

On the Nature of Comparative Subclauses: A Crosslinguistic Approach*

Julia Bacskai-Atkari

1 INTRODUCTION

Although comparatives are traditionally treated as subordinate structures, it has been proposed (Lechner 1999: 183–193; 2004: 185–198) that they rather resemble coordination and should be analyzed accordingly. However, various cross-linguistic phenomena show that a coordination analysis cannot be universally applied to comparative structures as they conflict with the assumptions on which Lechner's theory is based. The aim of this essay is to prove that comparatives are always subordinate structures and that a coordination analysis is fundamentally flawed.

The paper is divided into nine major sections. In Section 2, the main arguments for subordination are considered; Section 3 briefly describes Lechner's coordination proposal. Sections 4–9 concentrate on specific issues related to comparatives, showing the impossibility of applying a coordination analysis. Finally, Section 10 argues that coordination is not necessary to account for ellipsis in comparatives.

2 COMPARATIVES AS SUBORDINATION

Let us begin with a general characterization of comparative structures. Consider:

- (1) Peter is more intelligent than John.

The structure of comparatives consists of two major parts: the matrix clause (*Peter is more intelligent*) expresses the reference value of the comparison and the comparative subclause (*than John*) expresses the standard value. Their relation can be described in the following way (based on Kántor 2008: 97; see also Lechner 2004: 53–56; for the semantics of comparison, see Kennedy in press: 1–3).

*The present article is a slightly modified version of my paper for the 2009 *National Conference for Students' Scholarly Circles* (OTDK), which won the first prize in the category 'English descriptive and theoretical linguistics'. The original version is to appear in the volume *Első Század – OTDK 2009*. I would like to thank Gergely Kántor and Mark Newson for their help and encouragement while I was preparing this paper.

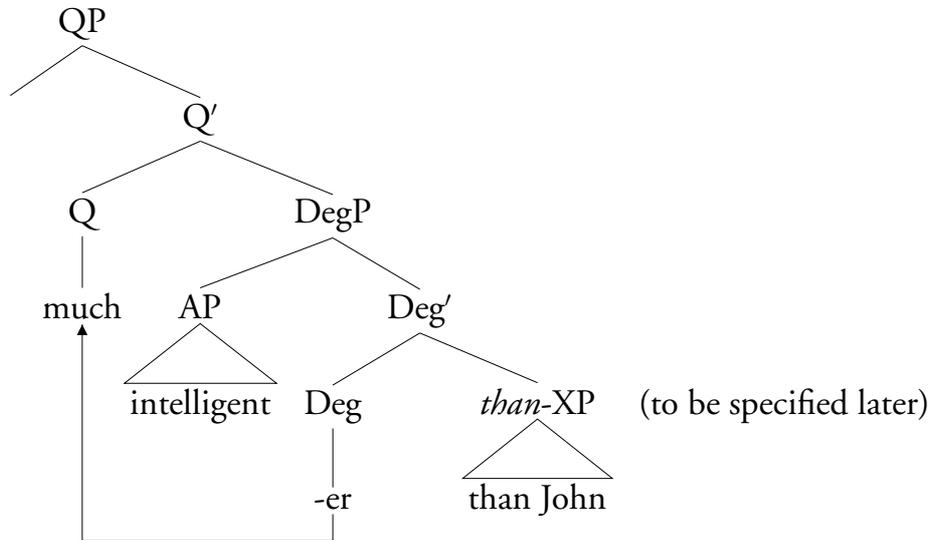


Figure 1: *The structure of more intelligent than John*

The structure of the string *more intelligent than John* is shown in Figure 1. The reference value is expressed in the matrix clause by a DegP, headed by the Deg head *-er* in English and *-bb* in Hungarian, which – being a bound morpheme – morphologically merges with the adjective/adverb in the Specifier in morphological comparatives (e.g. *taller*; see also Abney 1987: 189–204; Corver 1990: 34), or moves up to the Q head in periphrastic comparatives (e.g. *more intelligent*; see Kántor 2008: 100).¹ The Specifier of the DegP hosts an AdjP/AdvP, which gives the semantic dimension of comparison (Kántor 2008: 97; see also Lechner 1999: 25); the Complement of the Deg head expresses the standard value and is realized by the *than*-clause (see Bhatt & Pancheva 2004: 2–6), which is generally taken to be a CP in English (see Kántor 2008: 101).

There are various reasons to believe that the *than*-clause is base-generated as a complement of the Deg head. First, the presence of the element expressing the standard value is obligatory (Kántor 2008: 100) as the Deg head takes two arguments.² Second, the Deg head imposes selectional restrictions on the complement: as shown in (2), differential comparatives

¹The QP layer is clearly necessary, as shown by periphrastic comparatives, where the element *-er* (the original Deg head) ultimately precedes the AP (see Kántor 2008: 99–101). Furthermore, even in morphological comparatives such as *taller [than John]*, the modification of the DegP by determiner-like degree items can happen only if there is a position for them in [Spec; QP]; see for instance Corver (1997) and Lechner (1999).

²Note that the arguments may remain implicit. Consider (i), where the standard value (*than it was before*) is not expressed explicitly:

- (i) My admiration for him is greater since I met him in person (than it was before).

(comparatives with *-er*) co-occur with a subclause introduced by *than* (see also Bhatt & Pancheva 2004: 3):

- (2) Mary is *more* intelligent *than*/**that*/**if* Peter (is).

The Deg head imposes a restriction on the following CP: it has to have comparative force and as the only [+COMP] C head in English is *than*, any other complementizer (heading a CP in the declarative, interrogative, etc. force) is inappropriate (see Rizzi 1999: 1 on force).³

Comparatives fall into two major types: clausal and phrasal comparatives (see also Kántor 2008: 101–102). The English *than*-XP is a clause, as exemplified by (3a):

- (3) a. George wrote more books than Andrew read.
 b. George read more books than Andrew.
 c. George read more books than Andrew ~~read *d-many* books~~.
 d. George read more books than Andrew did.

Although *than* is followed by the single DP *Andrew* in (3b), it is underlyingly still clausal since the full clause can be recovered, as shown in (3c);⁴ and *do*-insertion is possible for replacing the elided VP, as shown in (3d).⁵ The final structure of (3b) is derived from that of (3c) by means of two operations, both of which take place in overt syntax. One is Comparative Deletion (CD), whereby the gradable property of the *than*-XP (which is, in our case, *d-many books*) is deleted (Lechner 2001: 1; Bresnan 1973: 317–342, Kennedy

This phenomenon is not restricted to comparatives; for instance, a transitive verb like *eat* may appear without an explicit object:

- (ii) Ann is eating.

³I adopt Rizzi's view that declarative and interrogative are not the only types of force; different classes of force are to be set up on the basis of syntactic differences. As Rizzi (1997: 283) argues, '[f]orce is expressed sometimes by overt morphological encoding on the head (special C morphology for declaratives, questions, relatives, etc.), sometimes by simply providing the structure to host an operator of the required kind, sometimes by both means [...]'. See also Cheng (1991); Sportiche (1996); Bayer (2004).

⁴In the string *d-many books*, *d-* denotes an operator and is a traditional way of referring to a certain absolute degree in the construction.

⁵In some cases, *than* is followed by a DP in the Accusative Case:

- (i) He is taller than me.

As Newson (2008: 3) argues (see also Schütze 2001), in English, the Default Case is the Accusative, which means that in the absence of a Case assigner, DPs are in the Accusative Case. This is so for instance in Small Clauses, where the I head fails to assign Nominative Case to [Spec; IP]; see also Carnie (2002: 149–150).

1998: 1). The other is Comparative Ellipsis (CE), which deletes all the other elements that can be recovered from the matrix clause (Lechner 2001: 2; Bierwisch 1989; Bresnan 1973; McCawley 1988; Pinkham 1985).

3 COMPARATIVES AS COORDINATION

As it has already been mentioned in the introduction, Lechner (1999: 183–193) has proposed that comparatives are coordinated structures. His claim is that the comparative subclause is base-generated as a subordinate clause, but is then adjoined via rightward movement to the matrix clause, ultimately resulting in coordinated clauses. This is referred to as the ‘hybrid nature of comparatives’ (Lechner 1999: 183), where ‘hybrid nature’ does not mean that comparatives show subordination and coordination properties at the same time but that both structures are involved in the derivation *successively*. In other words, the *than*-XP is only interpreted as a subordinate clause until a certain point in the derivation, after which, however, it is only considered to be a coordinate conjunct that has lost its subordination properties (see Lechner 2004: 225). The derivation is thus supposed to involve an only-subordination and an only-coordination stage. I am going to refute this assumption, showing that there is no coordination in the derivation of comparatives at all.

Let us first see the syntactic representation of Lechner’s hypothesis. According to Lechner (1999: 189; 2004: 187–189), the initial structure of a comparative sentence would be like the one in Figure 2a, whereas the final structure derived by rightward movement would be like the one in Figure 2b, the representation I am going to refute (note that Lechner does not suggest that the *than*-XP should be a CP, and therefore works with IP coordination; on the other hand, he uses ternary branching, which I will adopt in the representations to show which elements are at the same depth).

Originally, ‘the *than*-XP is base-generated as the complement position of the degree head’ in the matrix clause (Lechner 1999: 189), which is a structure similar to that in Figure 1. However, the *than*-XP is then forced to be extraposed to the right and adjoined to the matrix IP node by a movement process called ‘*than*-XP Raising’ (TR) and ‘is reinterpreted as part of a coordinate structure’ (Lechner 1999: 190).⁶ In other words, TR causes the element *than* to act as a coordinator between the original matrix clause and the original subordinate clause. Comparative Deletion and Comparative Ellipsis operate after TR has applied; that is, when the two clauses are coordinated.

⁶The motivation for this process is left unexplained by Lechner himself; see Lechner (1999: 180, fn. 67).

