The syntax of relativization

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1. Introduction

A relative clause can be semantically restrictive, appositive or maximalizing. This has been discussed in Chapter 2, section 3. Some examples are repeated in (1).

(1) a. (I spoke to) the lecturers that failed the test on didactics. [restrictive]
   b. (I spoke to) the lecturers, who failed the test on didactics. [appositive]
   c. (I spilled) the milk that there was in the can. [maximalizing]

In (1a) the subject only spoke to the group of lecturers that failed the test; possible lecturers that passed the test are not addressed. In (1b) the subject spoke to all lecturers in the domain of discourse, who (by the way) all failed the test. In the degree relative construction (1c) the whole amount of milk in the can is spilled.

The present chapter focuses on the syntactic differences between restrictive and appositive relatives. Although there are obvious similarities, there are substantial differences between the two types, indeed. Hence appositives must be analysed differently from restrictives. There is a wealth of divergent proposals in the literature to distinguish them. I hope to bring the various insights together, here. I will argue that appositive relatives can be treated on a par with non-restrictive appositions. Both are specifying conjuncts to the head. Furthermore I show that within this conjunct, the relative is structured as a free relative. The derivation of the syntactic structure involves promotion, just as in restrictives, but here it is not the 'visible antecedent' (i.e. the first part of the appositional construction) that is promoted, but an element (within the second conjunct) that refers to the antecedent (possibly in combination with a relative pronoun). Thus the analysis combines several aspects of seemingly incompatible ideas put forward in the literature, and it explains many of the properties of appositive relatives to be reviewed below.

Section 2 is an overview of differences between restrictive and appositive relatives. Section 3 clears up some misconceptions concerning appositives. Section 4 is a short exposé on analyses of appositive relatives in the literature; see also Appendix III. Section 5 presents my analysis in detail. Section 6 concludes the chapter.

2. Differences between restrictive and appositive relatives

This section contains an overview of (potential) differences between restrictive and appositive relatives. There are five subsections: 2.1 discusses properties related to the antecedent; 2.2 is about relative pronouns and particles; 2.3 concerns extrapolation and stacking; 2.4 scope, binding and reconstruction; and 2.5 intonation.
But first, consider two important similarities between restrictives and appositives. First, as mentioned in Ch2§2.1 before, the semantic 0-role and the syntactic role that the pivot constituent plays in the relative clause, are in principle independent of its roles in the matrix clause (see also De Vries 1996 and Givón 1984:Ch15). For instance, in (2a) *Mien* is agent/subject and *die* recipient/subject. In (2b) *het Maagdenhuis* is theme/prep. object and *waar* location/adverbal phrase.

(2) a. Mien, die een boekenbon had gekregen, spoedde zich naar de winkel.
    Mien, who a book token had received, speeded SE to the shop

b. We spraken over *het Maagdenhuis*, waar snede plannen bekokstooft
   we spoke about the Maagdenhuis, where vile plans contrived were

This illustrates the role independency in appositives. It is similar to that in restrictives, which has been exemplified in Ch2§2.1.¹ Second, it seems that the relative pronoun in an appositive relative is a bound pronoun, as in restrictives:

(3) De postbode, heeft Mieke, die j/yesterday arrived, gezien,
the postman has Mieke, who yesterday arrived seen

However, further on it will become clear that the relation between the antecedent and the relative pronoun is more complicated in appositives.

Having said this, I will continue with the differences between restrictives and appositives below. I will use two abbreviations: ARC for appositive relative clause and RRC for restrictive relative clause. Appositivity is indicated by commas to the left and right. Notice that the English relative complementizer *that* can only be used in restrictive relatives, whereas the relative pronouns *who* and *which* may be used in both appositives and restrictives. The examples are mine, unless explicitly mentioned otherwise.

2.1. *The antecedent*

Both appositives and restrictives can have a definite or indefinite antecedent. However, there are some differences.

A1. If the antecedent is indefinite, it must be specific (hence presupposed) in order to licence an appositive. It may also be generic. There are several ways to show this. First, see the contrast in (4), and the contrast between the appositives in (4a) and (5). Example (4) is intended to be non-specific.

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¹ It is well-known that – independently of the role independency – there can be language-specific restrictions to the internal role, as discussed in Chapter 2, sections 2.1 and 4. With respect to appositive relatives it may be noted that, according to Klein (1976:152), the internal role can never be that of a predicate noun:

(i) a. *De minister van milieuzaken, die Irene Vorrink is, gebruikt geen hasj.*
       the minister of environmental affairs, who Irene Vorrink is, uses no hash

b. *Saskia, die zij daar is, weet het beter dan Henk.*
       Saskia, who she there is, knows it better than Henk
(4) a. * Ik zag een man, die een rode hoed droeg.  
I saw a man, who a red hat wore  
[ARC]

b. Ik zag een man die een rode hoed droeg.  
[RRR]

(5) a. Ik heb een mooie plek gevonden, waar zo te zien nog niemand eerder is  
I have a nice place found, where so to see yet nobody before has been geweest.  

b. Walvissen, die zoogdieren zijn, worden veel bestudeerd.  
whales, who mammals are, are much studied

c. Er woont hier een bepaalde man, die je trouwens ook wel kent.  
there lives here a certain man, who you by the way indeed also know

d. Ik heb een nieuwe trui gekregen, die m’n oma heeft gebreid.  
I have a new sweater received, which my granny has knitted

A2. Second, the specificity restriction on appositives implies that the antecedent cannot contain a (negative) quantifier, regularly. This is because a quantifier makes the antecedent non-specific; see (6) and (7).²

(6) a. Iedereen/niemand die een hoed droeg werd gefotografeerd.  
everybody/nobody who a hat wore was taken.a.picture.of  
[RRR]

b. * Iedereen/niemand, die een hoed droeg, werd gefotografeerd.  
[ARC]

(7) a. Alle/enkele mensen die een hoed droegen werden gefotografeerd.  
all/some people who a hat wore were taken.a.picture.of  
[RRR]

b. * Alle/enkele mensen, die een hoed droegen, werden gefotografeerd.  
[ARC]

If, however, the quantified antecedent is specific in a certain context, an appositive is tolerable, similar to the sentences in (5). Example (8b) is taken from Sells (1985:2).

(8) a. In het Rijksmuseum bekeek ik enkele schilderijen in het bijzonder, die me in het Rijksmuseum examined I some paintings in particular, which me aangeraden waren door Joop.  
recommended were by Joop

b. A tutor will register each student, who is then responsible for getting his papers to the Dean’s office on time.

In the following special contexts (cf. §2.4:S2), antecedents of appositives can be indefinite, too:

(9) a. Every chess set comes with a spare pawn, which you will find taped to the top of the box.

b. Every new student is assigned a tutor, who is responsible for the student’s well-being in college.

² Notice that the meaning of an antecedent with a universal quantifier differs from a generic reading as in (5b).
The examples are from Sells (1985:2), again. It seems to me that the indefinite antecedents are in a sense generic within the context of the quantifier every (spare pawns are always taped to the top of the box, etc.).

A3. Furthermore, unlike an appositive, a restrictive cannot modify a unique referent, since that leads to vacuous quantification.

(10) a. * John that I love fainted. [RRC]
b. John, whom I love, fainted. [ARC]

Strange exceptions to (10a) are the examples of apparent restrictive relatives in (11).

(11) a. Onze Vader Die in de hemelen zijt
   ‘Our Father Who in heaven art’
b. Wij die dapper zijn zullen jullie redden.
   we who brave are will you save
c. Jij die alles weer hebt natuurlijk het laatste woord!
   you who everything know have of course the final word
d. Joop die alles weer heeft natuurlijk het laatste woord!
   Joop who everything knows has of course the final word

Normally, a relative to a name or pronoun is appositive. It seems that the relatives in (11) indicate a fixed property of the antecedent, hence it concerns subject relatives only. This hybrid type of relative is neither restrictive, nor appositive: it does not provide further information on the antecedent, rather it gives a further (epithetical) indication who is meant, without there being a set of possibilities. The examples in (11a-d) may be compared to phrases like Joep van hiernaast ‘Joep from next door’, or, more precisely, with jij hemelbewoner ‘you celestial’, wij dapperen ‘we brave ones’, jij allesweter ‘you wiseacre’, and Joop de betweter ‘Joop know it all’, respectively.

A further special case is the well-known example in (12b), where the relative causes a set-interpretation of the head noun. This is not a property of relative clauses alone, but it can be established by any modifier, see (12c).

(12) a. * the Paris
b. the Paris that I love
c. the Paris of the old days

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3 In general, the external determiner of a restrictive relative depends on the content of the relative clause. See (i), taken from Jackendoff (1977:177).

   (i) a. He greeted me with the/*a warmth I expected.
b. He greeted me with a/*the warmth I had not expected.

According to Jackendoff this is a general property of restrictive modifiers, hence it cannot be considered as clear evidence for the D-complement hypothesis of relative clauses that I have adopted in Ch3/4 (unless one would assume that every restrictive modifier is a complement of D—but that raises a lot of extra trouble, e.g. obligatory DP-internal extraposition, except e.g. for adjectives in Dutch, etc.).
So (12b/c) implies a set of different Parises from which one is chosen by means of the information provided by the modifier.

A4. Restrictives only modify DPs. Appositives can have any antecedent, see (13). Jackendoff (1977:175) states: ‘Relative pronouns in appositives can be anaphoric to the same constituents as ordinary demonstrative pronouns can.’ See also Fabb (1990). Note that the function of the head in the relative is not necessarily the same as in the matrix.

(13) CP: The three wise men advised resignation, which is good.
    VP: The dog has thrown up, which the cat hasn’t, fortunately.
    AP: She denied to be corrupt, which she really was, though.
    AdvP: He ran fast, which is how an athlete should run.
    PP: They talked from one to twelve o’clock, which is a long time.
    PP: John looked behind himself, (which is) where I stood.

The same can be shown in Dutch; see (14).

(14) CP: De drie wijze mannen adviseerden het aftreden van de Commissie,
    the three wise men advised the retreat of the Commission,
    wat een juiste beslissing was.
    which a just decision was
    VP: De kat heeft overgegeven, wat de hond hopelijk niet zal doen.
    the cat has vomited, which the dog hopefully not will do
    AP: Cresson ontkende corrupt te zijn, wat ze echter wel degelijk is.
    Cresson denied corrupt to be, which she however indeed is
    AdvP: Hij werkte hard, hetgeen is hoe een ambtenaar behoort te werken.
    he worked hard, which is how a civil servant ought to work
    PP: De leerstoelgroep vergaderde van 9:30 tot 12:30, wat erg lang is.
    the prof. Chair-group metted from 9:30 to 12:30, which very long is
    PP: Hij keek verschrikkelijk achter zich, waar echter niets was te zien.
    he looked frightened behind SE, where however nothing was to see

However, this special use has its limitations: attributional APs cannot be relativized.

(15) a. * Unfortunately the corrupt (woman), which I am not, (woman) was elected.
    b. * Helaas werd de corrupte (vrouw), wat ik niet ben, (vrouw) gekozen.

According to Emonds only postnominal adjectives, which must always bear a complement or adjunct. may carry an appositive. See (16), from Emonds (1979:228).

[^4]: There is a clear explanation for these facts. First, there is more general constraint which prevents prenominal ajectives from taking a complement or modifier (e.g. the proud (*of these traditions) canadians). This need not be a primitive filter, for example it would follow from a theory in which A takes NP as a complement. Second, a postnominal adjective is predicative in English and Dutch.
(16) Canadians proud *(of these traditions), which Jean-Luc doesn’t seem to be, favour an independent Eastern Canada.

This can be more ore less confirmed in Dutch, although postnominal adjective constructions are very restricted and obligatorily appositive:

(17) Joop, als altijd tuk op voordeltries, wat ik zelf niet ben, rende naar de winkel.

