by di quanto, with the same degree of acceptability: comparatives without non2, as we expect by this point, can be introduced by che tive comparatives without non2 can be introduced only by di quanto. Subjunctive can be introduced by the complementizer che, as well as by di quanto, while indica-Fourth, we show in §3.24 below that subjunctive comparative clauses with nona

(65) Maria è più intelligente (a) ⁽¹⁾che sia Carlo | (b) ⁽¹⁾che tu creda 'M is mon intelligent than C is/than you think.'

61b, in which non2 appears with the indicative, have the same degree of (un) acceptability with che as with di quanto: tives, regardless of the presence or absence of non2. However, note that 60b and level, then we might try to suggest that che can appear with subjunctive comparawith non2 in the surface, constitute a single fact. But if there is no non2 in 65 at any complementizers here, and the choice of complementizers in comparative clauses If non2 has been deleted from the comparative clauses in 65, then the choice

(66) Maria è più intelligente (a) ?*che non è Carlo | (b) ?*che tu non credi

acceptable with non2 in comparative clauses. environments. But if non2 is underlyingly present in 65, then we can say that che is comparative clauses with non2 or with the subjunctive—an unenlightening set of WITHOUT it in the indicative (see §3.24 below), we must say that che can appear in Since che is not impossible with non2 in the indicative, but is totally impossible

and 61d above. In the past tense, however, the deletion of non_2 is perfectly acceptable tense verbs is marginal for some speakers, but good for others, as we saw in for many speakers we have questioned:20 3.23. Subjunctive without non2, Past Tense. The deletion of non2 with present-

(67) Maria è più intelligente (a) di quanto (non) fosse suo fratello a quell'età | (b) at that age / than you believed.' di quanto tu (non) credessi 'M is more intelligent than her brother was

rule deleting non2 operates in polite contexts of a type found more commonly in know another's opinions, Bolinger's explanation seems correct to us. Thus the of having mistaken another's opinions is more polite than stating that we think we the subjunctive without non2 seems more polite. Since allowing for the possibility the possibility of having mistaken a present one. We noted above (see fn. 17) that tenses, because the possibility of having mistaken a past opinion is stronger than then comparatives in the subjunctive without non_2 are perfectly acceptable in past about his presumption of other people's opinions.21 He suggests that, if this is true, non₂ is used when the speaker allows for the possibility that he might be mistaken Dwight Bolinger has suggested to us that the subjunctive comparative without the past tense than the present.

comparatives in the past tense: 20 Note that there is good syntactic evidence that 11012 has been deleted from the subjunctive

- La situazione in Africa è peggiore (P)di quanto si arrivasse [subj.] a immaginare | *di situation in Africa is worse than one could imagine, even with all the fantasy in quanto si arrivava [indic.] a immaginare, pur con tutta la fantasia del mondo 'The
- 3 Maria è più intelligente (?) di quanto tu fossi [subj.] convinto | *di quanto tu eri [indic.] convinced, and G wasn't convinced of it either. convinto, e neanche Giorgio ne era convinto 'M is more intelligent than you were
- Maria è più intelligente (?) che tu credessi [subj.] / *che tu credevi [indic.] 'M is more intelligent than you thought."

junctive with and without nong comparatives. We are merely relating his suggestions about the differences between the sub-²¹ We do not mean to suggest that Bolinger agrees with our rule deleting non₂ from these

when one wishes to avoid responsibility. transformations or not. Thus Bolinger 1968 has pointed out the preferred use of the passive

polarity item in the surface, which makes one expect a non2 there. 18 Ex. 63 may be slightly worse than 60d and 61d because of the presence of the negative-

of neanche in the surface, which makes one expect a nonz 19 Again, if 64 has lower acceptability than 60d and 61d, this may be because of the presence

A second interesting fact involving tense distinctions is that non_2 with the indicative sounds better in the past tense than in the present:

- (68) Maria è più intelligente (a) **di quanto non è suo fratello / (b) **odi quanto non era suo fratello a quell' età 'M is more intelligent than her brother is / than her brother was at that age.'
- (69) Maria è più intelligente (a) ?*di quanto tu non credi / (b) ¹⁰³di quanto tu non credevi 'M is more intelligent than you believe / believed.'