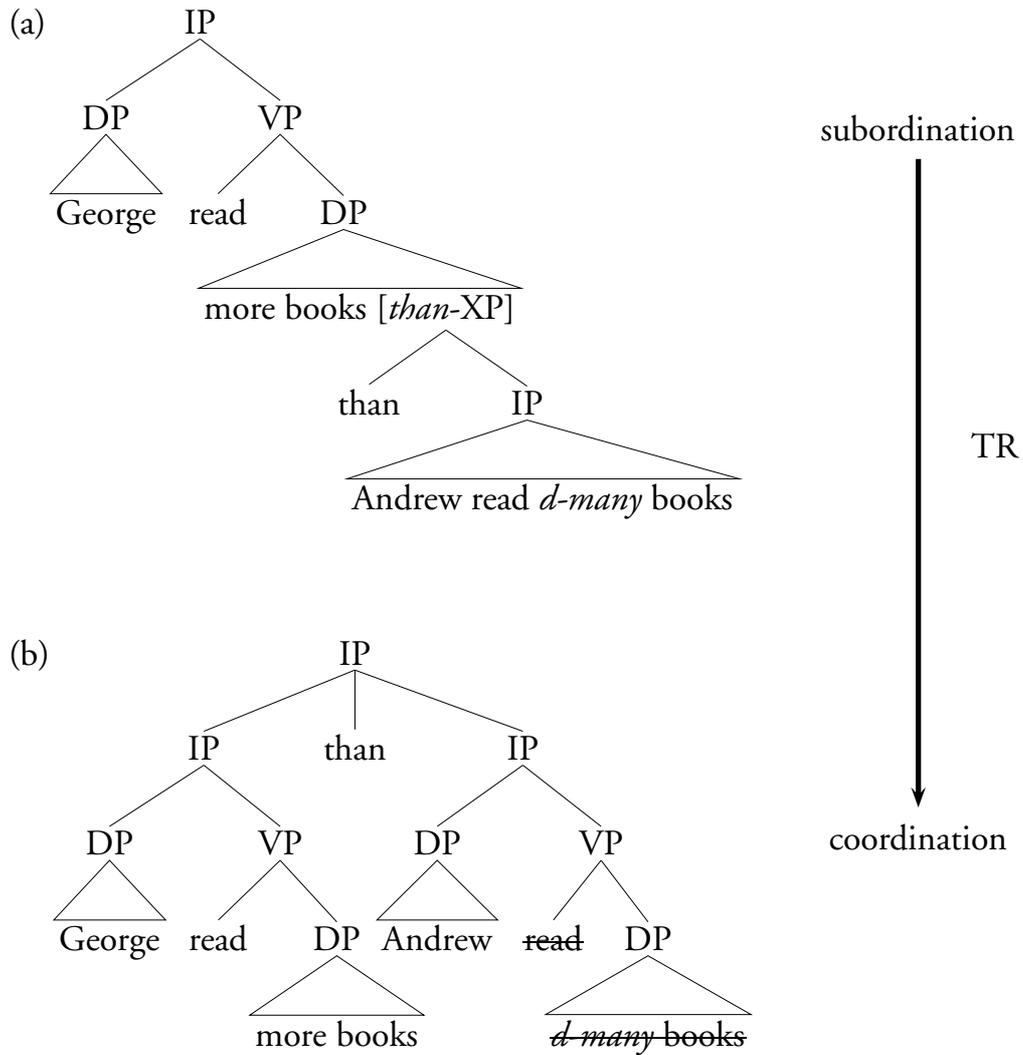


Figure 2: *The structure of George read more books than Andrew according to Lechner*

As Lechner states: ‘comparatives have to be treated as hybrid constructions with properties of both sub- and coordination’ (Lechner 1999: 183; see also Moltmann 1992; Smith 1961). Subordination, then, in Lechner’s view only serves to generate the structure but does not impose any specific characteristics on the subclause, which is in turn a structure essentially similar to the matrix clause with which it is to be coordinated. Hybrid nature means that even if the *than*-clause is base-generated as a subordinate clause, it is at the same time base-generated so that it may be coordinated; that is, coordination is an essential part of the derivation (Lechner 1999: 190). In fact, it is more important than subordination, since comparatives are, according to Lechner, interpreted as coordinate structures and as TR – being an untriggered rightward movement – does not leave a trace, all the subordination properties of the structure are lost.

The IP that takes part in coordination⁷ is not necessarily the topmost one: Lechner claims that whenever there is ambiguity in comparatives, as in (4a), this can be explained in terms of Isomorphism. Isomorphism means that the two coordinated clauses must have a strictly parallel structure: ‘the antecedent and the Gap have to be embedded at the same depth’ (Lechner 2004: 104, based on Hankamer 1971, 1979; Hudson 1976; Sag 1976). Therefore, Isomorphism – in a Lechnerian sense⁸ – specifies the precise syntactic position of the deleted material and the antecedent in terms of depth in the structure. As a result, whenever there is ambiguity, it can be traced back to the fact that the *than*-XP may be adjoined to two different IPs, and there are thus two competing structures when it comes to interpretation (see Lechner 1999: 187): either the higher IPs are coordinated, as in (4b) or the lower ones, as in (4c):

⁷Of course, the idea that *than* should be treated as a coordinator also rises the problem that it is restricted to conjoin IPs (or, at most, CPs). In ordinary coordination, such restrictions do not hold; compare:

- (i) I want to have a dog *and/or* a cat. (DPs)
- (ii) I can resist everything *but* temptation. (DPs)
- (iii) The house should be painted yellow *and/or* green. (AdjPs)
- (iv) The house is new *but* comfortable. (AdjPs)
- (v) She drives fast *and/or* recklessly. (AdvPs)
- (vi) She was driving slowly *but* recklessly. (AdvPs)
- (vii) Mary cleaned the windows *and/or* she did the washing up. (IPs)
- (viii) Mary did not clean the windows *but* she did the washing up. (IPs)

⁸Throughout the entire work, I will use Isomorphism in the Lechnerian sense presented above.

- (4) a. George wanted to read more books than Andrew.
 b. [George wanted to read more books] than [Andrew ~~wanted to read *a many* books~~].
 c. George wanted [to read more books] than [Andrew ~~read *a many* books~~].

In order to derive coordinate structures, the *than*-XP always has to be a clause: otherwise it could not be coordinated with an IP, since Isomorphism would be violated.⁹ Isomorphism in Lechner's system does not only account for possible ambiguities, but it also makes deletion and ellipsis possible: elements in the second clause may be deleted if they have an antecedent in the first clause at the same depth.¹⁰ On the other hand, it is Isomorphism (or strict parallelism) that provides a ground for coordination at all.

To sum up what has been said about Lechner's theory so far, it can be concluded that his proposal is based on the assumption that the two clauses show a rather strict structural parallelism. Thus, in order to analyse comparatives universally as coordinate structures, four major factors have to be observed:

- (i) The XP following *than* must be a clause.
- (ii) The *than*-XP must not show syntactic phenomena restricted to subordinate clauses.
- (iii) The deleted elements must be at the same depth as their antecedents.
- (iv) There must be a possible coordinator.

However, various cross-linguistic phenomena violate these constraints and suggest that comparatives are always subordinate structures. (i) and (iv) are called into question by phrasal comparatives, as will be discussed in Section 4; (ii) is neglected by comparatives that are either relative clauses, or are in the subjunctive or show a word order restricted to subordinate clauses: these issues are to be dealt with in Sections 5, 6 and 7 respectively. (iii) is cast in doubt both by subclauses with a specific word order and by comparatives containing intervening clauses, as shown in Sections 7 and 9.

⁹This is a problem inasmuch as in some languages (e.g. in Hungarian and Italian) there seem to exist phrasal comparatives as well. Lechner claims that phrasal comparatives are actually reduced clausal comparatives (Lechner 2001, Lechner 1999: 138–141, Lechner 2004: 124–127), but this, as will be shown in Section 4, cannot be maintained in cross-linguistic terms.

¹⁰In the last section of this paper, I will show that, contrary to Lechner, Isomorphism is not necessary for deletion processes to take place.

4 PHRASAL COMPARISON

Although in most cases the *than*-XP is a clause, in some languages it is also possible to have phrasal comparison, which refutes the idea of coordinating two clauses and having an element serve as a conjunction between these clauses too.

Consider the following examples; (5a) is from Italian, (5b) is from contemporary standard Hungarian, whereas (5c) is characteristic of certain Hungarian dialects and Old Hungarian and (5d) is an example from Old Hungarian (see Horváth 2003: 459):

- (5) a. Maria è più alta di me.
 Mary be.3SG.PRES.IND more tall.FEM.SG of I.ACC
 ‘Mary is taller than me.’
- b. Mari magas-abb Péter-nél.
 Mary tall-er Peter-ADE
 ‘Mary is taller than Peter.’
- c. Mari magas-abb Péter-től.
 Mary tall-er Peter-ABL
 ‘Mary is taller than Peter.’
- d. Jobb te irgalmasságod életek felett.
 better you mercy lives above
 ‘Your mercy is more important than life.’
 (Before 1494; Festetics Codex. 29; ex. from Horváth 2003: 459)

Let us begin with (5a). The element *di*, which follows the QP (*più alta*) is the equivalent of English *than*; however, it is not a complementizer but a preposition. It must be mentioned that there are two distinct *di* elements in Italian: one is a complementizer introducing non-finite clauses (Rizzi 1999: 2), and the other is a preposition taking DP complements. That *di* is a preposition in comparatives is supported by two facts. First, it only takes DP complements; second, it assigns Accusative Case to its DP complement (see Burzio 1986: 115). This is contrary to the properties of the C^o *di*, which introduces a clause with a PRO subject (Rizzi 1997: 305) and hence cannot govern – and assign case to a DP in – the subject position. The behavior of the prepositional *di* is illustrated below:

- (6) Maria è fiera di te.
 ‘Mary be.3SG.PRES.IND proud.FEM.SG of you.ACC
 ‘Mary is proud of you.’

The claim is that – as the preposition *di* takes only DP complements, to

which it assigns Case – this is an instance of phrasal and not clausal comparison. This is quite similar to Hungarian phrasal comparatives as shown in (5b)–(5d). The Hungarian DPs *Péternél* and *Pétertől* are instances of bare DPs standing for the comparative subclause: the standard value is expressed by morphologically inherent Case (Kántor 2008: 100; see also Kenesei 1992b: 42) – adessive in (5b) and ablative in (5c). In (5d) we have – as in Italian – a PP: according to É. Kiss (2002: 188–190), postpositional phrases are like PPs, so the DP *életék* is originally the complement of the P head *felett*, the latter acting as a comparative conjunction.¹¹

The Italian and Hungarian data reinforce the two most obvious problems with phrasal comparison for a coordination analysis. First, DPs with morphologically inherent Case or DPs taken by P heads cannot be extended into a clause and therefore there is no clause to be coordinated; the relationship between the P head and the DP is such that they cannot be separated as a coordinating conjunction and an element in the second conjunct; as for inherent Case assignment, there is no possible separation at all. Second, there is no element that could act as a coordinating conjunction: this is clearly ruled out for inherent case assignment.¹² On the other hand, *me* in (5a) and *Péternél* in (5b) both correspond to the subject of the clause, which means that they should be located in [Spec; IP] according to a coordination analysis. This is highly problematic because then the subject of the second coordinated conjunct would be assigned accusative/inherent adessive Case, the origins of which are not clear.