Joop, as ever keen on bargains, which I myself not am, ran to the shop

A5. Consider the following special case from Swedish: in appositives a definite marker is obligatory on the antecedent if it is preceded by a demonstrative, contrary to the situation in restrictive relative constructions. The normal definite marker in Swedish is a suffix, e.g. hus-et ‘the house’ (cf. Platzack 1997:71). A ‘free determiner’ can be added if an adjective precedes the noun: det röda huset ‘the red house-the’, or if the interpretation is demonstrative: det huset ‘that house-the’. A free determiner without a definite suffix on the noun is generally impossible: *det (röda) hus. Remarkably, it is possible if a restrictive relative is attached to the DP, but not in the case of an appositive relative. See the following contrast (from Platzack 1977:76): 5

(18) a. Det huset som han talade om ligger där borta. [RRC]
    the house-the that he talked about is over there

b. Det huset, som han för övrigt ville riva, är nu till salu. [ARC]
    the house-the, that he by the way wanted to demolish, is now for sale

(19) a. Det hus som han köpte var rött. [RRC]
    the house that he bought was red

b. * Det hus, som han för övrigt köpte, var rött. [ARC]
    the house, that he by the way bought, was red

Construction (19a) is even possible with extraposition (Platzack 1997:84):

(20) Den man vill jag se som kan lösa den här uppgiften.

the man want I see that can solve this task

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... continued

Therefore it is a complete AP, which can have a complement and/or a modifier. In my terms, a predicative AP may take a specifying conjunct that contains an ARC; see below.

5 Notice that Swedish som, a relative complementizer, hence equivalent to English that, not which, can be used in appositive relatives.
A6. Finally, appositives with a partitive antecedent may cause difficulties concerning the agreement in the predicate. First consider the situation in Swedish. As is always the case, a predicate adjective in a subject relative agrees in number with the antecedent in Swedish. However, if the construction is partitive, a contrast between restrictives and appositives appears (Platzack 1997:79):

(21) a. En av poliserna som blev sjuk/sjuka heter Blom. [RRC]
   one of policemen-the that got illsg/illpl is.named Blom

b. En av poliserna, som f. ö. blev sjuk/*sjuka, heter Blom. [ARC]
   one of policemen-the, that by the.way got illsg/*illpl is.named Blom

If the relative is restrictive, the predicate adjective is optionally singular or plural; in an appositive it must be singular. Unfortunately, this observation is not confirmed by the following pattern concerning verb agreement in Dutch; see (22).

Example (22b) is from Bennis (1978:212). The two variants can be explained by varying the place of attachment of the relative clause (hence there is a meaning difference).

(22) a. Ik heb één van de voetballers die bij Ajax spelen/speelt,
   I have one of the football.players who with Ajax playpt/playsg
   gisteren ontmoet.
yesterday met

b. Ik heb één van de voetballers, die bij Ajax spelen/speelt,
   gisteren ontmoet.

According to Bennis, extraposition in (22b) is only possible with the singular variant, but I do not agree with this judgement. Moreover, it seems to me that in (22a) extraposition is possible with both variants. Thus we have (23).

(23) a. Ik heb één van de voetballers ontmoet die bij Ajax speelt/spelen. [RRC]

b. Ik heb één van de voetballers ontmoet, die bij Ajax speelt/spelen. [ARC]

Furthermore, notice the constructions with appositives in (24), from Bennis (1978:213). If the relatives are interpreted as restrictive, the judgements remain the same.

(24) a. Van de voetballers, die bij Ajax spelen, heb ik er één ontmoet.
   b. * Van de voetballers, die bij Ajax speelt, heb ik er één ontmoet.
   c. Van de voetballers heb ik er één ontmoet, die bij Ajax speelt.
   d. * Van de voetballers heb ik er één ontmoet, die bij Ajax spelen.

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6 The uncertainty concerning the verb agreement in (22a) resembles some facts concerning the binominal qualititative construction, to be discussed in Ch8§App:4. Notice that the plural verb spelen is preferred if the main stress is on Ajax, but the singular speelt if it is on één.

7 Moreover, the translation of (21b) into Dutch gives two acceptable variants.
I think (24) can be explained almost trivially once it is noticed that a PP cannot be moved from within NP; see also Chapter 8 and Klein & Van der Toorn (1980). The fronted PP must be adverbial; it is not the complement of één. Hence the pied piped relatives belong to the plural DP, the sentence-final ones to the singular één.

2.2. **Relative elements and pied piping**

**R1.** English *that* cannot be used as a relative complementizer in appositives, as noted above. This is not a universal property: see further section 3.1. More interestingly, restrictives but not appositives may be introduced by a zero particle, at least in English and the continental Scandinavian languages (Smits 1988):

(25) a. The man I saw is great. [RRC]
b. * John, I saw, is great. [ARC]

Cinqué (1982) assumes that a relative pronoun in an English appositive cannot be deleted because it is not c-commanded by the head noun, hence it is unrecoverable if it is empty. Concerning zero relativization, see further section 3.1 and Ch5§3.1 above.

**R2.** Consider pied piping in relative clauses. Pied piping of a preposition is possible in both types of relatives: see (26) and the Dutch counterpart in (27).

(26) a. The man *to whom* I just gave a present is celebrating his birthday. [RRC]
b. John, *to whom* I just gave a present, is celebrating his birthday. [ARC]

(27) a. De man *aan wie* ik zojuist een cadeau gaf, viert zijn verjaardag. [RRC]
b. Joop, *aan wie* ik zojuist een cadeau gaf, viert zijn verjaardag. [ARC]

Possessive relatives are also possible in both cases:

(28) a. The man, *whose mother* I met the other day, is a creep.
b. De man, *wiens moeder* ik gistereen ontmoette, is een engerd.

By contrast, complex pied piping is highly marked, if not impossible, in English restrictives, contrary to the situation in appositives. This is shown in (29).

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8 Safir (1986:679) notices an interesting possibility concerning complex pied piping: fronting of the relative pronoun; see (i)

(i) a. Those reports, *the height of the lettering on which* the government prescribes, are tedious.
b. * Those reports, *which the height of the lettering on* the government prescribes, are tedious.

See also Bianchi (1995:Ch6) on this subject.

9 Unfortunately, sentences like (29a) are dubbed acceptable (but stylistically marked) in Cinqué (1982:279), but unacceptable in Fabb (1990:64). Emonds (1979:224) has similar examples with inanimate antecedents, which he disapproves. All authors accept the examples with appositives as in (29b). I conclude that at least there is a clear contrast in (29).
(29) a. ?* The man the wife of whom I met yesterday is a carpenter.  
   b. John, the wife of whom I met yesterday, is a carpenter.

According to Cinque (1982), relative pronouns in English restrictive relatives are anaphors in the unmarked case, whereas they can be discourse-linked to the antecedent in appositives. Therefore (in the unmarked case) complex pied piping is ungrammatical in restrictives, because a closer NP node intervenes – the antecedent is outside the governing category of the pronoun – hence binding is impossible. In appositives the relative pronouns are not (necessarily) anaphors, hence principle A of the Binding Theory does not apply and complex pied piping is allowed.

Unfortunately, this reasoning cannot be completely correct. First of all, relative pronouns in appositives must have a nearby antecedent, too, as noted above; see for instance (30) and (31).

(30) Jan zag de vrouw, die gisteren arriveerde.
(31) John, saw the woman, who arrived yesterday.

Moreover, in Dutch, complex pied piping as in (29) is impossible in both restrictive and appositive relatives; see (32).

(32) a. * De man de vrouw van wie ik gisteren heb ontmoet, is timmerman.
   b. * Joop, de vrouw van wie ik gisteren heb ontmoet, is timmerman.

But we cannot say that relative pronouns are always anaphors of the Cinque type in Dutch, since complex pied piping in restrictives (and appositives) is possible if an additional preposition is added. This is also the case in English; see (33).

(33) a. De man met de vrouw van wie ik gisteren gesproken heb, is timmerman.
   b. The man to the wife of whom I spoke yesterday, is a carpenter.

These facts are discussed in detail in Chapter 8, section 5.

R3. An appositive relative can contain an epithet NP, contrary to a restrictive. This is shown in (34). See also Fabb (1990).

(34) a. "De avonden", welk boek van Reve veel gelezen wordt, is herdrukt.
   b. Ze schaamden zich diep, onze werkloze echtgenoten,  
      they shamed SE deeply, our unemployed husbands,
      welke stakkers geen Ferrari hebben.
      welke poor.devils no Ferrari have
   c. Hond en kat zijn als water en vuur, welk feit reeds lang bekend is.
      dog and cat are like water and fire, which fact already long known is
Examples like these have a literary flavour. They remind one of the internally headed free relatives discussed in Ch2§6.3.2 such as *welke onverlaat zo iets doet verdient straf*—which miscreant such a thing does deserves punishment*.

R4. Finally, notice that a relative pronoun is a third person pronoun. We might wonder whether (appositive) relatives with a first or second person pronoun are ungrammatical. Unexpectedly this is not the case. Consider the examples in (35), from Delorme & Dougherty (1972:27/16):

(35) a. We, who are policemen, like peanuts.
    b. You, who are troops, will embark.

Similar examples can be obtained in Dutch. See further section 5.5 on matching effects in appositive relatives with a pronominal head.

2.3. Extraposition and stacking

Like restrictives, appositives can be extraposed, and they can be stacked as well:

(36) a. Ik heb Joop gezien, die twee zusters heeft.
    I have Joop seen, who two sisters has
    b. Joop, die op de derde rij zat, van wie we nu nog niet weten of hij wel een Joop, who on the third row sat, of whom we now yet not know if he indeed a kaartje had, genoot van de voorstelling.
        ticket had, enjoyed the performance

These properties have been denied. They are treated further in section 3.1 below. Apart from that, the following can be said about stacking and extraposition.

E1. Appositives must appear to the right of restrictives; see e.g. Jackendoff (1977), Smits (1988), or Platzack (1997). An English example is (37):

(37) a. The man that came to dinner, who was drunk, fainted.
    b. *The man, who was drunk, that came to dinner, fainted.

This is the case in Dutch, too:

(38) a. De president die dronken was, die president Clinton moreel veroordeelde, the president who drunk was, who president Clinton morally condemned, lachte luid.
        laughed loud
    b. * De president, die president Clinton moreel veroordeelde, die dronken was, lachte luid.
However, in exceptional cases the reverse order is acceptable.

((39)) Kijk, daar heb je die man weer, die ik je trouwens gisteren ook aanwees,
look, there have you that man again, who I you by.the.way yesterday also out.pointed,
die een paarse hoed draagt.
who a purple hat wears

Likewise, the order can be turned around in English. See (40), from Emonds (1979:222).

(40) We found that movie, which cost plenty, that you so highly recommended.

Emonds states that in general, both appositives and parentheticals can be followed by only one constituent, see (41), from Emonds (1979:227).

((41)) He was sent that mony, | I want to emphasize |, for new furnature (*by my brother).
| which I worked hard for |

However, there are many counterexamples to this claim, e.g. (42), from Perzanowski (1980: 358/365). See also Fabb (1990:74).

((42)) a. I gave Harry, who thanked me, his money back.
b. I gave Harry, who goes to NYU, his money back yesterday.

Finally, recall from Ch2§7.3 that, obviously, next to stacking recursive embedding is possible. Appositives and restrictives can be used in random order in that case, see e.g. (43), where restrictive connections are printed in italics and appositive connections are underlined.

((43)) Ik zag de vrouw, die, de hond, sloeg, die, de man, gebeten had die, vandaag
I saw the woman who the dog hit, who the man bitten had who today
een vrije dag; had, waar, hij, zich zeer op verheugd had.
a free day had, where he SE very on enjoyed had.