As we stated in §3.22, we predict that certain speakers, who control mood entirely on the lexical level, may classify the verb of our abstract S as taking the indicative mood in its complement. Such speakers would produce the sentences of 68-69. Although we have not found such speakers, we have noted that for many speakers who control mood lexically (either entirely or partially), lexical items requiring the subjunctive in a present-tense complement may accept (fully or marginally) the indicative in a past-tense complement. Consider an example with the clause introducer prima che 'before', which controls mood:

- (70) Prima che Maria (a) faccia [subj.] quello / (b) *fa [indic.] quello, io faccio così 'Before M does that, I'll do thus.'
- (71) Prima che Maria (a) facesse [subj.] quello / (b) (m)faceva [indic.] quello, io facevo così 'Before M did that, I was doing thus.'

In 70, we see that the present indicative is bad after prima che. But in 71, we see that some speakers fully accept the past indicative, while others do not reject it completely after prima che. Thus the fact that the indicative with non_2 in inequalities is much better in the past tense than in the present is parallel to the fact that the indicative after elements that lexically control the subjunctive is better in the past tense than in the present. These two facts are, indeed, a single fact if 68b and 69b are alternatives to 67a and 67b respectively, which is our claim.

3,24. CHOICE OF COMPLEMENTIZERS. The comparative complementizer, di (quanto), can appear in comparatives with and without non_B, as we saw in 4-5. For many Italians, however, the complementizer che 'that' can appear with the non₂-comparatives, but not with the comparatives lacking non₂ in the indicative:

- (72) *Maria è più intelligente (a) *che è Carlo / (b) che non sia Carlo.
- (73) *Maria è più intelligente (a) *che tu credi / (b) che tu non creda

Looking back at the structures proposed in Figs. 1-4, we see that the abstract S_2 present in comparatives with non_2 is introduced by the same complementizer that introduces S_2 in the comparatives without non_2 . We see also that S_3 embedded in S_2 is introduced by the unmarked complementizer *che*. Thus the two complementizers, *di* and *che*, are separated only by the abstract elements of S_2 . The abstract elements of S_2 are subsequently deleted, leaving behind S_3 . The question, then, is what happens to the complementizers on either side of the deletion site.

Note that, when subjunctive clauses stand alone, they may or may not be introduced by a complementizer:

(74) (Che) le avessi comprate! Oh, if only I had bought them!

The subjunctive in S's like 74 is exactly the kind for which R. Lakoff 1968 proposes higher abstract verbs. If a higher abstract verb underlies 74, then when it is deleted, the *che* introducing its complement may optionally also be deleted.

Perhaps the abstract elements of S₂ in Figs. 2 and 4 are deleted, optionally taking with them the *che* complementizer that introduces S₃. If *che* is deleted, *di* (quanto) surfaces as the complementizer. If *che* is not deleted, then we have two complementizers back-to-back; and since they introduce only one S, one of them is deleted. Thus *di* (quanto) might be deleted, yielding *che* in the surface in 72b and 73b. Nick Clements has pointed out to us that, since the complementizer *di* is homophonous with a preposition, a rule deleting *di* before *che* is similar to preposition deletion before complementizers in various languages. Certainly such a rule is independently motivated in Italian—*Ho paura di lui* 'I am afraid of him' vs. *Ho paura* (**di*) *che venga* 'I am afraid (*of) that he may come'.

Che can never arise in the comparatives without an abstract S_2 (i.e. the indicative comparatives without non_2), because the situation of two complementizers 'fighting' for one position will never arise.

Without an underlying extra abstract S in the comparatives with non2, it is difficult to imagine how the choice of complementizers might be accounted for. But with the abstract S, the data are more understandable.

3.25. REPETITION AND CLITICS. In comparatives of the type seen in 4, the element which is compared need not be deleted:

(75) Maria è più intelligente (a) di quanto è intelligente Carlo / (b) di quanto non sia intelligente Carlo 'M's more intelligent than C is intelligent.'

There is a distinct difference, however, in the tone and possible uses for 75a and 75b. The second *intelligente* of 75a is said more slowly than that of 75b. In 75a there is a strong sense of repetition, which is much less noticeable in 75b. Furthermore, 75a might be found in a context like the following:

(76) Paolo: Maria e Carlo sono una coppia speciale: lei è intelligentissima e lui è bellissimo. 'M and C are a special couple: she is very intelligent and he is very handsome.'

Dario: Ma lei è più intelligente di quanto è bello lui, no?' But she is more intelligent than he is handsome, isn't that so?'

Paolo: Not Lui è il più bello del mondol Però, lei è più intelligente di quanto è intelligente lui. 'No! He is the most handsome man in the world! But she is more intelligent than he is intelligent.'