We can conclude that phrasal comparison refutes the idea that comparatives must be universally analyzed as hybrid constructions, since the properties of coordination are clearly absent.¹³

¹¹In fact, an alternative analysis for DPs like *Péternél* is to assign them the following structure, where KP stands for Case phrase:

(i) [KP -nél [DP Péter]]

In this analysis, the counterpart of the English *than* is represented by a K head, which, as a bound affix, will require the complement DP to move up and to be merged morphosyntactically with the K head (Bartos 2000: 700–701). The problems such an analysis presents cannot be discussed in the present paper.

¹²Even if one purports that there should be a K head, there is still no possible coordinator available: bound morphemes in Hungarian cannot act so. Note that this would be in contradiction to the fact that coordinating conjunctions cannot be found in the left conjunct as they form one phonological phrase with the right conjunct (Bánréti 1992: 736–738).

¹³The XP responsible for expressing the standard value is, of course, not a subordinate clause; nevertheless, it occupies the complement position of the DegP, which is exactly the same as the position for the clearly clausal – and subordinated – *than*-XP, as shown in Figure 1.

5 RELATIVE CLAUSES

As stated at the start of this paper, the so-called hybrid nature of comparative subclauses is based on the assumption that, although the *than*-XP is base-generated as a subclause, it has no special characteristics that would determine its nature as a subordinate clause. This cannot be maintained in the case of certain comparative clauses which have the structure of relative clauses: in these instances, the Deg head – just as in phrasal comparatives – takes a phrasal complement, to which the comparative subclause is adjoined. Besides presenting a structure which is impossible to coordinate, these clauses also violate Isomorphism.

Consider the following sentence from Italian:

- (7) Maria ama Giorgio più di quanto Susanna
 Mary love.3SG.PRES.IND George more of what Susan
 ami te.
 love.3SG.PRES.SUBJ you.ACC
 ‘Mary loves George more than Susan loves you.’

As can be seen, *di* – as opposed to what we have been dealing with so far – takes a complement other than a single DP. This is, however, a regular phenomenon shown by Italian prepositions, such as *su* and *da* in (8):

- (8) a. Sono d’accordo su quanto dici.
 be.1SG.PRES.IND agreed on what say.2SG.PRES.IND
 ‘I agree with what you say.’
 b. Era diverso da quanto i
 be.3SG.PAST.IND different.MASC from what the.MASC.PL.
 medici hanno detto.
 doctors have.3PL.PRES.IND say.PASTPT
 ‘It was different from what the doctors said.’

The examples in (8) – together with that in (7) – are instances of headless relative clauses. Below are some English instances of headless relatives:

- (9) a. I agree with what you say.
 b. What he says and what he means are not necessarily the same.

Headless relative clauses lack a modified noun in the matrix clause; however, they themselves behave as nominal expressions, as shown by their ability to be taken by P heads as in (9a), or by the fact that they show agreement in coordination as in (9b) (see also Newson et al. 2006: 441 and de Vries 2002: 42). Thus, there is reason to purport the existence of a \emptyset D head to which the clause itself is adjoined (see de Vries 2002: 44).

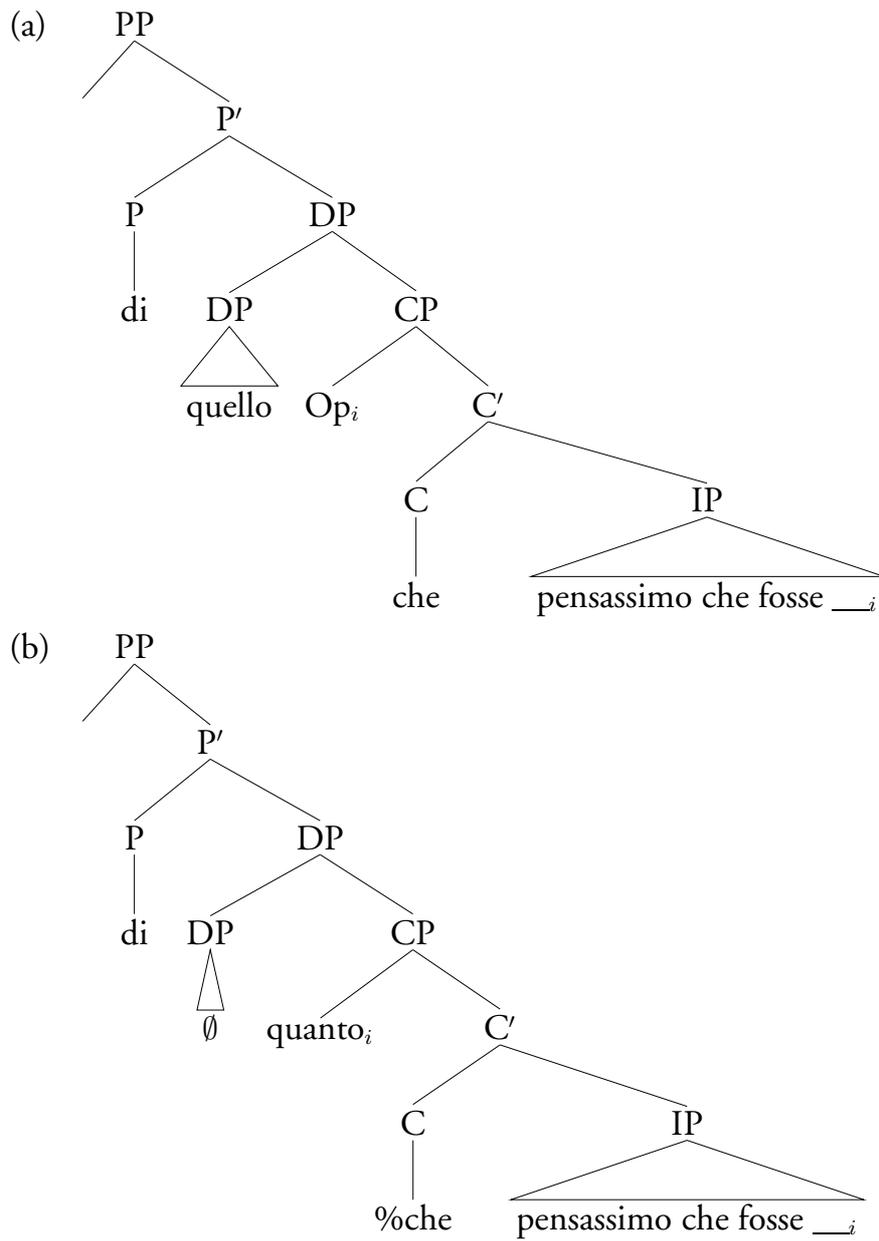


Figure 3: *The difference between quanto and quello*

& Guéron 1999: 448). The reason why *quello che* is perfectly grammatical is that *quello* is not a *wh*-operator: it heads the DP to which the comparative subclause is adjoined, while this DP is headed by a \emptyset head in the case of simple free/headless relative clauses.

The difference between *quello che* and *quanto*-relatives can be observed even if there is no PP projection:

- (12) a. Faccio quanto mi piace.
do.I.SG.PRES.IND what I.DAT appeal.3SG.PRES.IND
'I do what I like.' (headless/free relative)
- b. Faccio quello che mi piace.
do.I.SG.PRES.IND that.DEM that I.DAT appeal.3SG.PRES.IND
'I do what I like.' (ordinary relative)

As I have mentioned, *quello* clearly belongs to the matrix clause, which is also shown by the fact that it can appear without the CP headed by *che* in certain cases:

- (13) a. A: Pietro è alto 150 cm.
Peter be.3SG.PRES.IND tall.MASC 150 cm
'Peter is 150 cm tall.'
- B: No, è più alto di quello/*quanto.
no be.3SG.PRES.IND more tall.MASC of that.DEM/*what
'No, he is taller than that.'
- b. A: Pietro è cambiato.
Peter be.3SG.PRES.IND change.PAST.PART
'Peter has changed.'
- B: Sono d'accordo su quello/*quanto.
be.I.SG.PRES.IND agreed on that.DEM/*what
'I agree with that.'

As can be seen in Figure 3a, *quello* may be a complement of the preposition *di* on its own, to which the relative clause is adjoined: this relative clause carries the information about the standard value of comparison. In (13), however, *quello* points back to a degree of tallness previously mentioned in the context and hence does not require a CP adjunct. If *quello* were an operator moved to a Specifier position in the Left Periphery, this construction would not be possible, as shown by the ungrammaticality of *quanto* here.

Comparative subclauses may be realized as relative clauses in other languages as well. This is exactly the case in Hungarian (see also Kenesei 1992b: 43):

- (14) a. Szebb annál, mint amilyen szép az
 more.beautiful that.DEM.ADE than *d-much* beautiful the
 anyja volt
 her.mother be.3SG.PAST.IND
 ‘She is more beautiful than her mother was.’
- b. Nem értem azt, amit
 not understand.1SG.PRES.IND that.DEM.ACC what
 mondasz.
 say.2SG.PRES.IND
 ‘I do not understand what you say.’

In (14b), the matrix pronominal element is the DP *azt*, to which the CP *amit mondasz* is adjoined; the CP adjunct is actually required by *azt*, in order to specify the standard value of comparison (except when it can be derived from the previous context or when it has a deictic function). Within this CP, the initial element *amit* is a relative operator, which is base-generated as the complement of the verb *mondasz*.¹⁴ In (14a), the matrix pronominal element is *annál*, which expresses the standard value. Accordingly, its relative clausal adjunct will also be comparative in nature; this is why this CP is headed by *mint*, the Hungarian counterpart of English *than*, which is likewise a C head (see Kenesei 1992a: 587, 1992b: 43). As a C head, *mint* ‘expresses the comparative illocutionary force of the subordinate clause’ (Kántor 2006: 584; see also Rizzi 1999: 1) and requires a DegP expressing the standard value of comparison, which, in this case, is *amilyen szép*.

What is more, the behavior of the matrix pronominal element *annál* patterns with that of *quello*, both being able to stand without the CP complement:

- (15) A: Péter 150 cm magas.
 Peter 150 cm tall
 ‘Peter is 150 cm tall.’
- B: Nem, magasabb annál.
 no taller that.DEM.ADE
 ‘No, he is taller than that.’

Italian and Hungarian are not unique in having a relative clausal comparative; this is also possible in certain dialects of English and in Slavic languages, such as Serbo-Croatian:

¹⁴The exact position of the relative operator is unknown. See Kenesei (1992a: 586–590).

- (16) a. %John is taller than what Mary is.
 (Chomsky 1977: 87, ex. 51a)
- b. Marija je viša nego što je Petar.
 Maria is taller than what is Peter.NOM
 ‘Mary is taller than Peter is.’
 (Pancheva 2006: 10, ex. 23a)

As can be seen above, the comparative operator is a *wh*-operator in English (Chomsky 1977: 87) and Serbo-Croatian. Operators may be overt in Italian, as shown by headless free relatives introduced by *quanto* but they are in most cases covert; Italian, in fact, lacks ordinary *wh*-relatives altogether (Bianchi 2000: 57; based on Kayne 1976 and Cinque 1982).