2.4. Scope, binding and reconstruction

S1. By definition, an appositive refers to the whole antecedent DP, whereas a restrictive is under the scope of a determiner or quantifier that belongs to the antecedent. Hence (44a) implies that all students passed the examination, whereas (44b) implies that some students did not pass the examination.
S2. An appositive is opaque for quantifiers and negation, contrary to restrictives. In other words: appositives are barriers for licencing relations such as variable binding. Therefore the meaning of hij in (46) cannot be constructed.

(45)  Bijna niemand vertelde over de toren die hij beklimmen had
almost nobody told about the tower which he climbed had

(46) * Bijna niemand vertelde over de Martinitoren, die hij beklimmen had. 
almost nobody told about the Martini.tower, which he climbed had

Jackendoff (1977:176) presents the following examples in English. In (48b) the negative polarity item any cannot be licenced by the negation.

(47) a. Everyone bought a suit that suited him. 
   b. * Everyone bought a suit, which suited him.

(48) a. I didn’t see a man who had had any drinks. 
   b. I didn’t see Bill, who had had some/*any drinks.

See also Fabb (1990) on this subject.

However, it must be noted that in special contexts a quantifier seems to be able to bind a variable in an appositive. The examples in (49) are from Sells (1985). Equivalent sentences in Dutch are acceptable as well.
(49) a. Every rice-grower in Korea owns a wooden cart, which he uses when he harvests the crop.
   b. A tutor will register each student, who is then responsible for getting his papers to the Dean’s office on time.
   c. Every man has two hands, which serve him well.

Sells shows at length that these examples do not involve syntactic variable binding, but a type of discourse linking called cospecification. A direct indication for this is that the relation between every/each and he can be inter-sentential, as shown in (50), where the appositive clauses of (49) have been converted into main clauses. Therefore a c-command relation is certainly excluded, hence syntactic binding is impossible.

(50) a. Every rice-grower in Korea owns a wooden cart. He uses it when he harvests the crop.
   b. A tutor will register each student. He is then responsible for getting his papers to the Dean’s office on time.
   c. Every man has two hands. They serve him well.

Cospecification as in (49) or (50) is only possible with certain operators (excluding negation) in a continuative discourse. The latter implies that the ‘expected centre’ (usually the focus) is confirmed in the following clause by pronominalization, and that there is a temporal parallelism (more precisely: ‘temporal or modal subordination’). See further Sells (1985). Notably, in the examples (46) through (48) these conditions are not fulfilled. A transformation such as in (50) is also impossible; see e.g. (51).

(51) Bijna niemand/iedereen sprak over de Martinitoren. 
almost nobody/everybody told about the Martini.tower
* Hij had die beklimmen.
he had it climbed

Thus the generalization that appositives are for some reason syntactically opaque to licencing relations can be maintained. Apparent counterexamples are explained by special discourse requirements. For instance, (52) is acceptable, contrary to (46) and (51).

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12 Sells (1985) argues that there are three main types of linking to an antecedent: i) syntactic binding, ii) cospecification, i.e. discourse licenced anaphora, and iii) coreference, which is only based on ‘knowledge of the world’. Sells states cospecification in terms of Discourse Representation Theory, cf. Kamp & Reyle (1993). Demirdache (1991) takes over the essential parts of his findings in a somewhat different framework. She argues that there is a clear parallel with Evans’s (1980) E-type pronouns. I might add that at present it is, or should be, well-known that there are several types of anaphora that are dependent on discourse conditions; see e.g. Sells (1987), De Vries (1999b) – and the references there – on logophoric reference, identifying emphatic expressions, etc.
(52) Elke toerist sprak over de Martinitoren, die hij immers de volgende dag zou gaan beklimmen.

go climbing

S3. A restrictive but not an appositive allows for collocations split across a relative construction; see (53). This has been discussed in Ch3§2.3.3.13

(53) a. De voortgang die we boekten, was hoopgevend.
   b. * De voortgang, die we (vorig jaar) boekten, was hoopgevend.

A restrictive but not an appositive allows for collocations split across a relative construction; see (53). This has been discussed in Ch3§2.3.3.13

(53) a. The progress, which we (last year) made, was hopeful

Vergnaud (1974) gives the following example in English:

(54) a. The horrible face that Harry made at Peter scared him.
   b. * The horrible face, which Harry made at Peter, scared him.

S4. A restrictive but not an appositive allows for binding into the relative clause, as is familiar from examples like (55).

(55) a. The picture of himself that John likes is on the wall.
   b. * That portrait of himself, which John painted last year, is expensive.

More appropriate examples avoid a possible coreferential PRO subject in SpecNP, as discussed in Ch3§2.3.4; see (56):

(56) a. De verhalen over zichzelf die Joop gisteren hoorde, waren gelogen.

b. * De verhalen over zichzelf, die Joop gisteren hoorde, waren gelogen.

b. * Aan de muur hing een schilderij van zichzelf, dat Joop vorige maand heeft laten maken.

More appropriate examples avoid a possible coreferential PRO subject in SpecNP, as discussed in Ch3§2.3.4; see (56):

(56) a. The stories about SE-SELF which Joop yesterday heard, were lied.

b. * The stories about SE-SELF, which Joop yesterday heard, were lied.

b. * A painting of SE-SELF, which Joop last month has made.

S5. Next, Safir (1986:673) claims that there is a difference between appositives and restrictives concerning parasitic gaps; see (57).

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13 The judgements are influenced by the level of concreteness of the head noun, and the amount of semantic content in the appositive. Sentence (i), for example, is much better.

(i) ? De voortgang, die we wegens grote werkdruk graag zouden boeken, the progress, which we due to heavy pressure of work readily would make, werd belemmerd door trage Jan.

was hindered by slow Jan.
Safir explains this by assuming that appositives are not present at S-structure. To me, the contrast in (57) seems to be just another instance of property S2: appositive are barriers for licencing relations; compare e.g. (46). This is confirmed by Demirdache (1991:158/9), in whose theory appositives are LF-raised (hence, in (57b) the appositive that contains the parasitic gap is not in the c-command domain of the antecedent, the first who). Notice, moreover, that (57a) is unacceptable in Dutch:  

\[(58) \ast \text{Joop is een man die [iedereen die kent] bewondert.} \]

S6. Finally, certain speaker-oriented sentence adverbs and logical connectives can appear in main clauses and appositive relatives only. An example is (59), from Emonds (1979:239).

\[(59) \begin{align*}
\text{a. } & \text{The boys, who have \textit{frankly} lost their case, should give up.} \\
\text{b. } & \ast \text{The boys that have \textit{frankly} lost their case, should give up.}
\end{align*} \]

See also Lehmann (1984:271).

2.5. Intonation


12. According to Jackendoff (1977:173) restrictives can be focused and negated, whereas appositives cannot carry the sentence stress; see (60) and (61).

\[(60) \begin{align*}
\text{We didn’t talk to the man who married SUSAN.} \\
\text{(We talked to the man who married JANE.)}
\end{align*} \]

\[(61) \ast \text{We didn’t talk to the man, who married SUSAN.} \]

13. The relative pronoun who in English can be reduced in restrictives, but in appositives this is not possible. See (62), based on Kaisse (1981):

\[(62) \begin{align*}
\text{a. } & \text{those people who’ll [həl] be there tomorrow} \\
\text{b. } & \ast \text{those people, who’ll [hol] be there tomorrow}
\end{align*} \]

\[14 \text{ See also Bennis & Hoekstra (1984).} \]
According to Kaisse, the main reason for this difference is that a restrictive, but not an appositive relative is a complement of the head noun. Given the promotion theory of relative clauses, this explanation must be revised. I do not expect problems, since there is a complementation relation both between $D_{\text{matrix}}$ and RC, and between $D_{\text{rel}}$ and $N_{\text{head}}$ in restrictives, whereas appositives are analysed differently (see below).

3. Misconceptions on appositive relatives

There are a number of misconceptions on appositive relatives which I would like to contradict. The first subsection discusses some false statements that persist in the literature, but can easily be refuted; and some properties of English that happen to be not general linguistic truths. The second subsection contains some residual issues.

3.1. False statements that persist in the literature, and properties of English that do not have a universal status

M1. *"An appositive relative cannot be extraposed, contrary to a restrictive one."

(e.g. Emonds 1979:234)

Emonds — but also Vergnaud (1974), Smits (1988) and others — assume that appositives cannot be extraposed. This is plainly false. Some examples are given in (63).

(63) a. Gisteren heb ik mijn zuster bezocht, die blond haar heeft (zoals je weet).
yesterday have I my sister visited, who blond hair has (as you know)

b. Ritzen kwam op bezoek, van wie laatst een schaamteloos boek over
Ritzen came on visit, by whom lately a shameless book on
ministerschap is verschenen.
ministership has appeared

Even in English appositives can be extraposed; see (64), from (Fabb 1990:59).

(64)  I met John yesterday, who I like a lot.

Some appositives have a continuative meaning or a cause/effect reading, such as (65a), taken from Smits (1988:185), or (65b), from Safir (1986:fn. 9). According to Smits these sentences are base-generated in a right-peripheral position.

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15 The bound pronoun in (65b) seems to be at odds with the generalization in §2.4.52 above, viz. that an appositive is opaque for licencing relations. However, it is another example of cospecification licenced by a continuative discourse, as discussed in Sells (1985). See also the following contrast, taken from Safir (1986:673).

(i)  The chairman must register each student, who may then apply for a loan.

(ii)  *The chairman must register each student, who has applied for a loan.
(65) a. Ik wilde mijn zuster opzoeken, die echter niet thuis was.
    I wanted my sister visit, who however not at home was
b. [Every Christian], prays to God, who forgives him.

This is rather interesting, but it does by no means imply that extraposition of ‘normal’ appositives is anomalous; cf. (63). See also Ch2§7.5 on this subject.

M2. * “Appositive relatives cannot be stacked, contrary to restrictives.”
(e.g. Jackendoff 1979:171)

According to Jackendoff – but also Smits (1988), Plat Zack (1997), Alexiadou et al. (2000), etc. – restrictives can be stacked, but appositives cannot. An example is (66).

(66) a. the man who came to dinner who hated lox [RRC]
b. * the man, who came to dinner, who hated lox [ARC]

Although stacking is somewhat difficult in English, and a coordination structure is often preferred in general (see below), this observation turns out to be completely incorrect if more languages are taken into account; cf. Lehmann (1984:197ff) and Grosu & Landman (1998). See also Ch2, sections 3 and 7.3. For instance, the Dutch examples in (67) are perfectly acceptable. A good strategy is to use different relative pronouns.

(67) a. Joop, die op de derde rij zat, van wie we nu nog niet weten of hij wel een kaartje had, genoot van de voorstelling.
    Joop, who on the third row sat, of whom we now yet not know if he indeed a ticket had, enjoyed the performance.
    [RRC]
b. Popeye, die van spinazie houdt, die daarom ook heel sterk is, redde Olijfje.
    Popeye, who . spinach likes, who therefore also very strong is, saved Olive
    [ARC]
c. Ik woon in Amsterdam, dat 750000 inwoners heeft, waar bovendien vele toeristen komen.
    I live in Amsterdam, which 750000 inhabitants has, where moreover many tourists come

An English example is (68).

(68) this man, who came to dinner late, about whom nobody knew anything, …

Examples of stacking with restrictive relatives comparable to (67) are shown in (69).

(69) a. Willen de mensen die op de derde rij zitten die nog geen kaartje hebben want the people who on the third row sit who yet no ticket have even hier komen?
    just here come
    [RRC]
b. Was de man die van spinazie houdt die heel sterk is, maar hier.
    were the man who . spinach likes who very strong is, only here
    [ARC]
c. Ken jij een stad die 750000 inwoners heeft waar veel toeristen komen?
    know you a city that 75000 inhabitants has where many tourists come
One might ask whether a second relative modifies the antecedent alone or the antecedent plus the first relative. In fact, both may be the case. This is shown in (70), where *degenen* is ambiguous, i.e. it refers to ‘people’ (on any row), or to ‘people on the third row’.