But 75b sounds fine in the same contexts as 4b. Note that if Fig. 1 is the structure underlying 75a, then the first instance of *intelligente* is in S₁, while the second is in S₂. The structural proximity may make the deletion of the second *intelligente* automatic in most contexts. But if Fig. 2 underlies 75b, the two instances of *intelligente* are in S₁ and S₃. The greater structural distance between them may allow for an optional deletion of the second one.

This explanation is supported by the facts on clitics. Predicate adjectives may be replaced by the clitic lo:

(77) Dario: È intelligente Maria? 'Is M intelligent?' Paolo: Sì, lo è 'Yes, she is (that).'

When lo replaces a predicate adjective, a quantifier may remain behind:

(78) Sì, lo è molto 'Yes, she is (that) a lot.'

be replaced by the unstressed clitic lo, while that of 75b could. This is, in fact, the that in 75b does not, we would expect that the second intelligente of 75a could not 75a requires a context in which it is lengthened or otherwise emphasized, while Clitics never receive stress in Italian. If the second occurrence of intelligente in

(79) Maria è più intelligente (a) *di quanto lo è Carlo | (b) di quanto non lo sia Carlo 'M's more intelligent than C is (that).'

cliticization facts can be accounted for. But with our abstract S, they follow. Without a structural difference between 75a and 75b, we cannot see how these

appear only with the surface complementizer di quanto, never with che (see §3.24 Another fact about clitics is that the lo which replaces predicate adjectives can

(80) Maria è più intelligente (a) di quanto non (lo) sia Carlo / (b) *che non lo sia

This follows from the fact that repetition of the predicate adjective can occur after di quanto (as we see in 75), but not after che:

(81) *Maria è più intelligente che non sia intelligente Carlo.

after che. This is true even when we compare clauses with different predicate From 81 we see that a predicate adjective cannot appear in the comparative clause

(82) Maria è più intelligente (a) di quanto è furbo Carlo / (b) di quanto non sia furbo Carlo / (c) *che non sia furbo Carlo 'M is more intelligent than C is sly.'

and since the presence of che blocks quanto from moving into complementizer quanto. Since quanto must either move into complementizer position or be deleted, appear in a comparative clause after che. position, quanto can never co-occur with che. Therefore no predicate adjective car tive clause is not admissible except in the presence of the comparative quantifier We think that 80b, 81, and 82c are bad because a predicate adjective in a compara

One prefers to use a briefer comparative like: 3.26. REDUCTION. Comparatives like 4a are fully acceptable, but they are unusual

(83) Maria è più intelligente di Carlo 'M is more intelligent than C.

of a longer comparative, it seems that it must be reduced from 4a and not from 4b tions of the type conveyed by comparatives with non2. Thus, if 83 is a reduced form This can be used in all the same contexts as 4a, and it does not convey presupposi-Some speakers have another alternative for forming comparatives:

(84) Maria è più intelligente che Carlo.

it is appropriate in the same contexts as 4b and 5b; i.e., it is reduced from a comparative with non₂. In fact, non₂ may appear with marginal acceptability: 25 We did not find many speakers who use this. Still, it seems that for those who do,

This does not mean that 85 is derived from a comparative having none with che, while a com-

(85) ³Maria è più intelligente che non Carlo

to NP's; for others, both indicative and subjunctive (i.e. those with non2) can reduc Thus it appears that, for many speakers, only indicative comparatives can reduce varieties of Italian We do not know why subjunctive comparatives can reduce to NP's only in certai

- ments, while proibire 'prohibit' in 87 can take only affirmative complements: claim is totally consistent with the grammar of Italian, since many verbs requi amounts to claiming that our abstract verb takes only negative complements. Such be affirmative. Thus, stare all erta 'watch out' in 86 can take only negative comple that their complements be negative-just as many require that their complement 3.3. Obligatory negation in S_3 . We have claimed that S_3 in Figs. 2 and 4 (i. the comparative clauses with non_2) are negated in underlying structure. Th
- (86) a. Sta all'erta che non ti sorprenda 'Watch out that he doesn't surpris
- *Sta all'erta che ti incontrino in quel posto 'Watch out that they mee you in that place."
- Proibisco che Giorgio parli 'I forbid that G speaks.'
- *Proibisco che Giorgio non vada a scuola 'I forbid that G not go t school.