That there is operator movement both in the case of *quanto* and *quello che* is shown by island violations. Island violations work differently in English and Italian, as the two languages are distinguished by the Subjacency Parameter: while in English, movement may maximally cross one IP, in Italian, movement may maximally cross one CP (Haegeman & Guéron 1999: 631; based on Rizzi 1982: 54, 58–59). That is, while in Italian it is grammatical to cross a CP, the crossing of two CP nodes will count as a violation.¹⁵ This phenomenon can be observed in comparatives as well:

¹⁵Consider the following examples:

- (i) tuo fratello [_{CP} a cui_i [_{IP} mi domando [_{CP} **che storie**_j [_{IP} abbiamo
 your brother to whom myself ask.1SG which stories they have
 raccontato t_i t_j]]]]
 told
 (*) ‘Your brother to whom I wonder which stories they have told’
- (ii) *tuo fratello [_{CP} a cui_i [_{IP} mi domando [_{CP} **che storie**_j [_{CP} Paola crede
 your brother to whom myself ask.1SG which stories [Paola thinks
 [_{CP} t’_i **che** [Giorgio abbia raccontato t_j t_i]]]]]]
 that Giorgio have.SUBJ.3SG told
 (*) ‘Your brother to whom I wonder which stories Paola thinks that Giorgio
 has told’

(Haegeman–Guéron 1999: 631, ex. 160a&c)

As can be seen, the *wh*-movement of *a cui* in (i) crosses the *wh*-phrase *che storie* in the lower [Spec; CP], which leads to a grammatical construction in Italian, as opposed to English, where grammaticality is reduced (Haegeman & Guéron 1999: 631). In (ii), however, the movement of *a cui* crosses both *che storie* and *che*, that is, two CPs, and the structure is therefore ruled out.

- (17) a. Era più forte di quanto/quello che
 be.3SG.PAST.IND more strong of what/that.DEM that
 pensavo che fosse.
 think.1SG.PAST.IND that be.3SG.PAST.SUBJ
 ‘It was stronger than I thought.’
- b. *Era più forte di quanto/quello che
 be.3SG.PAST.IND more strong of what/that.DEM that
 chiedevo quando pensava che
 ask.1SG.PAST.IND when think.3SG.PAST.IND that
 fosse.
 be.3SG.PAST.SUBJ
 ‘It was stronger than what I asked when he thought it was.’

In (17a), the operator crosses only one CP node (headed by *che*) and the structure is therefore grammatical. In (17b), however, the operator crosses two CP nodes (the first has *quando* in its Specifier, and the second is headed by *che*), which leads to ungrammaticality. The structure of (17b) is illustrated in Figure 4. As we can see, there are two CPs in (17b) and the result is ungrammatical. The reason is that if *quando* ‘when’ moves up to the Specifier of the second CP, its movement leaves a trace in the lowest [Spec; CP] as well; thus neither the lowest nor the second [Spec; CP] is available for *quanto* ‘what’ as a landing site. This means that *quanto* should move directly to the topmost CP, which involves crossing two CPs; hence the structure is ungrammatical. The same holds for comparatives with *quello che*: as there is no overt operator moving here, it has to be assumed that there is a covert operator.

We can conclude, then, that the subclause expressing the standard value is a relative clause in Italian clausal comparatives. This is already problematic for a coordination analysis, since the comparative subclause then shows a phenomenon restricted to subordinate clauses. Relative clauses are not considered as hybrid constructions, yet their structure is actually the same as that of comparative subclauses.

However, there is an even more serious problem for coordination. As shown in Figure 3, clausal comparatives introduced by *di* do not really differ from phrasal comparatives: the only difference is within the DP taken by PP, which has a CP adjoined to it.

The CP adjunct may have a structure parallel to that of the matrix clause; the position of *più di quello che* is nevertheless problematic. Following Lechner’s proposal, *più* should be located in the first clause and the coordinator should be *di*: in this case, however, *quello* – which obviously cannot form

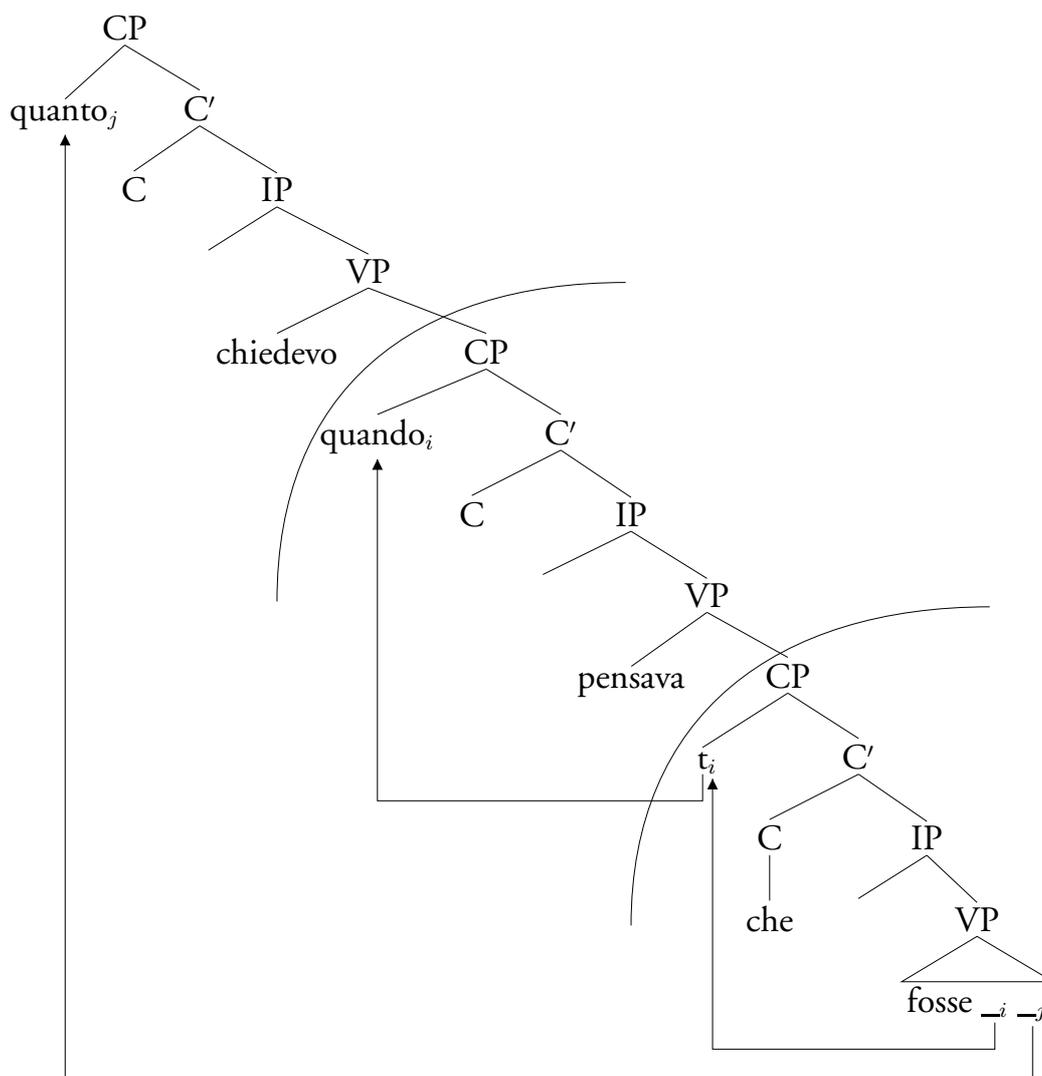


Figure 4

part of the conjunction – should be located in the second clause, together with *che*, which would result in an asymmetric structure (besides the fact that we would actually have to coordinate an IP and a DP with different functions, as only the latter is [+COMP]; note that the coordination of a DP and CP is rejected by Lechner 2004: 44; see also Bánrétí 1992: 720–721, 2007: 13), as shown in Figure 5.

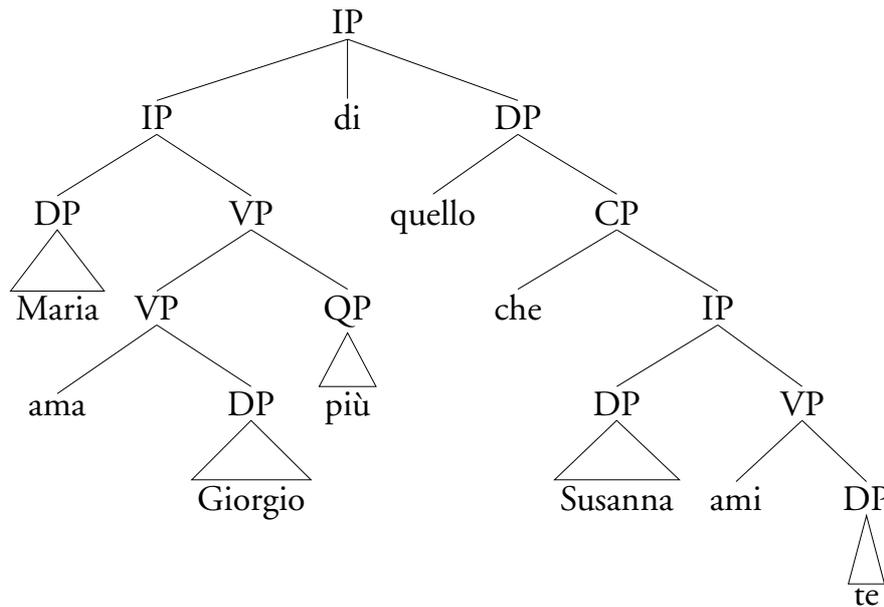


Figure 5: *Invalid coordination analysis 1*

Isomorphism would require that the two conjuncts have the same structure, which is obviously not satisfied in Figure 5. An element like *d-many* (what I claim to be the comparative operator) should be at the same depth as *più* in order to be deleted, which is impossible as the VP is much lower in the second clause. One might suppose that the situation can be resolved if we coordinate CPs instead of IPs by projecting an extra CP layer on top of the first clause. The resulting structure is shown in Figure 6. This, however, still does not address the issue of isomorphism.

We can conclude that the comparative subclause is quite often realized as a relative clause in various languages, which demonstrates that the subclause has a subordinate nature lacking any properties necessary for postulating a coordinate or even a hybrid nature. Beside the fact that relative clauses are otherwise always subordinate, the presence of the matrix pronominal element also means a problem for coordination, since it cannot be placed in the structure without violating Isomorphism.