(70) Willen [de *mensen*, die op de derde rij zitten, die nog geen kaartje hebben] want the people who on the third row sit who yet no ticket have zich bij de kassa vervoegen, en [degenen bij die wel een kaartje hebben] bij de ticket.inspector

According to Jackendoff (1977:186) “the phenomenon of stacking is not to be accounted for in the syntax, but rather in the system of presupposition and focus”. If this is true, a flat structure like [NP [RC1] [RC2]] is to be preferred over a hierarchical one like [[NP RC1] RC2], contra Ross (1967), because the latter leads to wrong predictions.\(^\text{16}\) In Jackendoff’s representation stacked relatives are on the same hierarchical level. However, in a binary branching grammar this is not possible. In my view the solution is a coordination analysis of stacking. This is confirmed by the fact that it is *always* possible to coordinate a stacked relative overtly; see also Platzack (1997). For instance, (67b) and (69b/c) may be expressed as in (71). There is no difference in meaning.

(71) a. Popeye, die van spinazie houdt, *en* die daarom ook heel sterk is, [ARC] redde Olijfje.
   b. *Was* de man die van spinazie houdt *en* die heel sterk is, maar hier. [RRC]
   c. Ken *hij* een stad die 750000 inwoners heeft *en* waar veel toeristen komen?

If the second relative pronoun equals the first, it can be omitted. Hence *die* can be left out in (71a/b), but not *waar* in (71c). This is shown in (72).

(72) a. Popeye, die van spinazie houdt, *en* daarom ook heel sterk is, redde Olijfje.
   b. *Was* de man die van spinazie houdt *en* heel sterk is, maar hier.
   c. *Ken* *hij* een stad die 750000 inwoners heeft *en* veel toeristen komen?

So under certain conditions the coordinative head or the second relative pronoun can be elliptic, but leaving out both is never allowed; see (73).\(^\text{17}\)

(73) a. *Popeye, die van spinazie houdt, heel sterk is, redde Olijfje. [ARC]
   b. *Was de man die van spinazie houdt heel sterk is, maar hier.* [RRC]

\(^{16}\) Jackendoff’s claim is criticized in Stuurman (1983). I will return to it in section 4.

\(^{17}\) However, if (73a) contains a third relative clause which is introduced by ‘*en*’ the second coordinative head may be asyndetic.
Finally, notice that stacking of appositives with a non-NP antecedent is also possible. In these cases an overt coordinator is often preferred.

(74) a. Joop zocht onder de tafel, waar ik ook altijd zoek, (en) waar het een Joop searched under the table, where I also always search, (and) where it a bende is.
    mess is
b. Joop is gevallen, wat heel zielig is, (en) wat hij voortaan moet vermijden. Joop has fallen, which very pitiful is, (and) which he from now on should avoid

M3. * "Object NPs in questions and negative sentences cannot bear an ARC."
     (e.g. Smith 1964:258)

It is claimed that object NPs in questions and negated sentences cannot have appositives; see for instance (75).

(75) a. * Did you see Bill, who is six foot tall?
      b. * Who wrote a novel, which was published by Foris?
      c. * We never go to the opera house, which is in Boston.

The observation is incorrect. Example (75a) is fine in Dutch; (75b) is unacceptable simply because a novel is non-specific; (75c) is all right and can also be rephrased (from Klein 1976:146). Thus consider (76).

(76) a. Heb je Lange Jan gezien, die 1 meter 99 meet?
      have you Tall Jan seen, who 1 meter 99 measures
b. Wie heeft ook weer dat boek over snorkels geschreven, dat ik je vorige who has also again that book about snorkels written, that I you last week nog heb laten zien?
      week yet have let seen
    c. Naar het operagebouw, dat in Boston staat, gaan we vandaag niet.
      to the opera.house, that in Boston is, go we today not
c. Naar het operagebouw, dat in Boston staat, gaan we vandaag niet.
      to the opera.house, that in Boston is, go we today not
d. We gaan vandaag niet naar opa, die zijn rust hard nodig heeft na de we go today not to grandfather, who his rest badly needs after the operatie van vorige week.
    operation of last week

What exactly causes the unacceptability in (75a) and (75c) in English is not clear to me. See also Sells (1985) and Demirdache (1991) on the subject of appositive relatives and the scope of quantifiers and negation.

M4. * "A relative complementizer can only be used in restrictive relatives"
     (e.g. Jackendoff 1977:171)

In English, appositives may not be introduced by a relative complementizer. For instance:
However, this restriction does not have a general status. According to Smits (1988) appositives can be introduced by a complementizer in the Scandinavian languages (i.e. som), French (que), Catalan, Italian and Portuguese. Lehmann (1984) provides many examples from other languages families. Hence the restriction in English is a language-particular coincidence, nothing more.

3.2. Other issues

M5. The head of a relative clause can be questioned in some cases. According to Fabb (1990:70) an appositive relative cannot be pied piped, contrary to a restrictive:

(78) a. [Who that you met] did you like ___ the best? [RRC]
b. * [Who, some of whom were deaf], did we teach ___ French? [ARC]

If the relative is stranded, Fabb gives the reverse pattern:

b. Who did we teach ___ , [some of whom were deaf], French? [ARC]

I think, however, that Fabb’s remarks are incorrect. First, the contrast in (78) disappears if who is changed to which people, at least in the Dutch counterpart. The reason is simply that appositives must have a specific antecedent (cf. section 2.1 above).

(80) a. [Welke mensen die je ontmoette] vond je ___ het leukst? [RRC]
b. [Welke mensen, van wie enkele doof waren], hebben we ___ Frans geleerd? [ARC]

Second, consider the contrast in (79). In fact both sentences are expected to be unacceptable, since stranding in the middlefield is prohibited in general (see Ch7§5.2.7). This explains the judgement in (79a) and its Dutch counterpart in (81).

(81) * Wie/welke mensen vond je ___ [die je ontmoette] het leukst?

This leaves us with the strange example in (79b). Notice that (82) – the Dutch counterpart – is plainly ungrammatical, as expected.

(82) * Welke mensen hebben we ___ , [van wie enkele doof waren], Frans geleerd?

This casts serious doubt on the acceptability of (79b); see also Alexiadou et al. (2000:46). Perhaps (79b) is easily confused with a parenthetical sentence because the relative pronoun is not sentence-initial. (In Dutch this confusion is less likely
because the word order mensen, enkele van wie ‘people, some of whom’ is impossible for independent reasons.)

Finally, notice that it is possible to split an interrogative antecedent and a relative clause, namely if the relative is extraposed from the SpecCP position properly (i.e. to the end of the sentence). The judgements for restrictives and appositives are equal; see (83).

(83) a. Hoeveel mensen heb je gezien die een hoed droegen? [RRC] 
how many people have you seen who a hat wore
b. Hoeveel mensen heb je Frans geleerd, van wie enkele doof [ARC] 
how many people have you French learned, of whom some deaf moeten zijn geweest? 
must have been

Thus the apparent contrasts in (78) and (79) are due to ill-chosen examples.

M6. According to Safir (1986:667) there is a weak cross-over effect in restrictives but not appositives:

(84) a. \(? * A\ man,\ who,\ [his,\ wife]\ loves\ t,\ arrived\ early. [RRC]
b. John, who, [his, wife] loves t, arrived early. [ARC]

Safir claims that this can be explained as follows: i) coreference of a restrictive relative pronoun and its antecedent is established at LF, ii) coreference of an appositive relative pronoun and its antecedent is established at some discourse level LF', and iii) the constraint against weak cross-over applies at LF only. However, I don’t feel the contrast in Dutch to begin with. Both restrictives and appositives produce the weak cross-over effect; see e.g. (85) and (86).

(85) a. \(? ? I\ neem\ de\ hond,\ die,\ [zijn;\ vorige\ eigenaars]\ t,\ verwaarloosd [RRC]
I take the dog which his former owners neglected have hebben.
b. \(? ? I\ neem\ deze\ hond, ,\ die,\ [zijn;\ vorige\ eigenaars]\ t,\ verwaarloosd [ARC]
hebben.

(86) a. \(? ? I\ zag\ het\ meisje,\ dat,\ [haar,\ ouders]\ altijd\ t,\ gesteund\ hebben. [RRC]
I saw the girl which her parents always supported have
b. \(? ? I\ zag\ Mieke, ,\ die,\ [haar,\ ouders]\ altijd\ t,\ gesteund\ hebben. [ARC]

M7. Next, according to Platzack (1997) identification of reference with the whole antecedent is a necessary condition for linking a relative head to a non-restrictive relative clause. Notice the following contrast, from Platzack (1997:92):

(87) a. Lisa har en ny klänning, som Anna f. ö. har sytt. [RRC]
Lisa has a new dress, that Anna by the way has sewed
b. * Lisa har en ny klänning, som Anna f. ö. också har. [ARC]
Lisa has a new dress, that Anna by the way also has
In (87a) the dress in the matrix and subordinate clause is the same dress; in (87b) this cannot be the case. This is similar in Dutch. Of course restrictives cannot be subject to such a constraint.

Although a contrast like (87) is true for a subset of appositives, it has no general value. For instance, if we use a neuter wh-relative pronoun, the antecedent can be understood as a type or class of objects, and an interpretation as required in (87b) becomes available; see (88).

(88) a. Lisa heeft een nieuwe jurk, wat Anna trouwens ook heeft.
   Lisa has a new dress, what Anna by.the.way also has
   
   b. Lisa har en ny klänning, vilket Anna f. ö. också har.

Similarly, the antecedent in (89) is a type rather than a concrete object.

(89) a. Piet en Anna wensen voor hun bruiloft zo'n duur Wedgewood-servies,
   Piet and Anna wish for their wedding such an expensive Wedgewood-service
   dat/wat onze buren trouwens ook al hebben.
   which our neighbours by.the.way also already have
   
   b. Piet kocht zo'n Lundia-kast, die/wat wij trouwens al jaren hebben.
   Piet bought such a Lundia-cupboard, which we by.the.way already for years have

I fail to see in what sense these facts are relevant to the appositive/restrictive distinction. 18

M8. Finally, unlike subordinate clauses (but like main clauses), appositives cannot be preposed. See (90), for example.

(90) a. Joop, die een gammele fiets had, kwam te laat.
   Joop, who a rickety bicycle had, came late
   
   a.' * Die een gammele fiets had, kwam Joop te laat.
   b. Joop kwam te laat, omdat zijn fietsband lek was.
   Joop came late, because his cycle.tyre punctured was
   
   b.' Omdat zijn fietsband lek was, kwam Joop te laat.
   c. Joop kwam te laat, want zijn fietsband was lek.
   Joop came late, for his cycle.tyre was punctured
   
   c.' * Want zijn fietsband was lek, kwam Joop te laat.

According to Emonds (1979) this indicates that appositives are derived from main clauses. However, since restrictives cannot be preposed either, see (91), the same reasoning would apply to them – an unwanted conclusion.

(91) a. De man die een lekke band had, kwam te laat.
   the man who a punctured tyre had, came late
   
   b. * Die een lekke band had, kwam de man te laat.

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18 Platzack suggests a relation with the phenomenon of split collocations, but it seems to me that that has to do with scope; see section 2.4 above and section 4ff.
See also Perzanowski (1980) for a reply to Emonds’s claims.  At present, the question would rather be why relative clauses cannot be topicalized at all; see Chapter 7.

4. The syntax of appositive relatives: different views

An essential part of the syntax of restrictive relative constructions is that the relative clause is in the scope of the external determiner. In other words, there must be a node containing N+RRC – or rather RRC containing N, in accordance with the conclusions of the previous chapters – that excludes the matrix determiner/specifier. Moreover, the syntax of restrictives involves complementation: in the promotion theory advocated here, the relative is the complement of D; in the revised standard analysis (cf. Ch3§3.1.2) it is the complement of the head noun. This cannot be the case for appositive relatives. As shown in section 2 above, an ARC takes scope over a determiner or quantifier. Example (92) is an additional illustration, where the meaning of the second root clause is paraphrased in (b).