Our abstract verb, then, is in a class of predicates with stare all'erta which take only negative complements.

depends on the presuppositions of the speaker, and not completely on the syntax c 4. Non2 IN OTHER CONSTRUCTIONS. If our analysis of non2 is correct, its appearance

parative having non₂ with di (quanto) cannot reduce. Rather, (a) is bad because di can t followed only by NP's, pronouns, and numerals in the surface of reduced comparatives. An other element (ADV, VP, PP etc.) must be preceded by che:

(b) Maria è più intelligente che | *di furba 'M is more intelligent than sly.

Va più spesso al cinema che | *di in biblioteca 'He goes to the movies more often tha Mi piace di più nuotare che | *di fare i tuffi 'I like swimming better than diving.'

to the library.

comparatives are discussed by Nespor (MS). Thus (a) is bad because non2 cannot follow di. Differences between di and che in reduce

While many speakers do not accept (85), most accept the following:

(e) È più studioso che (non) intelligente 'He's more scholarly than intelligent.'

maggiormente il difetto dell'intelligenza' ('underline more strongly the defect of intelligence' Battaglia & Pernicone (1951:497) note that non2 is kept here when one wants to 'sottolinear We believe, rather that this non is non2

²³ Another example might be:

(a) Dubito che Carla (1) abbia capito / (2) non abbia capito 'I doubt that C has (no understood."

tactic negation'. He points to cases in which 'a negative is placed in a clause dependent on a ver of negative import like "deny, forbid, hinder, doubt" ([1917] 1960:75), and he gives as a to that of (a1); however, (a) may exemplify a separate phenomenon that Jespersen calls 'para Certainly (a2) is ambiguous (as are 88-90, in the b examples). It does have one reading similar

²² Note that the corresponding sentence with di is totally unacceptable

 ⁽a) *Maria è più intelligente di non Carlo.

comparatives. Therefore we would expect to find other syntactic environments in following sentences,23 all of which involve indirect questions: which it can appear. And in fact, we do. Consider the a and b examples of the

(88) Chissà (a) che ti sposi / (b) che non ti sposi 'Who knows if he'll marry you / if he might not marry you."

Non sono sicura (a) se io debba / (b) se io non debba vederlo lunedì 'I'm not sure if I should / shouldn't see him Monday.

9 Ci domandiamo (a) se dobbiamo / (b) se non dobbiamo riconsiderare la nostra analisi di 'non2' 'We wonder if we should / shouldn't reconsider our analysis of non2.

9 Chissà (a) se vale | (b) se non valga la pena (di) comprarlo 'Who knows if it's worth / if it's not worth the trouble to buy it.'

sentences as would non1. In fact, the b sentences of 88-90 are ambiguous as to surprise someone, or to be contrary to previous expectations. Note that the subwith non1 plus the indicative, contrasting with 91b in the same way that 16 contrasts this is truly an example of nona, then there should be a corresponding sentence clause. However, 91 takes the indicative without non2, but the subjunctive with it. If whether one is unsure about the affirmative or negative possibility of the embedded The b examples are used when the speaker expects the negated proposition to with 17—and there is: junctive is used with or without non_2 in 88-90; thus it sounds the same in these

(92) Chissà se non vale [indic.] la pena (di) comprarlo 'Who knows if it isn'i worth the trouble to buy it."

paper is not found solely in Italian (or solely in Romance), but in English as well. presuppositions present in Italian. Thus the negative element discussed in this We expect that it can be found—we wonder if it can't be found—in many languages. We believe that these examples can be translated into English, maintaining the

verb in an abstract sentence dominating the complement in which non2 appears. In order to explain many syntactic and semantic facts, we have proposed an abstract holds certain presuppositions. It is not pleonastic, but rather is a bona-fide negative. in both Italian and English. We have given no account of why our abstract S of Finally, we have shown that non2 appears in constructions other than comparatives 5. CONCLUSIONS. We have argued that non2 is present only when the speaker

example (a2), with the reading given there, is used in contexts similar to that for nonz. Thus (a2) Certainly (c) and (d) seem to give examples of our negative of presupposition. And the Italian is enough evidence to make the speaker think Carla has indeed not understood. So the speaker therefore, the idea that she might not have understood in this instance is unlikely. Still, there might be used when the speaker knows Carla is very intelligent and usually understands: raises his doubt, while still letting you know he expects people to be surprised at it.