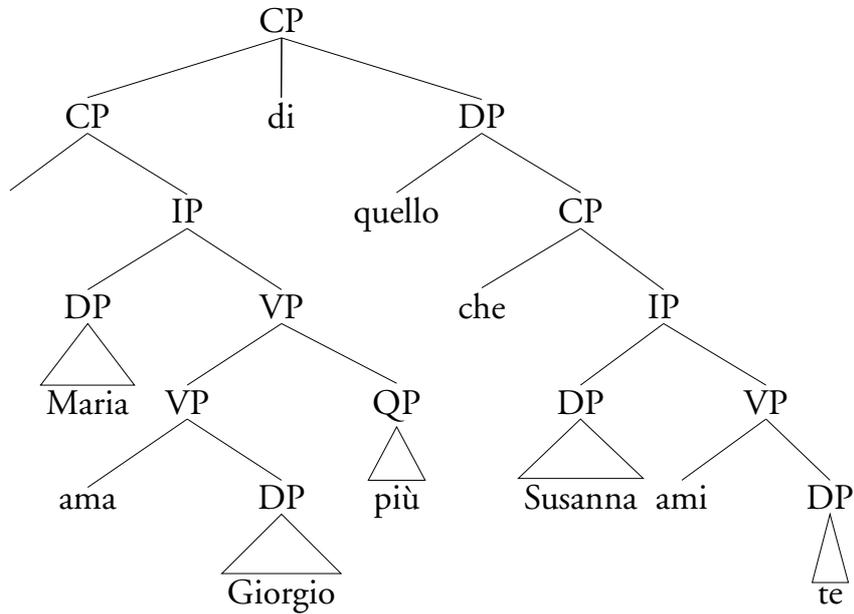


Figure 6: Invalid coordination analysis 2

6 SUBJUNCTIVE MOOD IN COMPARATIVES

Some comparative subclauses may be in the subjunctive mood, which is typical of subordinate clauses and therefore refutes the idea that such comparative clauses have a hybrid nature allowing for coordination.

Consider the Italian example in (7), repeated here as (18):

- (18) Maria ama Giorgio più di quanto Susanna
 Mary love.3SG.PRES.IND George more of what Susan
 ami/²%ama te.
 love.3SG.PRES.SUBJ/²IND you.ACC
 ‘Mary loves George more than Susan loves you.’

As can be seen, the verb expressing the standard value is in the subjunctive mood. The subjunctive in Italian appears in subordinate clauses with only two exceptions: formal imperative clauses as in (19a) and clauses expressing wonder or uncertainty, as in (19b) (see Alberti 2000: 90–91 and Herczeg 1985: 309–311); the latter, though standing on its own, is introduced by the subordinating conjunction *che* and can thus – formally – be considered as a special instance of subordination, where the matrix clause is missing:

- (19) a. Finisca quella lettera!
 finish.2SG.PRES.SUBJ that.DEM.FEM.SG letter
 ‘Finish that letter!’
- b. Che siano già partiti?
 that be.3PL.PRES.SUBJ already leave.PASTPT.MASC.PL
 ‘Have they already left?’

It is clear that (18) is neither imperative nor a clause expressing wonder or uncertainty. As comparative illocutionary force exists as a phenomenon (Rizzi 1999: 1), the subjunctive mood is most probably required by this in standard Italian. This is not an absolute requirement in all varieties: sentences like (20b) are possible in colloquial speech; although they are marked, for some speakers they are the informal counterparts of sentences like (20a):

- (20) a. Roma è più bella di quanto
 Rome be.3PL.PRES.IND more beautiful.FEM.SG of what
 pensassimo.
 think.IPL.PAST.SUBJ
 ‘Rome is more beautiful than we thought.’
- b. %Roma è più bella di quanto
 Rome be.3PL.PRES.IND more beautiful.FEM.SG of what
 pensavamo.
 think.IPL.PAST.IND
 ‘Rome is more beautiful than we thought.’

In Italian, there is a restriction on the appearance of the subjunctive: the subject of the matrix clause and the subject of the embedded clause have disjoint reference so that the subjunctive may appear in the embedded clause. This is exemplified in (18) and (20).

The appearance of the subjunctive in comparative subclauses is not unique to Italian. It also appears in Old English: there is a tendency for the subclause to be in the subjunctive when the matrix clause is positive, whereas they are in the indicative when the matrix clause is negative (Traugott 1992: 264). An example for the first case is shown below:

- (21) ... for ðan þe he brycð swiðor on ðone suðdæl þonne he
 for that part it breaks-forth more on that south than it
 do on þone norðdæl
 does.SUBJ on that north
 ‘because it (the Mediterranean [Sea]) washes more violently on the
 southern shore than it does on the northern’

(*Or* I 1.24.24; ex. from Traugott 1992: 262, ex. 236)

This tendency changed during the Early Middle English period, when the indicative became the rule in the Midlands; in the south, however, it is found even in Chaucer's time (Fischer 1992: 357):

- (22) It is ful lasse harm to lete hym pace / Than he *shende* all the
 it is full less ill to let him go than he *should*.SUBJ alle the
 servantz in the place.
 servants in the place
 'It is less ill to let him go, apace, / Than ruin all the others in the
 place.' (CT I.4409–10 [1: 4401–2]; ex. from Fischer 1992: 357, ex. 428)

The use of the subjunctive in comparative subclauses shows that these clauses are subordinate in their nature: they show a phenomenon characteristic of subordinate clauses. A coordination analysis could scarcely account for the fact that the second – and only the second – clause involved in coordination should be in the subjunctive.

7 WORD ORDER IN COMPARATIVE SUBCLAUSES

In some languages, such as English, the word order of comparative subclauses is not distinct from that of main clauses. Consider:

- (23) I love you more than Peter loves you.

As can be seen, the word order in both clauses is SVO, which – besides the fact that there is no special subordinate word order – results in a structural parallelism ideal for coordination.

In German, however, this is not so, as the word order of the *als*-clause (the German equivalent of the English *than*-clause) is SOV:

- (24) a. Dieses Auto ist länger als die
 this.NEUT.SG car be.3SG.PRES.IND longer than the.FEM.SG
 Parklücke groß ist.
 parking spot big be.3SG.PRES.IND
 'This car is longer than the parking spot is big.'
 b. Ich esse das Brötchen schneller als
 I eat.1SG.PRES.IND the.NEUT.SG bread faster than
 er [die Fenster] putzt.
 he the.PL windows clean.3SG.PRES.IND
 S O V
 'I eat the bread faster than he cleans the windows.'

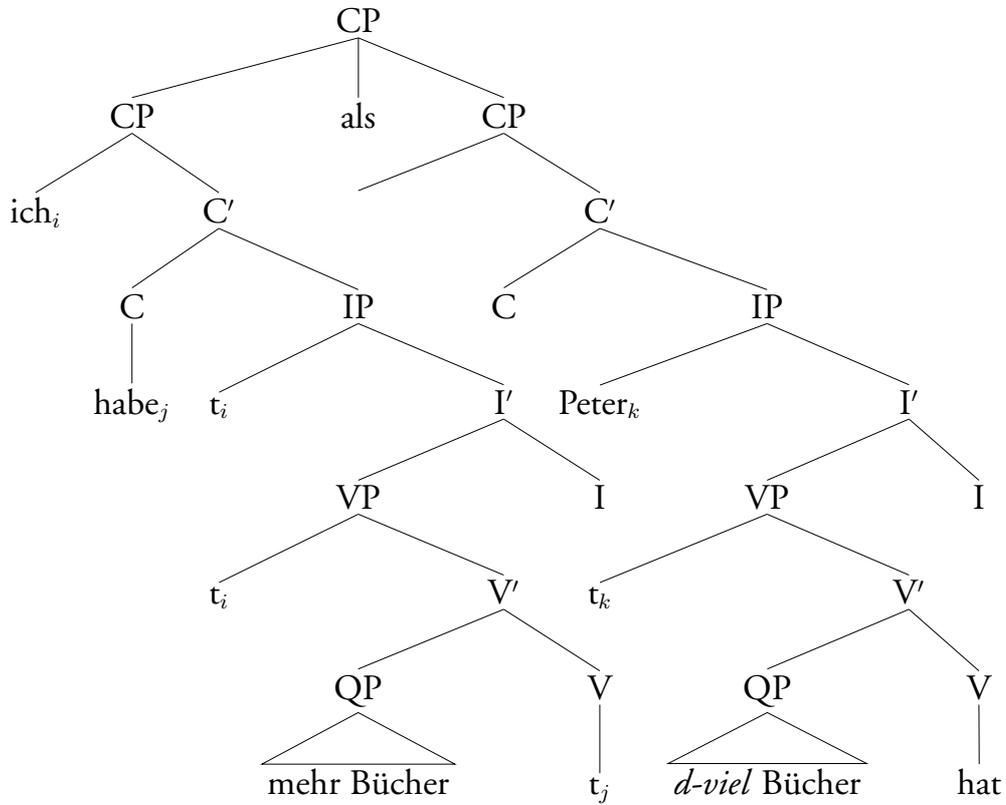


Figure 7: Invalid coordination analysis 3

lack of V-to-C movement in the second conjunct is left unexplained by a coordination analysis.

The word order found in German comparative subclauses, then, would be a problem for a coordination analysis not only because it is an indication of the subordinate nature of comparative subclauses in itself, but also because the use of such word order in the second (and only in the second) clause of comparison would be unmotivated. Furthermore, the parallelism between the two clauses would also be lost, which is clearly a violation of Isomorphism that requires deleted elements to be at the same depth as their antecedents. Still, Comparative Deletion and Comparative Ellipsis do operate, which indicates that coordination – which is impossible in the case of (25) – is not a necessary step for deletion.

8 MOVEMENT (OUT) OF THE COMPARATIVE SUBCLAUSE

In some languages, either the movement of the entire comparative subclause or the extraction of some part of the subclause is permitted. This is contrary to the nature of coordination where none of the above operations are allowed as stated by Ross's Coordinate Structure Constraint, according to which no conjunct may be moved out of a coordinate structure, nor may an element contained within a conjunct be extracted (Ross 1967: 89).

The *than*-XP may most easily be moved to FocP if it is expressed not by a clause but by a DP or a PP, as shown by Hungarian and Italian respectively:

- (26) a. PÉTERNÉL vagyok magasabb.
 Peter.ADE be.I SG.PRES.IND taller
 'I am taller than PETER.'
- b. Di PIETRO sono più alto.
 of Peter be.I SG.PRES.IND more tall.MASC.SG
 'I am taller than PETER.'