(92) a. Jij hebt twee violen, die trouwens al heel oud zijn, en ik heb er drie.
you have two violins, which besides already very old are, and I have there three
b. (i)  = … & I have three violins.
   (ii) ≠ … & I have three violins, which are already very old, by the way.

Given that an implication involving the relative clause as indicated in (92ii) is wrong, the elided constituent following the quantifier cannot contain N and the appositive relative (cf. Smits 1988:112-113). That is, an ARC must be attached at a higher level. Notice that a paraphrase like (92b.ii) would be the right interpretation for an elliptic restrictive relative.

Similarly, in (93), there is only one boy in the domain of discourse, viz. Annie’s fat son. Sentence (93) does not imply that there is a set of possible sons of which one is wearing a cap, and who is fat, too. This would be the case if the relative clause were restrictive.

(93)  & Ik zag de dikke zoon van Annie, die een petje droeg.
       I saw the fat son of Annie, who a cap-DIM wore

Therefore, the potential analyses of appositive relative constructions depicted in figure 1 below are incorrect. Here (a/b) would correspond to the (revised) standard analysis of restrictives, and (c) to the promotion theory.

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19 In turn, Perzanowski (1980) is heavily criticized in Stuurman (1983). I think much of Stuurman’s comment is valid. However, his defence of Emonds’s Main Clause Hypothesis is based, among other things, on two false assumptions, viz. that appositives could neither stack nor extrapose.
Figure 1. False analyses of appositive relative constructions.

A priori, the following analyses (to be explained below) seem to be possible; see figure 2. Here (a') is simply a modernized variant of the adjunction analysis in (a); (b) involves a third constituent which contains the antecedent and the relative clause; and in (c) the relative and the antecedent are generated separately.

Figure 2. Potential analyses of appositive relative constructions.

Usually the antecedent is a DP, as drawn in Figure 2, but it must be kept in mind that any category can be the antecedent of an appositive relative (cf. section 2.1:A4).

In fact, all of these analyses have been proposed in the literature, in many different variants, and next to still other, less obvious theories. I will briefly discuss the historical development here. A summary will be given in Figure 3 below. See also Appendix III for some structural details.

The oldest theory on appositive relatives I know is the one by Smith (1964). She generates an appositive as the complement of Det, as she does with a restrictive. Subsequently, it must be extraposed to the right of the antecedent, within the maximal NP. Smith’s approach to appositives has found no continuation in the literature, as far as I know. Probably this has the following reasons: it does not clearly distinguish appositive from restrictive relatives, and it does not reflect the basic scope facts mentioned above.

From Ross (1967) on, one may distinguish a line of thought concerning appositives called the MCH, the Main Clause Hypothesis. Ross argues that appositives are main clauses. At D-structure, they are coordinated to the matrix clause. Some transformations must then turn the clause into a parenthetical, relative clause, which surfaces in a position adjacent to the antecedent. This approach is
taken over by Thompson (1971) — who, by the way, is the only one who applies it to restrictive relatives, too. The MCH is formalized in Emonds (1979) and defended also by Stuurman (1983).

The MCH competes with the SCH, the Subordinate Clause Hypothesis, which states that the antecedent and the appositive relative form a constituent; the ARC is a subordinate clause, not a main clause. The difference with restrictives is represented by the attachment of an ARC to a higher level within the noun phrase. As far as I know, Jackendoff (1977:Ch7) is the first who explicitly argues so. It is defended against the MCH by Perzanowski (1980). In a binary branching grammar, Jackendoff’s analysis translates straightforwardly into right-adjunction. For instance, in Smits (1988:partII) appositives are right-adjointed to the NP-level. In present-day syntactic the position of ARCs may be viewed as adjoined to the DP-level, as e.g. in Toribio (1992). As I see it, these are all variants of the Subordinate Clause Hypothesis.

I will reserve the term MCH for the Ross/Emonds type approach, and SCH for Jackendoff’s with its successors. In a broader perspective, the controversy concerns the difference between orphanage and constituency. The former notion (due to Haegeman, I believe) means that the antecedent and the ARC are generated separately, as depicted in Figure 2c. The latter means that they are a syntactic constituent, as e.g. in Figure 2a/a’.

First consider orphanage. It can be ‘radical’ or ‘non-radical’. Radical orphanage means that an appositive is not even part of the syntactic structure of the matrix clause. For instance, Safir (1986) argues that there is a level LF20, beyond LF, where an ARC is attached next to the antecedent. Likewise, Fabb (1990) and Canac-Marquis & Tremblay (1997) claim that an ARC is attached at a ‘discourse’ level.20 They do not specify what this means exactly, but a DRT approach as in Sells (1985) comes to mind; cf. §2.4:S2 above. Non-radical orphanage means that an ARC is syntactically present, but it is not generated together with the antecedent. Next to the standard MCH, which involves extraposition of the constituent that intervenes between the antecedent and the ARC, there are some other theories. The closest related one is presented in McCawley (1982). He claims that constituents can be discontinuous. If precedence and dominance are independent relations, then there could be order-changing transformations that only affect the order of the constituents, but not their mutual relations as encoded in the phrase structure. This gives trees with crossing branches. Hence an ARC (or a parenthetical phrase in general) can be generated as attached to the main clause (as in the MCH; however, McCawley does not speak of coordination), and put next to the antecedent by ‘Parenthetical Placement’, a simple order-changing transformation. Finally, Smits (1988) argues that there are ‘type B’ appositives (viz. extraposed, continuative ARCs,21 and those with a split antecedent) that cannot be accounted for by the SCH. He claims that these are generated separately from the antecedent. Smits does not specify the position of these relatives. Similarly, Bianchi (1999), although in general

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20 More importantly than this, Canac-Marquis & Tremblay assume that an ARC is a free relative in apposition to the antecedent. See below.

21 See also section 3.1:M1 above.
a proponent of the constituency account, notes that a subset of appositives cannot be explained. Notably, this is a subset different from Smits's; it includes appositives with a non-DP antecedent. Bianchi assumes that these are base-generated separately (without specifically explaining where and how).

An advantage of the orphanage theory is that it explains why an ARC is not within the scope of phrases in the matrix clause (cf. §2.4), since it is not syntactically present in the radical orphanage approach, and it is at the highest position in most of the non-radical orphanage theories. However, there are also clear disadvantages. In short: the orphanage hypothesis does not explain a single relation between an antecedent and an appositive at all; just think of adjacency requirements, selection effects, feature matching between the antecedent and the relative pronoun, conditions on extraposition, etc. See also Perzanowski (1980) and Borsley (1992) for comment. Here, I wish to point out briefly some important problems.

First, it must be stipulated that an ARC always surfaces adjacent to the antecedent (apart from instances of extraposition, of course, which are treated in the next chapter).22 Second, the Main Clause Hypothesis is strange from the perspective of many languages. For instance, in Dutch and German main clauses display verb second, whereas subordinate clauses are completely verb-final. Relative clauses, including appositives, are clearly subordinate clauses in this respect. To put it more generally: how does the MCH make sure that appositives acquire the characteristics of subordinate clauses and get rid of typical main clause properties (e.g. the possibility of topicalization)? Third, concerning radical orphanage, if an ARC is attached at LF' (or some equivalent level), how can it be pronounced at all, given the regular T-model of grammar? Fourth, consider non-radical orphanage, where an ARC is present in syntax. This analysis can be excluded simply on the basis of the 'verb second' property in Dutch (see also Smits 1988:114), as shown in (94).

(94) a. Annie, die viool speelt, *heeft een nieuwe strijksstok gekocht.
    Annie, who violin plays, has a new bow bought
    b. Annie *heeft, die viool speelt, een nieuwe strijksstok gekocht.

There can only be one constituent in front of the finite verb, hebben.23 However, in the MCH the antecedent and the appositive are two separate constituents, hence (94a) cannot be derived. Notice that (94b), where the antecedent and the ARC are separated, is excluded.

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22 Emonds (1979) and Stuurman (1983) claim that this follows independently from the rule on wh interpretation that is needed for restrictives, too (hence 'appositives have no properties'). However, this cannot be correct. The adjacency requirement that is implicit in their formulation of 'wh interpretation' is completely superfluous for restrictives. Furthermore, the semantics of appositives and restrictives is different in general. Finally, if what they mean boils down to the idea that a relative pronoun is a kind of anaphor, its reference should be established by the Binding Theory, not by some additional rule of wh interpretation in relative clauses. Notice that if this idea is correct, an ARC cannot be attached at a discourse level, since the Binding Theory works in syntax.

23 Recall that the finite verb is moved to C. This leaves one higher position in SpecCP, which is filled by either the subject or a topicalized phrase.
I conclude that there is substantial evidence against the orphanage hypothesis. In other words: an antecedent and an appositive must be a constituent together. Therefore consider the constituency approach in more detail. I have mentioned the D-complement hypothesis and the Subordinate Clause Hypothesis above. Next to these there are other, more recently proposed alternatives. One of them is the possibility of a surrounding phrase – cf. Figure 2b above. For instance, Lipták (1998) assumes that an appositive is a small clause complement: [sc DP_{m} ARC]. This implies that the relation between the antecedent XP and the appositive is predicative. However, if it is true that small clause predicates can also serve as predicate nominals, we have to conclude that Lipták’s idea is problematic. For instance, the following sentences are downright ungrammatical, whereas the corresponding appositive relative constructions are perfectly all right: *this book is which I studied yesterday, by the way; or *they advised resignation is which is good; or, in Dutch *dit meisje is dat ik gisteren nog gezien had’.* *this girl is which I had seen yesterday, still’. A related theory is Platzack (1997, 2000), where the appositive is generated as the complement of an empty N, and the antecedent originates as a DP in SpecNP: ...[NP DP_{m} [N' o ARC]]. Since the determiner belonging to the antecedent is embedded in DP_{m}, it does not take scope over the ARC, as required.

Another development is the one in Kayne (1994:Ch8§7) and Bianchi (1999:Ch5§4): promotion plus LF remnant raising. They argue that appositives are derived just as restrictive – see (95a) – except for one difference: in appositives there is remnant IP movement to SpecDP at LF. The effect of this is that the appositive is moved out of the scope of D; see (95b).

\[(95)\]
\[\begin{align*}
\text{a. } & [DP] \quad [D' D [CP [DP_{rel} NP_{rel} t_{np}]_{i} (C) [t_{r} ... t_{i} ...]]] \\
\text{b. } & [DP [t_{r} ... t_{i} ...]_{i}]_{p} [DP [D' D [CP [DP_{rel} NP_{rel} t_{np}]_{i} (C) t_{p} ...]]] \\
\end{align*}\]

The advantage of this approach seems that it unifies restrictive and appositives. Unfortunately, it is problematic in several respects. First, there is no plausible trigger for the movement in (95b). Second, in Kayne’s system prenominal relatives have the structure in (95b), too. However, a regular prenominal relative does not have an appositive interpretation. Third, the antecedent of an appositive can be non-nominal, e.g. an AP or CP, but it is not likely that these phrases undergo promotion as DPs do, because this would imply selection of a DP_{rel} (which in turn includes the antecedent XP) in the subordinate clause, where an AP/etc. is expected; cf. Borsley

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24 Notice that it has also been claimed for restrictives that the relation between the antecedent and the relative is predicative, cf. Ch3§2.1.

25 Obviously a (semi-)free relative can be a predicate, e.g. *this is what I saw, or Joop is the one I like. But these sentences do not show a predicative relation between an antecedent and a relative, but between two DPs. The relevant examples would be: *o is wh I saw; *the one is I like.