> account for at least five sets of facts (in §3.1 the gerund facts, and in §3.2 those on serious theoretical implications. However, the proposal of this S has allowed us to S in embedded position that is never lexically realized is a new proposal, with structures do not. Perhaps the presence of the wn-word in both these structures approach. Thus this analysis has strong explanatory power in its favor. unrelated in either a presupposition-dependent syntax model or an interpretive mood, choice of complementizers, clitics, and repetition); all these would go in §4) provide environments for this presuppositional sentence, while other types of Specifically, we do not know why comparatives and indirect questions (like those presupposition can appear in certain syntactic environments, but not in others. (comparatives and indirect questions) is crucial. Also, we realize that generating an

suppositional fact that is accounted for by a certain syntactic analysis. Thus we may hope that presupposition-free syntax can still be defended If our analysis is anywhere near correct, non2 is one more example of a pre-

REFERENCES

ANTINUCCI, FRANCESCO, and ANNARITA PUGLIELLI, 1971. Struttura della quantificazione. 47-62. Rome: Bulzoni. Grammatica trasformazionale italiana, ed. by Mario Medici & Raffaele Simone,

Bresnan, Joan. 1973. Syntax of the comparative clause construction in English. BOLINGER, DWIGHT. 1968. Aspects of language. New York: Harcourt, Brace & World. BATTAGLIA, S., and V. Pernicone. 1951. La grammatica italiana. Torino: Chiantore. Linguistic Inquiry 4.275-344.

CHOMSKY, NOAM. 1971. Deep structure, surface structure, and semantic interpretation. Semantics, ed. by D. Steinberg & L. Jakobovits, 183-216. Cambridge: University

GROSU, ALEXANDER. 1972. The strategic content of island constraints. (Working papers

in linguistics, Ohio State University, 13.) Columbus.

HORN, LAURENCE. 1969. A presuppositional analysis of only and even. Papers from the 5th Regional Meeting, Chicago Linguistic Society, 98-107.

HUCKIN, Tom. 1974. Abstract negation in the English comparative sentence. Papers presented at the 4th Western Conference on Linguistics, Seattle.

Karttunen, Lauri. 1973. Presuppositions of compound sentences. Linguistic Inquiry JESPERSEN, OTTO. 1917. Negation in English and other languages. Copenhagen. [Reprinted in his Selected writings, 3-151. London: George Allen & Unwin, 1960.

Keenan, Edward. 1971. Two kinds of presupposition in natural language. Studies in linguistic semantics, ed. by C. Filmore & D. T. Langendoen, 45-54. New York: 4.169-93.

Holt, Rinehart & Winston.

LAKOFF, GEORGE. 1971. Presupposition and relative well-formedness. Semantics, ed. by D. Steinberg & L. Jakobovits, 329-40. Cambridge: University Press. KIPARSKY, PAUL, and CAROL KIPARSKY. 1970. Fact. Progress in linguistics, ed. by M. Bierwisch & K. E. Heidolph, 143-73. The Hague: Mouton.

LAKOFF, ROBIN. 1968. Abstract syntax and Latin complementation. Cambridge, MA. MIT Press.

-, 1972. Language in context. Lg. 48.907-27.

Napoli, Donna Jo. Ms. Indefinite subject sentences in Italian. Morgan, Jerry. 1969. On the treatment of presupposition in transformational grammar. Papers from the 5th Regional Meeting, Chicago Linguistic Society, 167-77.

Nespor, Marina. Ms. The head of the comparative construction in Italian. Rivero, Marina Luisa. 1971. Mood and presupposition in Spanish. Foundations of Language 7.305-36.

⁽b) It never occurred to me to doubt that your work ... would not advance our common object in the highest degree.

Dwight Bolinger, on the other hand, has suggested that doubt today might be analysed as

⁽c) I raise the doubt that he is (not) here.

⁽d) I raised the doubt about his (not) being here.

- Ross, John Robert. 1969. A proposed rule of tree-pruning. Modern studies in English, ed. by D. A. Reibel & S. A. Schane, 288-99. Englewood Cliffs, NJ: Prentice-Hall. Saltarelli, Marko. 1974a. Reference and mood in Italian. Linguistic studies in Romance languages, ed. by J. Campbell, M. Goldin, & M. Wang, 203-18. Washington, DC: Georgetown University Press.

 ——. 1974b. Postulati per una teoria semantica delle proposizioni comparative. Fenomeni morfologici e sintattici nell'Italiano contemporaneo, ed. by Mario Medici & Antonella Sangregorio, 283-99. Rome: Bulzoni.

 Seuren, Pieter. 1969. Il concetto di regola grammaticale. La sintassi, Atti del III Convegno Internazionale di Studi, Società di Linguistica Italiana, 125-41. Rome:
- Bulzoni.

 Van Valin, Robert. 1975. A pragmatic analysis of German doch. Master's thesis.

 Berkeley: University of California.

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