The structure of (26a) is shown in Figure 8 and is an ordinary instance of focalisation in Hungarian (see É. Kiss 2002: 77–89; Bródy 1990a,b, 1995, 1990b, 1995). The movement of the DP Péternél is possible because it does not violate the Head-finality Constraint, which states that the phrase moved to the position [Spec; FocP] must be head-final (É. Kiss 2002: 88, 231). The same constraint filters out the movement of CPs to [Spec; Foc] in Hungarian; thus, focalization is not available for the Hungarian comparative subclause (*ibid.*).¹⁷

In English, the *than*-XP may be fronted as a contrastive topic:

- (27) Than Peter, I am much taller.

In German, when motivated by focalisation, an ordinary comparative such as (28a) may change to the structure shown in (28b):

¹⁷The fact that the focalization of the *than*-XP is allowed in phrasal comparatives in a given language does not imply that the same language should allow it for clausal comparatives too, as shown by the ungrammaticality of the following Hungarian sentence, as opposed to its phrasal counterpart in (26a):

- (i) *Mint Péter vagyok magasabb.
 than Peter be.I SG.PRES.IND taller
 'I am taller than Peter.'

Whether and to what extent a language allows the *than*-XP to be preposed is clearly subject to parametric variation, the discussion of which falls outside the scope of the present essay.

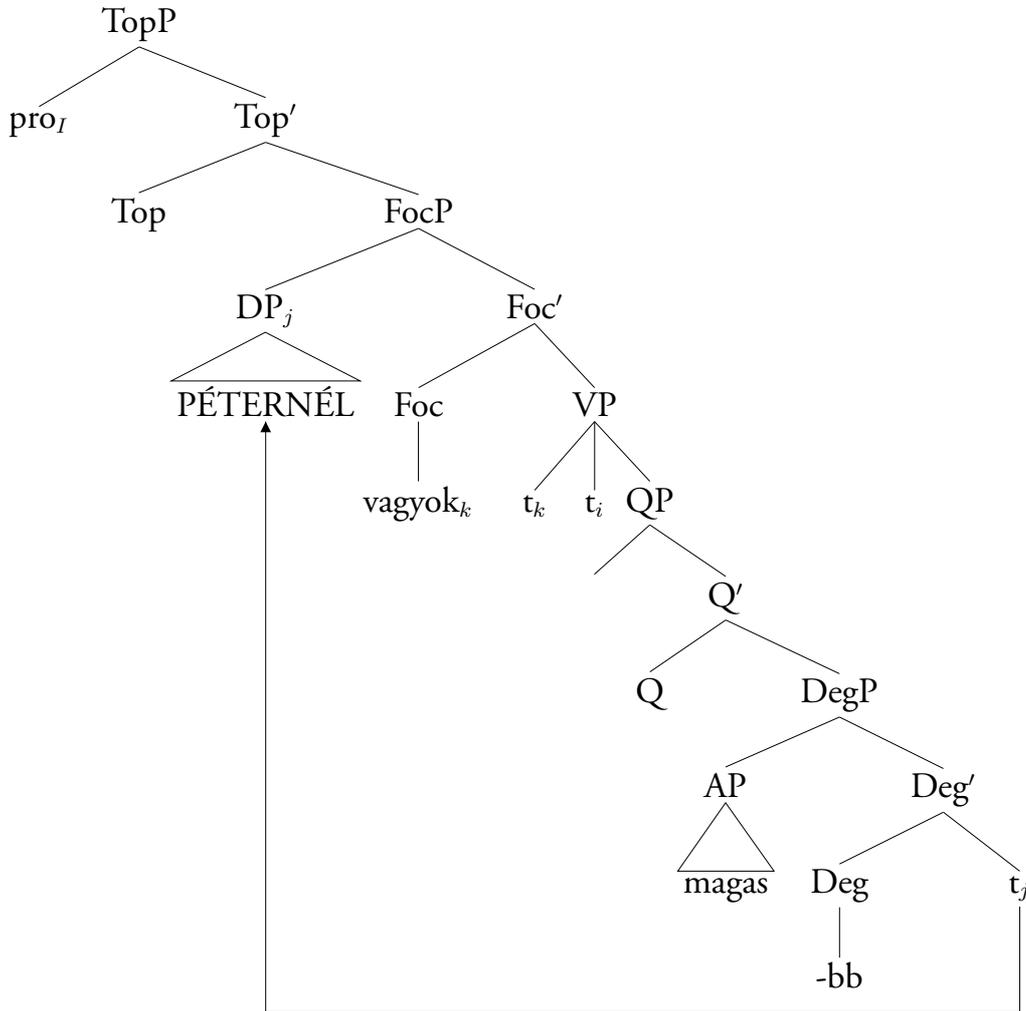
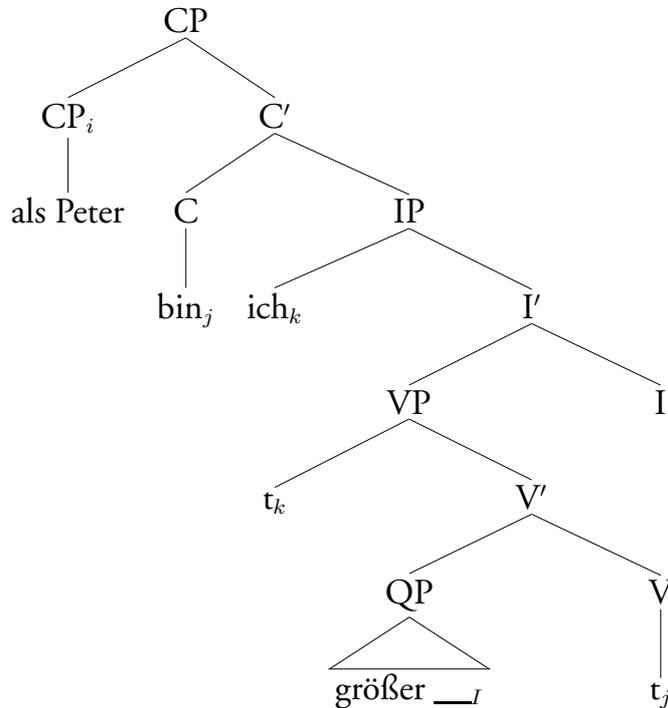


Figure 8

- (28) a. Ich bin größer als Peter.
 I be.I.SG.PRES.IND taller than Peter
 'I am taller than Peter.'
- b. [Als PETER]_i bin ich größer ___i.
 than Peter be.I.SG.PRES.IND I taller
 'I am taller than PETER.'

The structure of (28b) in a subordination analysis is shown in Figure 9. As we can see, in a subordination analysis the CP *als Peter* acts as one constituent and can therefore be moved out of the QP without any structural violations.

**Figure 9**

This is, however, not so in a coordination analysis. The ordinary counterpart of (28b), as represented in (28a), would have the following structure in coordination:

(29) [Ich bin größer] als [Peter *d-groß* ist].

If we assume, for the time being, that comparatives should be given a coordination analysis, the following problems arise. In order to derive the structure in (28b), the second clause of coordination and the coordinator should be moved out, which is highly problematic for a number of reasons. First, since the clauses involved in comparison are supposed to form one single constituent, extracting either of them is prohibited, as stated by the Coordinate Structure Constraint. Second, the coordinate conjunction – which in this case should be *als* – cannot act as a coordinator if it is moved to the front of the clause. Finally, the extraction of [*als Peter*] triggers inversion in the first clause: the verb precedes the subject and as German is a V2 language, this means that there is one (and only one) constituent preceding it in the same clause. The elements *als* and *Peter* therefore should have their landing site in the first coordinated conjunct in a coordination

analysis; moreover, they should actually be moved to the same position once there is only one constituent preceding the verb.

The above problems with focalization become even more evident in cases like (30a) and (30c) – their ordinary counterparts are shown in (30b) and (30d), respectively:

- (30) a. [Hübscher als sie]_i bin ich nicht ____i.
 prettier than she be.I.SG.PRES.IND I not
 ‘I am not prettier than her.’
 b. [Ich bin nicht hübscher] als [sie *d-hübsch* ist].
 c. [Schneller als er die Fenster putzt]_i,
 faster than he the.PL windows clean.3SG.PRES.IND
 esse ich nicht ____i.
 eat.I.SG.PRES.IND I not
 ‘I do not eat faster than he cleans the windows.’
 d. [Ich esse nicht schneller] als [er die Fenster *d-schnell* putzt].

Assuming that there is coordination in comparatives, in (30a) and (30c) an element from the first clause (*hübscher* or *schneller*), the purported coordinating conjunction (*als*) and the second clause would have to be fronted in a coordination analysis. As in (29), *als* is moved out, but elements are extracted not only from the second but also from the first conjunct. This is problematic especially because – as there is again inversion in the first clause – the extracted elements are supposed to act as one single constituent preceding the verb (*bin* or *esse*). In order to do so, they should occupy the same position, which is impossible if they are not base-generated as one possible constituent, which is clearly not the case in coordination, where we would actually have movement of non-constituents (see Izvorski 1995: 2). As shown in (30c), extraction does involve the entire QP since *als* is followed by a CP-sized constituent (*er die Fenster putzt*).

In a subordination analysis, however, these elements form one XP: thus either a QP (*hübscher als sie and schneller als er*) or a CP (*als Peter*) is preposed, as in (30) and (28b) respectively. German is relatively free in focalization: not only arguments or adjuncts but also parts of the predicate may be fronted (see Fanselow 2004a: 10):

- (31) a. Er hat [VP [DP ein Haus] gekauft].
 he have.3SG.PRES.IND a.NEUT.ACC house buy.PASTPT
 ‘He has bought a house.’

- b. [DP Ein Haus]_i hat er [VP ____i
 a.NEUT.ACC house have.3SG.PRES.IND he
 gekauft].
 buy.PASTPT
 ‘He has bought a house.’
- c. [VP [DP Ein Haus] gekauft]_i hat
 a.NEUT.ACC house buy.PASTPT have.3SG.PRES.IND
 er ____i.
 he
 ‘He has bought a house.’

In fact, extraposition phenomena in German prove that comparatives are subordinate rather than coordinate structures, as movement in coordination would be impossible, whereas extraposition of either the *als*-clause or the QP is similar to ordinary cases of German fronting.

Extraposition thus shows that comparatives are subordinate structures: this is a phenomenon restricted to subordinate clauses and not explainable in terms of coordination as there is no appropriate landing site for the moved elements and the position of the coordinator is not retained.

9 INTERVENING CLAUSES

As I have already stated, Lechner’s coordination analysis is based on the assumption that the deleted elements in one – in this case the second – clause must be at the same depth as their antecedents in the other (the first) clause. In most cases, the comparative clauses show a parallel structure allowing this. However, the subclause may also contain a clause that has no counterpart in the matrix clause:

- (32) a. I love you more than you think.
 b. Ich liebe dich mehr als du
 I love.1SG.PRES.IND you.ACC more than you
 denkst.
 think.2SG.PRES.IND
 ‘I love you more than you think.’
 c. Jobban szeretlek, mint
 more love.1SG.PRES.IND you than
 gondolnád.
 think.2SG.PRES.COND.DEF
 ‘I love you more than you think.’