26 If so, reconstruction must be excluded. See Bianchi (1999:147ff) on this subject.

27 Kayne suggests that it is triggered by some feature which at PF causes a comma intonation. However, as he admits himself, the intonation break is between the antecedent and the relative pronoun (which is in SpecCP) and not before IP. Moreover, it is not clear to me why a PF-related feature would cause movement in syntax.
This is acknowledged by Bianchi (1999). Therefore she proposes that there are kinds of appositives, say type (ii) ARCs, that are not derived by promotion, but in another way. In my view this undermines the potential appeal of this theory, since unification is one of the primary goals of the approach.

An interesting alternative is Demirdache (1991:Ch3). She tries to bring the advantages of the SCH and the MCH together. As in the SCH, appositives are generated as right-hand adjuncts to the antecedent. Furthermore, the ARC is raised and adjoined to the matrix clause at LF. Thus ARCs are subordinate clauses syntactically, but they are interpreted as main clauses. Contrary to the SCH, the surrounding phrase theory and the promotion-plus-LF-remnant-raising analysis, Demirdache’s theory accounts for all scope facts. Nevertheless, I will not follow her approach, because right-adjunction, countercyclic untriggered movement and the lack of promotion in a relative construction are at odds with the assumptions throughout this book.

Finally, it has been proposed that an appositive is coordinated to the antecedent; see Sturm (1986:Ch7§7.5), Koster (2000c:22), and more elaborated in De Vries (2000a). Like appositions such as Joop, our boss ARCs are ‘specifying conjuncts’. Koster’s approach is exceptional in that he also treats restrictive relatives as specifying conjuncts. He briefly suggests that the difference between RRCs and ARCs can be captured by attaching them at a different level, viz. NP and DP, respectively. This is in important respects similar to Toribio’s (1992) version of the SCH approach. I will return to this below and continue with the discussion of appositives here. Koster represents coordination as [XP [\& YP]], cf. Johannessen (1998). Specifying coordination is rendered as [XP [: YP]], where ‘:’ is the head of a ‘colon phrase’, which symbolizes specifying coordination. The head ‘:’ can be paraphrased as ‘namely’. (I will discuss this extensively in section 5 below and in Chapter 7.) Thus, an appositive is represented as \[P [DP DNP] [: ARC]\], where DP is the antecedent and ARC an appositive relative CP.

I agree with the general idea that appositives are specifying conjuncts to the antecedent (although I will develop an approach to coordination different from Koster’s). I argue below that a conjoined appositive is not just a relative CP, but a kind of free relative (hence a DP). Independently, Canac-Marquis & Tremblay (1997) reach the same conclusion. They state that an appositive is a free relative that stands in apposition to the antecedent, like regular appositions. (The difference with De Vries (2000a) and the pertinent chapter is that they assume appositive elements to be ‘unmerged objects’, licenced at a discourse level. Hence their analysis is basically an orphanage approach.)

In order to facilitate the comprehension of the relations between all the different proposals concerning ARCs mentioned above, I have put them in a relational scheme in Figure 3.
## Figure 3. Theories of appositive relative clauses.

<table>
<thead>
<tr>
<th>Constituency</th>
<th>Complement of D</th>
<th>Smith (1964)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>plus NP-internal extrapolation of ARC</td>
<td></td>
</tr>
<tr>
<td>Adjunction to antecedent</td>
<td>&quot;Subordinate Clause Hypothesis&quot;</td>
<td>Jackendoff (1977)</td>
</tr>
<tr>
<td></td>
<td>plus LF-raising to SpecCp$_{main}$</td>
<td>Perzanowski (1980)</td>
</tr>
<tr>
<td>Surounding phrase</td>
<td>compl. of add. empty N; antecedent DP is in SpecNP</td>
<td>Smits [type A] (1988)</td>
</tr>
<tr>
<td>Promotion plus LF remnant raising of ARC to SpecDP</td>
<td></td>
<td>Toribio (1992)</td>
</tr>
<tr>
<td>Specifying coordination to antecedent</td>
<td>(bare ARC)</td>
<td>Demirdache (1991)</td>
</tr>
<tr>
<td></td>
<td>ARC is Free Relative</td>
<td>Platzack (1997)</td>
</tr>
<tr>
<td>Non-radical</td>
<td>&quot;M$_{par}$Clause Hypothesis&quot;</td>
<td>Lipták (1998)</td>
</tr>
<tr>
<td></td>
<td>coordination to matrix</td>
<td>Kayne (1994)</td>
</tr>
<tr>
<td></td>
<td>clause at D-structure</td>
<td>Bianchi [type i] (1999)</td>
</tr>
<tr>
<td>Orphanage</td>
<td>discontinuous constituent</td>
<td>Sturm (1986)</td>
</tr>
<tr>
<td></td>
<td>plus attachment to matrix</td>
<td>Koster (2000c)</td>
</tr>
<tr>
<td>Radial</td>
<td>base-gen. extrapolation</td>
<td>Ross (1967)</td>
</tr>
<tr>
<td></td>
<td>[position unspecified]</td>
<td>Thompson (1971)</td>
</tr>
<tr>
<td></td>
<td>LF &quot;discourse&quot;</td>
<td>Emonds (1979)</td>
</tr>
<tr>
<td></td>
<td>(bare ARC)</td>
<td>Stuurman (1983)</td>
</tr>
<tr>
<td></td>
<td>ARC is Free Relative</td>
<td>McCawley (1982)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Smits [type B] (1988)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bianchi [type ii] (1999)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Safir (1986)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fabb (1990)</td>
</tr>
</tbody>
</table>

This concludes a short but complete overview of all types of analyses of appositives relatives I know of. I have indicated briefly why I think the coordination approach is the most interesting one to pursue. The next section discusses it in detail. In short, I argue that appositive relative structures have the following characteristics:

- An appositive forms a constituent with its antecedent. This is the basic assumption of all variants of the constituency approach.
- The syntax of restrictives and appositives is only minimally different. This, too, is a characteristic of many constituency approaches, but particularly of Demirdache (1991), Kayne (1994), Bianchi (1999), Koster (2000c), and also of the orphanage analyses in Thompson (1971), and Canac-Marquis & Tremblay (1997).

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28 Notice that this is equivalent with complementation to an (extended) projection of N. The point is that the appositive is not an argument of N°, i.e. not its specifier or complement.
• There is a generalized approach to ARCs and appositions, cf. Sturm (1986), Canac-Marquis & Tremblay (1997), and Koster (2000c). In particular, it involves specifying coordination, as argued by Canac-Marquis & Tremblay and Koster.

• Since the antecedent and the relative are separate conjuncts, the ARC is outside the scope of the determiner, as required.

• The appositive is a (false) free relative in apposition to the antecedent. By definition, the free relative involves a restrictive relative inside. See also Canac-Marquis & Tremblay (1997). Notice that this means that there is both a \textit{wh}-element and an empty pronoun, which is equivalent to the implied antecedent in a free relative (see section 5.3 below for details).

• Within the free relative there is promotion of the empty pronoun. Hence the promotion theory of relative clauses can be applied across-the-board to all types of relative clauses. This generalization captures what Kayne (1994) and Bianchi (1999) aim at, too. Their mistake, I think, is that they try to promote the visible antecedent, which leads to severe problems.

• The relative pronoun in an ARC is syntactically bound by the empty element in the same way as the relative \textit{wh}-operator in a restrictive relative by the antecedent.

• The empty pronoun in an ARC is anaphoric to the visible antecedent in the first conjunct. It is \textit{this} relation that can be licenced by discourse (\textit{cospecification} in Sells's terms). The discourse link between the antecedent and an element in the appositive relative is argued for at length in Sells (1985) and Demirdache (1991), although they take this element to be the relative pronoun.

Finally, notice that from the generalizations stated above – most importantly that i) as for the way they are attached to the antecedent, ARCs are a kind of appositions; ii) as for the internal syntax, ARCs are a kind of free relatives – it follows that ARCs do not exist as an independent type. Roughly speaking, all the differences between restrictives and appositives follow from independent properties of (false) free relatives and apposition structures. This means that, although the MCH as such is untenable, Emonds is right after all: \textit{"appositive relatives have no properties"}. 29

5. A coordination analysis of apposition

This section discusses in detail the coordination analysis of apposition, and of appositive relatives in particular. Section 5.1 elaborates on the concept of specification and shows why appositions in general can be treated as specifying conjuncts. In 5.2 the similarities between appositions and appositive relatives as specifying conjuncts are pointed out. Section 5.3 poses the hypothesis that ARCs are free relatives in apposition, and explores some direct consequences and potential

29 Unfortunately, I think, several authors have mistakenly extrapolated this argument to the idea that an ARC as a whole is attached to the matrix on a discourse level.
problems. Section 5.4 discusses how the behaviour of ARCs as reviewed in sections 2 and 3 is explained by this analysis. Finally, section 5.5 presents some additional evidence for the theory presented: matching effects in appositive relative constructions with a pronominal head.

5.1. **Apposition, specification and coordination**

A nominal phrase can be modified. A non-adjectival, postnominal modifier is called an *apposition*. There are appositions of several syntactic categories – I will return to this – but the canonical case for which the term is used is a DP: another nominal phrase. The major distinction to be made is the one between restrictive and non-restrictive appositions. A restrictive DP apposition is often a name or a citation:

(96) a. the writer Mulisch  
    b. Mount Everest  
    c. Alexander the Great  
    d. the novel *De avonden*  
    e. the saying *et tu, Brute*

These appositions restrict the meaning of the first noun phrase. Hence within the logic of the framework used, they are DP complements of N. Other possible complements/modifiers of N – hence restrictive appositions according to the definition in Quirk et al. (1985:1300ff) – are clauses and prepositional phrases:

(97) a. the fact that he is ill  
    b. the question whether he will come  
    c. the man with the red hat  
    d. a city in Overijssel

What is of interest here are non-restrictive appositions. Some examples are provided in (98).

(98) a. John, our boss  
    b. a nice present: a book by Golding

Since ‘appositive’ has become a synonym of ‘non-restrictive’, they are ‘appositive appositions’, strictly speaking. Again, we are faced with a terminology that is a little confusing. Henceforth I will use the term ‘apposition’ for non-restrictive DP appositions only, unless explicitly indicated otherwise.

There are several semantic types of appositions; see (99), which is taken from Quirk et al. (1985:1308). According to them it may be viewed as a scale whereby type A(i) is the ‘most appositive’ and type C(ii) the ‘least appositive’.
(99) **Semantic types of non-restrictive appositions:**

A. **Equivalence**
   - (i) *appellation:* ‘that is’
   - (ii) *identification:* ‘namely’
   - (iii) *designation:* ‘that is to say’
   - (iv) *reformulation:* ‘in other words’

B. **Attribution**
   -

C. **Inclusion**
   - (i) *exemplification:* ‘for example’
   - (ii) *particularization:* ‘especially’

Examples (mine) are given in (100):

(100) A(i) [My best friend, *i.e.* Joop], came by last night.
A(ii) He gave me [a nice present, *namely* a book by Mulisch].
A(iii) [Janeway, *that is to say* the captain of Voyager], disappeared.
A(iv) Joop is [an ornithologist, *in other words* a bird expert]
B [Joep, a nasty liar], left.
C(i) [Many people, *for example* my neighbour], like the mayor.
C(ii) They liked [these books, *especially* De avonden].

The *equatives* in A are canonical appositions. The initial DP and the apposition can often be turned around; both DPs select the same extralinguistic referent; and if one of the DPs is left out, the sentence is still acceptable.

What all these types have in common is that the apposition *specifies* the first DP. Even in equatives, where both DPs carry the same referential index, it is the case that the second DP provides further information on the first one to the hearer. Turning around the DPs changes the discourse. For example, the paraphrase “my best friend came by, you know, Joop” differs from “Joop came by, you know, the guy who is my best friend.”

As shown above, an apposition is often connected to the initial DP by a special connection word or phrase, e.g. *namely, that is, especially, or*. Most of these can be used for several semantic types, but notice that they are not exactly synonymous. In several cases the connection can be *asynthetic*, that is, without an overt connector. It turns out that type A can be asynthetic; B is preferably asynthetic;30 C cannot be asynthetic. See further below.