- d. Ti amo più di quanto
 you.ACC love.1SG.PRES.IND more of what
 pensi.
 think.2SG.PRES.SUBJ
 ‘I love you more than you think.’

The underlying structure of (32a) is as follows:

- (33) [I love you more] than you think that [I love you *d-much*].

Clearly, this would result in an asymmetric structure, as shown in Figure 10. Since the two bracketed IPs in (33) are not at the same depth, it is not possible to account for the fact that the CP taken by the verb *think* is entirely deleted. There is a reason to claim that this clause exists; the verb *think* subcategorizes for a complement, which is in most cases a CP. Since the complement is not overt in PF, it must be recoverable from the previous clause, which in this case means that it is the IP *I love you*, as is suggested by the meaning of the sentences as well.

Hungarian shows the existence of this CP more straightforwardly. The verb *gondolnád* has objective conjugation, which indicates that it does take a definite XP, in this case an object clause (see É. Kiss 2003: 49, 52). Furthermore, the comparative operator may be overt in Hungarian:

- (34) Jobban szeretlek, mint amennyire
 more love.1SG.PRES.IND you than *d-much*
 gondolnád.
 think.2SG.PRES.COND.DEF
 ‘I love you more than you think.’

The operator *amennyire* must be base-generated in the CP selected by *gondolnád*, since the degree of ‘loving’ (reference value) is not compared to the the degree of ‘thinking’, but to the degree of ‘love’ the addressee presupposes on the speaker’s part. The operator is thus base-generated as an adjunct of the verb in the lowest CP and then regularly moves up to the highest [Spec; CP] following the complementizer *mint*.

We may conclude that in some comparative constructions the subclause contains a clause that would act as an intervening string of elements in a coordination analysis: the elements to be deleted would not have their antecedents at the same depth, and therefore deletion could not take place. This, on the other hand, is not problematic in a subordination analysis, which suggests that comparative structures are always subordinate.

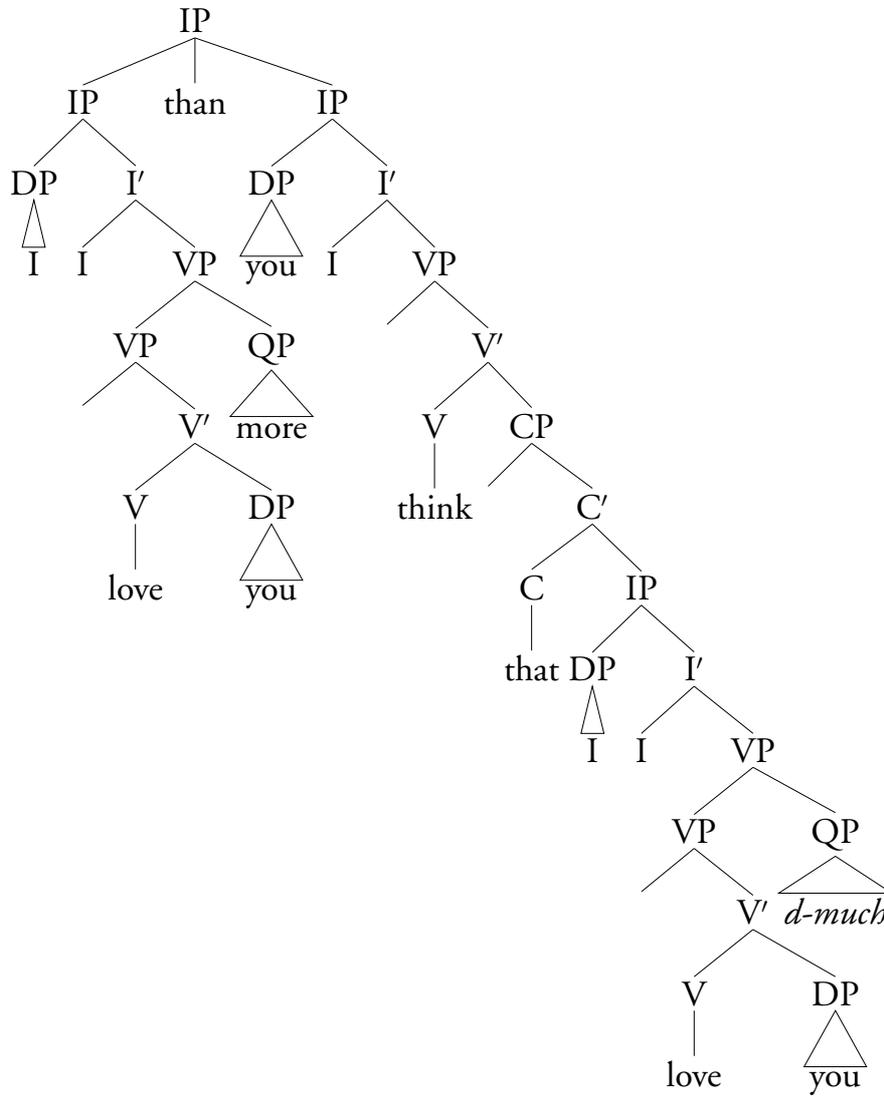


Figure 10: *Invalid coordination analysis 4*

10 DELETION WITHOUT COORDINATION

In the previous sections, I showed Lechner’s analysis to be inadequate to account for the structure of comparatives in various languages, from which it follows that comparatives should be analyzed as subordinate and not as hybrid structures. The main argument for coordination and TR (*than*-XP Raising) would be its ability to account for Comparative Deletion and Comparative Ellipsis. As we have seen, this possibility is already lost in a number

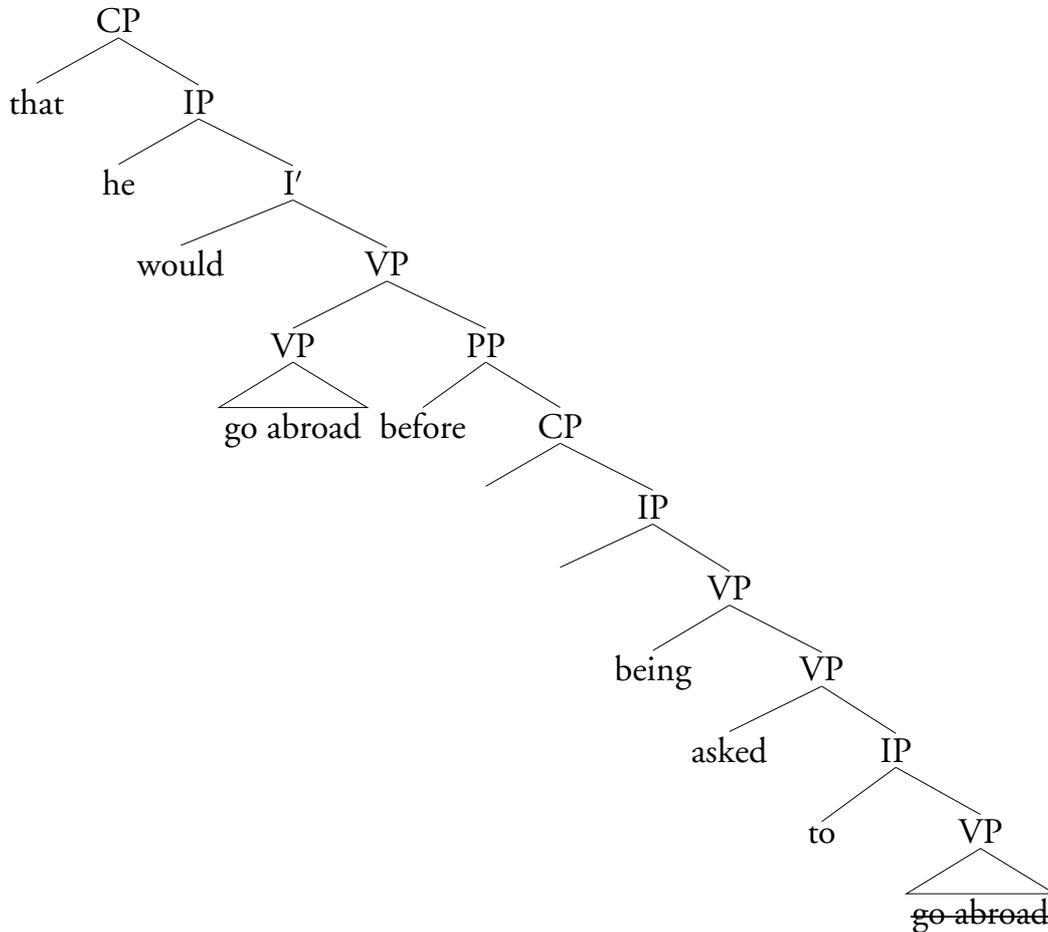


Figure 11

of cases. The question arises whether we have deletion in subordinate structures besides comparatives.

Consider the following:

- (35) She thought that he would go abroad [PP before being asked to go abroad].

In the example above, deletion takes place within the PP headed by *before*, which is adjoined to the VP. The structure can be represented as in Figure 11.

As can be seen, the VP *go abroad* is deleted within the clause taken by the P head *before*; this PP is, however, an adjunct of the VP in the matrix clause, which means that there would be no reason to suppose that there is a coordinate structure responsible for deletion. Similarly, in comparatives,

we have a QP adjunct in the matrix clause, within which CD and CE may take place. If deletion is possible in non-coordinate structures as well, TR is actually unnecessary to account for CD and CE. Therefore, I claim that there is no need to analyze comparatives as hybrid structures: they should be treated simply as subordinate structures.

11 CONCLUSION

The aim of this essay was to prove that comparatives are always subordinate structures and that the proposal made by Lechner (1999) for a coordination analysis cannot be maintained in the light of cross-linguistic data. We saw that the major assumptions on which Lechner's theory is based are, in fact, all violated, and therefore it would be highly problematic to consider comparatives as coordinate, or even as hybrid constructions. On the other hand, there is ample evidence that comparatives resemble typical subordinate structures and the problematic points for coordination can easily be accommodated by a subordination analysis. Moreover, the main argument in favor of coordination is also lost, as deletion in obviously non-coordinate constructions happens similarly to comparatives, which means that the necessity for coordination is removed. To conclude, comparatives should universally be analyzed as subordinate structures.

REFERENCES

- Abney, S. P. (1987). *The English noun phrase in its sentential aspect*. Ph.D. thesis, MIT, Cambridge, MA.
- Alberti, A. (2000). *Grammatica alfabetica italiana*. Antonio Vallardi Editore, Milano.
- Bánréti, Z. (1992). A mellérendelés. Kiefer, F. (ed.), *Strukturális Magyar Nyelvtan 1: Mondattan*, Akadémiai Kiadó, Budapest, pp. 715–796.
- Bánréti, Z. (2007). *A mellérendelés és az ellipszis nyelvtana a magyarban*. Tinta Könyvkiadó, Budapest.
- Bartos, H. (2000). Az inflexiós jelenségek szintaktikai háttere. Kiefer, F. (ed.), *Strukturális Magyar Nyelvtan 3: Morfológia*, Akadémiai Kiadó, Budapest, pp. 653–762.

- Bayer, J. (2004). Decomposing the left periphery: Dialectal and cross-linguistic evidence. Lohnstein, H. & S. Trissler (eds.), *The Syntax and Semantics of the Left Periphery*, Mouton de Gruyter, Berlin, pp. 59–95.
- Benincà, P. & G. Cinque (in press). Frasi relative. To appear in: Salvi, G. R. Lorenzo Renzi (eds.), *Grammatica dell'italiano antico*. Retrieved 12 April 2008, from <http://www.geocities.com/gpsalvi/konyv/>.
- den Besten, H. (1989). *Studies in West Germanic Syntax*. Atlanta, Amsterdam.
- Bhatt, R. & R. Pancheva (2004). Late merger of degree clauses. *Linguistic Inquiry* 35, pp. 1–45.
- Bianchi, V. (2000). The raising analysis of relative clauses: A reply to Borsley (1996). Retrieved April 13 2008, from <http://alphalinguistica.sns.it/QLL/QLL97/VB.RaisingAnalysis.pdf>.
- Bierwisch, M. (1989). The semantics of gradation. Bierwisch, M. & E. Lang (eds.), *Dimensional Adjectives*, Springer Verlag, Berlin-Heidelberg, pp. 71–237.
- Bresnan, J. (1973). The syntax of the comparative clause construction in English. *Linguistic Inquiry* 4, pp. 275–343.
- Brody, M. (1990a). Remarks on the order of elements in the Hungarian focus field. Kenesei, I. (ed.), *Approaches to Hungarian* 3, JATE, Szeged.
- Brody, M. (1990b). Some remarks on the focus field in Hungarian. *University College London Working Papers in Linguistics* 2, pp. 201–225.
- Brody, M. (1995). Focus and Checking Theory. Kenesei, I. (ed.), *Approaches to Hungarian* 5, JATE, Szeged.
- Burzio, L. (1986). *Italian Syntax: A Government-Binding Approach*. Reidel, Dordrecht.
- Carnie, A. (2002). *Syntax: A Generative Introduction*. Blackwell, Oxford.
- Cheng, L. (1991). *On the Typology of Wh Questions*. Ph.D. thesis, MIT, Cambridge, MA.
- Chomsky, N. (1977). On WH-movement. Culicover, P. W. (ed.), *Formal Syntax*, Academic Press, New York.

- Chomsky, N. & H. Lasnik (1977). Filters and Control. *Linguistic Inquiry* 8, pp. 425–504.
- Cinque, G. (1982). On the theory of relative clauses and markedness. *The Linguistic Review* 1, pp. 247–296.
- Corver, N. F. M. (1990). *The Syntax of Left Branch Extractions*. Ph.D. thesis, Tilburg University.
- Corver, N. F. M. (1997). Much-support as a last resort. *Linguistic Inquiry* 28, pp. 119–164.
- É. Kiss, K. (2002). *The Syntax of Hungarian*. Cambridge University Press, Cambridge.
- É. Kiss, K. (2003). Mondattan. Kiss, K. É., F. Kiefer & P. Siptár (eds.), *Új magyar nyelvtan*, Osiris Kiadó, Budapest, pp. 17–186.
- Fanselow, G. (2004a). Cyclic phonology-syntax interaction: Movement to first position in German. Schmitz, S. I. M. & A. Schwarz (eds.), *Interdisciplinary Studies in Information Structure Vol. I.: Working Papers of the SFB632*, Universitätsverlag Potsdam, Potsdam, pp. 1–42.
- Fanselow, G. (2004b). Münchhausen-style head movement and the analysis of verb second. Vogel, R. (ed.), *Three Papers on German Verb Movement*, Universitätsverlag Potsdam, Potsdam, pp. 9–49.
- Fischer, O. (1992). Syntax. Blake, N. (ed.), *The Cambridge History of the English Language, Volume II*, Cambridge University Press, Cambridge, pp. 207–408.
- Haegeman, L. & J. Guéron (1999). *English Grammar: A Generative Perspective*. Blackwell, Oxford.
- Haider, H. (1993). *Deutsche Syntax, generativ: Vorstudien zur Theorie einer projektiven Grammatik*. Gunter Narr Verlag, Tübingen.
- Hankamer, J. (1971). *Constraints on Deletion in Syntax*. Ph.D. thesis, Yale University, Yale.
- Hankamer, J. (1979). *Deletion in Coordinate Structures*. Garland, New York.
- Herczeg, G. (1985). *Olasz leíró nyelvtan*. Terra, Budapest.

- Hinterhölzl, R. (2006). *Scrambling, Remnant Movement, and Restructuring in West Germanic*. Oxford University Press, Oxford.
- Horváth, L. (2003). Az ómagyar kor: Szószerkezet-történet. Kiss, J. & F. Pusztai (eds.), *Magyar nyelvtörténet*, Osiris Kiadó, Budapest, pp. 430–482.
- Hudson, R. A. (1976). Conjunction Reduction, Gapping and Right-Node Raising. *Language* 52, pp. 535–562.
- Izvorski, R. (1995). A DP-shell for comparatives. *CONSOLE III Proceedings*, Holland Academic Graphics, The Hague, pp. 99–121.
- Kántor, G. (2006). On the left periphery of clausal comparative complements. *Interlingüística* 17, pp. 580–598.
- Kántor, G. (2008). Edge-effektus és komparatív extrapozíció. *LINGDOK* 7, pp. 95–121.
- Kayne, R. (1976). French relative ‘que’. Luj, M. & F. Hensey (eds.), *Current Studies in Romance*, Georgetown University Press, Washington, D. C., pp. 255–299.
- Kayne, R. (1994). *The Antisymmetry of Syntax*. MIT Press, Cambridge, MA.
- Kenesei, I. (1992a). Az alárendelt mondatok szerkezete. Kiefer, F. (ed.), *Strukturális Magyar Nyelvtan 1: Mondattan*, Akadémiai Kiadó, Budapest, pp. 529–713.
- Kenesei, I. (1992b). On Hungarian complementizers. Kenesei, I. & C. Pléh (eds.), *Approaches to Hungarian 4*, JATE, Szeged, pp. 37–50.
- Kennedy, C. (1998). Local dependencies in comparative deletion. Shanin, K., S. Blake & E.-S. Kim (eds.), *Proceedings of WCCFL 17*, CSLI Publications, Stanford, pp. 375–389.
- Kennedy, C. (in press). Modes of comparison. To appear in *Proceedings of CLS 43*.
- Koster, J. (1999). The word orders of English and Dutch: Collective vs. Individual change. *Groninger Arbeiten zur germanistischen Linguistik* 43, pp. 1–42.
- Lechner, W. (1999). *Comparatives and DP-structure*. Ph.D. thesis, University of Massachusetts Amherst, Amherst, MA.

- Lechner, W. (2001). Reduced and phrasal comparatives. Retrieved April 18 2008, from <http://vivaldi.sfs.nphil.uni-tuebingen.de/%7Ennsle01/PC.pdf>.
- Lechner, W. (2004). *Ellipsis in Comparatives*. Mouton de Gruyter, Berlin.
- McCawley, J. (1988). *The Syntactic Phenomena of English*. Chicago University Press, Chicago.
- Meinunger, A. (2004). Interface restrictions on verb second. Vogel, R. (ed.), *Three Papers on German Verb Movement*, Universitätsverlag Potsdam, Potsdam, pp. 51–81.
- Moltmann, F. (1992). *Coordination and Comparatives*. Ph.D. thesis, MIT, Cambridge, MA.
- Newson, M. (2008). Case in OT. Retrieved 2 May 2008, from <http://seas3.elte.hu/coursematerial/NewsonMark/index.html>.
- Newson, M., D. Pap, G. Tóth, K. Szécsényi, M. Hordós & V. Vincze (2006). *Basic English Syntax with Exercises*. Bölcsész Konzorcium., Budapest.
- Pancheva, R. (2006). Phrasal and clausal comparatives in Slavic. Retrieved 19 April 2008, from [http://www-rcf.usc.edu/~pancheva/Pancheva\(2006\)SlavicComp.pdf](http://www-rcf.usc.edu/~pancheva/Pancheva(2006)SlavicComp.pdf).
- Pinkham, J. (1985). *The Formation of Comparative Clauses in French and English*. Garland, New York.
- Richter, F. & M. Sailer (1998). Complementizers and finite verbs in German sentence structure. Kiss, T. & D. Meurers (eds.), *Proceedings of the ESSLLI-98 Workshop on Current Topics in Constraint-based Theories of Germanic Syntax, Saarbrücken (Germany)*, pp. 133–148.
- Rizzi, L. (1982). Violations of the Wh Island Constraint and the Subjacency Condition. Rizzi, L. (ed.), *Issues in Italian Syntax*, Foris, Dordrecht, pp. 49–76.
- Rizzi, L. (1997). The fine structure of the left periphery. Haegeman, L. (ed.), *Elements of Grammar*, Kluwer, Dordrecht, pp. 281–337.
- Rizzi, L. (1999). On the position “Int(errogative)” in the left periphery of the clause. Retrieved March 31 2008, from <http://www.ciscl.unisi.it/persona/rizzi.htm>.

- Ross, J. R. (1967). *Constraints on Variables in Syntax*. Ph.D. thesis, MIT, Cambridge, MA.
- Sag, I. (1976). *Deletion and Logical Form*. Ph.D. thesis, MIT, Cambridge, MA.
- Schütze, C. T. (2001). On the nature of default case. *Syntax* 4, pp. 205–238.
- Smith, C. (1961). A class of complex modifiers in English. *Language* 37, pp. 342–365.
- Sportiche, D. (1996). Clitic constructions. Rooryck, J. & L. Zaring (eds.), *Phrase Structure and the Lexicon*, Kluwer, Dordrecht, pp. 213–287.
- Traugott, E. C. (1992). Syntax. Hogg, R. M. (ed.), *The Cambridge History of the English Language, Volume I*, Cambridge University Press, Cambridge, pp. 168–289.
- de Vries, M. (2002). *The Syntax of Relativization*. Ph.D. thesis, LOT, Utrecht.