What is the syntactic status of appositions? In my view they must be analysed as coordinated constituents.31 Consider (101).

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30 A connection like *being* or *as you know* is acceptable.
31 The idea that a (non-restrictive) apposition is syntactically coordinated to the first nominal phrase is shared by Koster (1995a, 2000c), Sturm (1986:VII.§7.5) and, in a sense, Klein (1976, 1977). An alternative possibility is right-adjunction (i.e. complementation to a higher projection of N). For more discussion on the syntax of restrictive and non-restrictive appositions see e.g. Delorme & Dougherty (1972), Klein (1976, 1977), Wiers (1978) and Bennis (1978).
The mere fact that coordinators like or (Dutch: off((te)wel), en wel, etc.) can sometimes be used, strongly suggests that the appositive construction is a kind of coordination. Quirk et al. (1985:1301/2) state: "Apposition resembles coordination in that not only do coordinate constructions also involve the linking of units of the same rank, but the central coordinators and or may themselves occasionally be used as explicit markers of apposition." Notice that if appositions were simply right-hand adjuncts to a noun phrase, the existence of coordinative heads or phrases is completely unexpected. Thus the three main types of coordination are conjunction, disjunction and specification. This section elaborates on the concept of specifying coordination. It has been first introduced by Kraak & Klooster (1968:Ch11), as far as I know. (A discussion on the syntactic representation of coordination as such is postponed until Ch7§6.2.)

I have shown in (99/100) that specification is a notion that can be divided into several semantic kinds, e.g. equivalence as in (101c). This is similar for conjunction and disjunction. In general, conjunction combines two phrases; disjunction provides an alternative. In particular, conjunction can indicate a consequence, a result, a sequent, a contrast, a concession, a condition, a similarity, an addition, or a comment; as long as the two phrases have enough in common to justify the combination. A disjunction indicates an exclusive or inclusive alternative, or a negative condition. See Quirk (1985:930-934).

In terms of propositional logic, a conjunction of propositions is true only if both conjuncts are true, i.e. the semantics involves set intersection. A disjunction is true if one or more of the conjuncts are true. If individuals are coordinated the semantics is much more complicated, see Link (1984).

Koster (1995a, 2000c) represents specifying coordination as [P XP [: : YP]], where he introduces :P as the colon phrase, named after the colon punctuation mark which may be paraphrased as 'namely'. In his view, which differs considerably from the one presented here, specifying coordination can be restrictive or non-restrictive. The colon is a Boolean operator that indicates set intersection in the case of a restrictive conjunct and set union in the case of a non-restrictive conjunct (Koster 2000c:22). I think that this is not correct. First, specifying coordination becomes an incoherent notion if it constitutes both restrictive and non-restrictive relations. Second, restriction is semantically different from specification. Third, how can a Boolean operator be ambiguous? In particular, Koster's suggestion boils down to the claim that the colon is either \( \land \) or \( \lor \), which raises the question why a restrictive

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32 In fact, in natural language the operator OR has the meaning of the formal operator XOR (exclusive or). In other words: 'a or b' means 'a or b but not both'.

33 The term conjunct is somewhat confusing. It refers to one of the coordinated phrases, whether the coordination as a whole constitutes conjunction, disjunction or something else.
phrase is not simply coordinated with *and* and a non-restrictive phrase by *or*. In short, I reject the idea that specifying coordination can be restrictive.

Furthermore consider Koster's suggestion that appositive phrases require set union. This claim can be evaluated with the use of propositional logic. Then a specifying coordination corresponding to \([A : B]\) would be true if at least one of its members is true. But this is not correct. If the sentence corresponding to \(B\), the apposition, is true, but the one corresponding to \(A\) false, the whole construction does not represent a specification at all (*# all politicians are dead, namely Bush still lives*). Hence we reach the opposite result: if we have to make a forced choice — although it is clear that this is a gross oversimplification — specification is a special case of the Boolean operator \(\cap\), not \(\cup\). If the first conjunct is false, the whole construction cannot be true at all. If the first conjunct is true, the second must be true also (*# Bush still lives, namely all politicians are dead; # Some politicians still live, namely Bush is dead*). In fact, specification of \(A\) by \(B\) means that \(B\) is a logical subset of \(A\) (cf. Kraak & Klooster 1968). In the case of an equative, \(B\) is maximal, i.e. of equal size as \(A\). Therefore I will use the symbol \&: (instead of a colon) to represent specifying coordination. The \& indicates that it is a special instance of conjunction; the colon indicates the specifying part. The Dutch paraphrase *en wel ‘and namely’* directly reflects this concept. I will not further discuss the semantics of the construction.

Next, consider the phonological shape of coordinative heads. They can be overt, as in (101) above, or *asyndetic* (i.e. phonetically empty); see (102).

\[(102)\]
- a. Joop, Jaap (and Joep)
- b. Jaap, Joop (or Joep)
- c. the White House, the house with the Oval Office

It appears that the default interpretation of an asyndetic conjunct is specification. Asyndetic forms of disjunctive and conjunctive heads are also possible, but it seems that these must be licenced by the presence of a final overt coordinated phrase — a kind of backward deletion. However, this need not be so. First, as I indicated above, not every type of specifying coordination can be asyndetic. Second, asyndetic coordination of the conjunctive type can be complete. Often, this has a stylistic effect; it indicates intensification, emphasis or a never-ending list. Some examples are given in (103).

\[(103)\]
- a. We need an office, computers, money.
- b. Joop, Mien, everybody left.
- c. He is very, very ill.
- d. In a clear, loud voice she said: “yes”.

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It is also not clear how an ‘ambiguous colon’ relates to Koster’s suggestion that ARCs are attached at a higher level than RRCs as mentioned in section 4 above.
Hence under certain conditions all three types of coordination allow for (or even demand) an asyndetic connection. A further inquiry to the nature of these conditions lies outside the scope of this book.

The next section shows that appositive relatives can be analysed within the framework of specifying coordination, too. Chapter 7 shows that the same concept is relevant for the analysis of extraposition as well.

5.2. Appositive relatives are specifying conjuncts

Section 5.2.1 shows that appositive relatives behave as appositions and can be analysed as specifying conjuncts. In 5.2.2 some cross-linguistic consequences are discussed.

5.2.1. Appositive relatives behave as appositions

It has been claimed that an apposition is a reduced (relative) clause; see e.g. Delorme & Dougherty (1972) and Klein (1976, 1977). Since a clause can express more than a nominal phrase, this cannot be correct in a derivational sense – cf. Wiers (1978) or Lehmann (1984:272) – but I share the intuition that appositive relatives and appositions are similar in certain respects. Informally, I would rather state it the other way around: an appositive relative is nothing more than an extensive apposition. For instance, ‘Annie, our manager’ can be paraphrased as ‘Annie, who is our manager’. (The implication is unidirectional, then.) Since I have argued in the previous section that appositions are specifying conjuncts, the present hypothesis will be that an appositive relative is a specifying conjunct to its antecedent.

**Theorem I**

Appositive relatives and appositions involve (asyndetic) specifying coordination.

As discussed in section 4, the coordination approach to apposition implies constituency of the antecedent and the relative clause. This is confirmed by the fact that topicalization of the whole construction is possible, similar to constructions with an apposition or normal conjunction. See (104), where the finite verb, which is always at the second position in Dutch main clauses, is printed in italics. The usual surface position of the object is indicated by an underscore.

(104)  

| a. Joop en Joep heb ik _ gezien. | [conjunction] |
| Joop and Joep have I _ seen |
| b. Annie, onze directrice, heb ik _ gezien. | [apposition] |
| Annie, our manager, have I _ seen |
| c. Annie, die een dochter van drie heeft, heb ik _ gezien. | [ARC] |
| Annie, who a daughter of three has, have I _ seen |
By contrast, the two parts (e.g. the antecedent and the ARC) may not be separated by preposing one of the two, such that the remainder is stranded in the middlefield. This is shown in (105) and (106).  

(105) a. * Joop heb ik _ en Joep gezien.  
   b. * Annie heb ik _ , onze directrice, gezien.  
   c. * Annie heb ik _ , die een dochter van drie heeft, gezien.  

(106) a. * (En) Joop heb ik Joop (en) _ gezien.  
   b. * Onze directrice heb ik Annie _ gezien.  
   c. * Die een dochter van drie heeft, heb ik Annie _ gezien.  

These patterns are predicted by the Coordinate Structure Constraint, or whatever its deeper cause is.  

Despite the fact that the two parts cannot be separated by fronting one of the two, extrapolation of the second is possible (cf. section 3.1:M1):  

(107) a. Ik heb Joop _ gezien, en Joep.  
   b. Ik heb Annie _ gezien, onze directrice.  
   c. Ik heb Annie _ gezien, die een dochter van drie heeft.  

The general mechanism of extrapolation is discussed in Chapter 7. I will show that it does not involve (rightward) movement of the second part, which explains why the judgements concerning (106) and (107) can be so radically different.  

Furthermore, if appositions and ARCs are specifying conjuncts, it is expected that there may be a third (fourth, etc.) part whose status equals the second, just as there can be conjunction of more than two phrases (see also Ch7§6.2). This prediction of multiplicity (or stacking; cf. section 3.1:M2) is borne out; see (108).  

(108) a. Jaap en Joop en Joep, ...  
   b. voetbalvandalen, dat tuig, dat schorriemorrie, ...  
      football hooligans, that scum, that ragtag  
   b. ' Joop, onze held, onze redder in nood, ...  
      Joop, our hero, our saviour in distress  
   c. Annie, die gek is, van wie niemand de woonplaats kent, ...  
      Annie, who crazy is, of whom nobody the residence knows  
   c. ' deze stad, die iedereen kent, waar één miljoen mensen wonen, ...  
      this city, which everybody knows, where one million people live  

Finally, as for appositions, it is now clear why they get the same Case as the antecedent, since normal conjuncts always bear equal Case.  

(Concerning Case and appositive relatives, see section 5.5.)  

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35 Of course this is similar for restrictive relatives, which is to be discussed in Ch7, sections 5.2.4 and 5.2.7.
In short, if one subsumes non-restrictive relative clauses and appositions under coordination, several properties follow naturally. Moreover, a coordination analysis of apposition has some immediate advantages over a SCH-type approach, which crucially involves adjunction. I do not want to discuss it in detail here, but a brief list of relevant critique is the following:

- An adjunction analysis does not explain the Case of an apposition.
- An adjunction analysis has to stipulate that ARC-s and appositions must be right-adjointed, not left-adjointed.
- An adjunction analysis does not directly exclude leftward movement of an ARC or apposition.
- Theoretically, right-adjunction is ill-founded; in particular, it does not fit within an antisymmetric phrase structure.

Furthermore, notice that the repercussion of the multiplicity facts on the adjunction theory is that there is counterevidence to the assumption that there would be a maximum of one adjunct per projection, e.g. contra Smits (1988:114), and its equivalent in Jackendoff (1977).

5.2.2. Some cross-linguistic considerations

Before I proceed with the syntactic analysis of appositive relatives in detail, I want to elaborate on some direct consequences and potential problems for the approach.

Since a specification follows the element specified per definition, two (related) immediate predictions ensue:

**Theorem II**

a. Prenominal non-restrictive appositions do not exist.
b. Only postnominal relatives can be appositive.

I think these are true cross-linguistically. In English, (109) is a relevant example.

(109) a. Joe, who was ill last week
    b. * who was ill last week, Joe

The fact that restrictive relatives cannot precede their antecedents in English either, has nothing to do with (109). Complements are always to the right in English. Moreover, many OV languages have prenominal restrictive relatives. As mentioned in Chapter 2, Turkish has prenominal (participial) relatives, but it uses a postnominal

...continued

36 That is, apart from some instances of syntactically unbalanced coordination in the sense of Case differences (e.g. he and me), as reported in Johanssen (1998). See also Ch7§6.2.

37 Even in symmetric phrases like "the White House, or the house with the Oval Office", which can be turned around without much change of meaning, it is always the case that the second conjunct specifies the first one.
or extraposed (finite) variant especially for appositives. Similarly, in Basque and Lahu ARCs are postposed. Nevertheless, it has been reported that prenominal appositive relatives exist in some languages, for instance Japanese and Chinese, albeit marginally. Lehmann (1984:277/8) states that they are primarily restricted to proper names. There is no intonation break (Keenan 1985:169).

The near-restriction of ‘antecedents’ of prenominal ARCs to proper names suggests that the construction is deceptive. I will tentatively propose an analysis of these constructions that is subtly different, and which is in line with Theorem II. I suspect that what seems to be an appositive prenominal relative is really a (definite) free relative followed by a specifying apposition, comparable to e.g. she who is our manager, (viz.) Annie. This explains why the proper name cannot easily be replaced by definite nominal phrases or pronouns, since that would render a meaningless specification: for instance she who is our manager, (viz.) *she/this woman. The other way around, where the relative is appositive, is fine: Annie/she/this woman, who is our manager. Hence it is the information structure which regulates the possibilities. I conclude that prenominal ARCs do not exist; examples that seem to involve such a construction involve apposition to a free relative, which is in fact the opposite of the normal construction.

If I am correct that apposition is specifying coordination, it follows that circumnominal relatives cannot be appositive, either. Indeed, Lehmann (1984:278) states that they do not occur, except that there are some marginal examples in Mohave. In addition, Culy (1990:251-254,256) provides some rare examples from Dogon and Japanese. However, all these exceptions have a relative clause-initial head noun, which makes them suspect. Given the fact that many things are unclear about these constructions, primarily due to a lack of data, I consider it possible that they are misanalysed and display a secondary postnominal relative strategy after all.

Finally, recall that correlatives are maximalizing, hence per definition not appositive (cf. Ch2§3). This is in accordance with Theorem II.39

5.3. Appositive relatives as free relatives in apposition

I argue that appositive relatives are a kind of free relatives in apposition to the antecedent. Section 5.3.1. is an outline of the proposal; section 5.3.2. elaborates on the syntax of free relatives; and section 5.3.3. shows the details of the analysis of appositives as ‘false’ free relatives.

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38 According to Lehmann (1984:277) the following scale of potential antecedents is relevant:

proper names → definite or generic NPs → personal pronouns → sentences

Proper names are the most and sentences the least accessible to appositive relativization.

39 Lehmann’s (1984:279) examples of would-be correlative appositive free relatives are parenthetical sentences in my view. For instance, they can be interjected at any position in the sentence, but a true correlative is left-peripheral in the matrix. A Dutch example is (i):

(i) ... dat hij – wat benadrukt moet worden – daartoe niet verplicht was.

... that he – what must be emphasized – there-to not obliged was
5.3.1. **Outline**

The idea of treating appositive relatives like appositions can be easily pushed to the limit by assuming that appositives are a kind of free relatives in apposition to the antecedent, in other words, that ARCs are complex appositions.\(^{40}\)

**Theorem III**

Appositive relatives are a kind of free relatives in apposition to the antecedent.

I will show that this is correct.

Since free relatives are extended nominal projections with an embedded relative CP, the structure of a regular appositive is roughly the following:

\[(110) \quad \left[ [_{DP1} \textit{Annie}] \&: [_{DP2} \textit{CP who is our manager}] \right] \]

A free relative functions as an argument. This explains why it can be coordinated to a DP. If it were just a CP, this should not be possible. Hence Theorem III supports Theorem I above; a regular appositive relative structure thus involves syntactically balanced coordination (contra Koster 2000c; see also Ch7§6.1).\(^{41}\)

In some more detail, the structure of (110) is given in (111). I represent coordination as involving a layer behind the normal syntactic structure; this is discussed at length in Ch7§6.2 and it is of no concern here.

\[(111) \quad \left[ \&: [_{DP1} \textit{Annie}] \right. \left. \&: [_{DP2} \textit{CP who is our manager}] \right] \]

The second DP specifies the first one. Therefore we have \(j \subseteq i\). Within the second conjunct — a free relative — CP modifies an abstract pronominal head \(\alpha_k\).\(^{42}\) Sometimes the empty elements can be spelled out, e.g. \textit{Annie, die onze directrice is 'Annie, who is our manager'} can become \textit{Annie, ofjewel zij die onze directrice is 'Annie, or she who is our manager'}. Here \textit{ofjewel 'or'} fills the specifying coordinative connection \(\&:'\), and \textit{zij 'she'} the empty pronoun \(\alpha_k\). This pronoun refers to \(DP_1\), hence at a discourse level we have \(k = i\). I will return to this below.

The structure in (111) is independent of the internal structure of relative clauses. A version of the revised standard analysis (cf. Ch3§3.1.2) is compatible with (111). However, for my purposes it is relevant that (111) is compatible with the

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40 As mentioned before, this idea is shared by Canac-Marquis & Tremblay (1997). Furthermore, De Rijk (1972) suggests a similar analysis for some particular examples in Basque, where the copying of the Case morpheme onto the relative is particularly telling. This is taken over by Lehmann (1984:61/68), who extends it to comparable examples in Chinese; and by Bianchi (1999:140-144), who – citing work by B. Mitchell – extends it to examples in Old English.

41 Of course there are instances of syntactically unbalanced coordination (e.g. \textit{there and behind you}), but the possibilities are not unlimited: the conjuncts must be semantically equivalent; see further Ch7§6.1. In section 5.4 below I will show cases of syntactically unbalanced coordination in appositive relative constructions, viz. the ones with non-DP antecedents.

42 See also Groos & Van Riemsdijk (1981), Alexiadou et al. (2000:Introduction,§3.2), and others.
promotion theory of relative clauses. In that case, promotion is performed within the second conjunct. Thus \( \omega_2 \) corresponds to the raised antecedent in restrictive relatives. It is not the visible antecedent that is promoted (as Kayne and Bianchi propose), but the empty element, i.e. the implied antecedent, in the free relative.

### 5.3.2. Some notes on the syntax of free relatives

At this point some notes on the syntax of free relatives are necessary. In accordance with the promotion theory, I assume that the selection structure is (112).

\[
(112) \quad [\text{DP} \quad D \quad [\text{CP} \quad (C) \ldots \text{[DP-rel} \quad D_{rel} \quad \text{NP}] \ldots]]
\]

As discussed in Ch2§6.3, there is a crucial difference between true free relatives and false free relatives (also called semi-free relatives). An example in Dutch is (113).

\[
(113) \quad \begin{align*}
\text{a.} & \quad \text{Wie zoet is krijgt lekkers.} \quad [\text{true FR}] \\
& \quad \text{who sweet is gets sweets} \\
& \quad \text{‘Sweets for the sweet.’}
\text{b.} & \quad \text{Degene/hij die zoet is krijgt lekkers.} \quad [\text{false FR}] \\
& \quad \text{the one/he who sweet is gets sweets}
\end{align*}
\]

First consider the derivation of (113b). It is similar to that of restrictive relatives. As is familiar by now, the external determiner selects a relative CP, ultimately. Before that, the relative DP moves to SpecCP for wh-checking, and the NP, which corresponds to an antecedent in a restrictive relative construction, moves to SpecDP\_rel in order to check agreement with D\_rel, die in (113b). Finally, N moves to the external D so that agreement and abstract Case can be checked. See (114).

\[
(114) \quad [\text{DP} \quad [D \quad \text{N+D}] \quad [\text{CP} \quad [\text{DP-rel} \quad \text{NP} \quad t_n] \quad D_{rel} \quad t_{np}] \quad (C) \ldots \quad t_{dp-rel} \ldots]] \quad [\text{false FR}]
\]

The complex N+D corresponds to an independent personal or demonstrative pronoun, degene or hij in (113b), which is a kind of dummy antecedent. Importantly, the dummy antecedent N+D is separate from the relative pronoun D\_rel.

By contrast, there is no separation between a dummy antecedent and a relative pronoun in true free relatives. Therefore we may assume that the derivation leads to the representation in (115).

\[
(115) \quad [\text{DP} \quad [D \quad [\text{N+D\_rel}+D]] \quad [\text{CP} \quad [\text{DP-rel} \quad t_n+d\_rel \quad \text{[NP} \quad t_n]\quad (C) \ldots \quad t_{dp-rel} \ldots]] \quad [\text{true FR}]
\]

First, N incorporates into D\_rel, then the complex [N+D\_rel] incorporates into the external D, after wh-movement of DP\_rel to SpecCP. This gives the independent pronoun wie in (113a).

The difference between (114) and (115) straightforwardly explains the following facts:

- True free relatives potentially cause matching effects; false FRs do not. (Cf. section 5.5 and Ch2§6.3) In (114) the elements [N+D] and D\_rel can bear
separate Cases, whereas in (115) the complex \([N+D_{rel}]+D\) has a role in both the main clause and the subordinate clause.

- **Relative elements in false FRs correspond to those in restrictive relatives.** The configuration in which \(D_{rel}\) and \(C\) appear in (114) equals the one in restrictive relatives. For example, a restrictive corresponding to (113b) is *de man die zoet is* 'the man who sweet is'.

- **Relative pronouns in true FRs and false FRs may differ.** \([N+D_{rel}]+D\) simply differs from \(D_{rel}\) alone. This may cause a different spell-out, e.g. *wie* versus *die* in (113a/b).

After this short intermezzo we can return to appositive relatives.

5.3.3. **Appositive relatives are 'false' free relatives**

The schematic structure proposed for appositive relative constructions above is repeated in (116).

\[
(116) \quad [\&P\ [DP_1\ Annie]]_i \\
\&: \ [DP_2\ \sigma_k\ [CP\ who_k\ is\ our\ manager]]_i
\]

When compared to (114) and (115), it becomes clear that an appositive relative is not a true free relative. Rather, it is a false free relative of which the pronominal head is empty:

**Theorem IV**

Appositive relatives are false free relatives with an empty pronominal head.

Hence the detailed structural representation is like (117). I will discuss the derivation of \(DP_2\) directly below. Again, it is similar to the one in restrictive postnominal relatives.

\[
(117) \quad [\&P\ [DP_1\ Annie]]_i \\
\&: \ [DP_2\ \sigma_k\ [NP\ t_n\ D_{rel}\ t_{np}]\ [C\ who_k\ is\ our\ manager]]_i
\]

\(\text{(namely)} \quad \text{(she)}\)

'Annie, (namely she) who is our manager'

At the lowest level, NP moves to Spec\(DP_{rel}\) in order to check agreement with \(D_{rel}\). This explains why a relative pronoun is a bound pronoun in general,\(^{43}\) hence in (116) and (117) we have co-indexing of \(\sigma\) and \(who\). \(DP_{rel}\) moves to SpecCP and checks the \(wh\)-feature. The relative CP is selected by \(D_2\). Finally, N moves to the empty external D so that agreement and abstract Case can be checked. Whether this is overt or covert is irrelevant in this case. The complex \([N+D]\) corresponds to an (abstract) personal pronoun; this is \(\sigma_k\).

\(^{43}\) That is, except in true free relatives.
The specifying-coordination-plus-free-relative (‘CFR’) theory of appositive relativization as laid down in Theorem I, III and IV can be summarized as follows:

**The CFR theory of appositive relativization**

An appositive relative clause is a false free relative (with an empty pronominal head) which is a specifying conjunct, i.e. in apposition, to the visible antecedent.

The next subsection discusses how the properties of appositive relatives as opposed to restrictives follow from this. But first, I must address the following. Bianchi (1999:144-146) argues that there are problems with the conjunction/FR analysis of appositives. These are all due to the fact that there are differences between true free relatives and ARCs. What she refers to, however, is Koster’s theory in which the second conjunct is a bare CP. I will show that Bianchi’s critique is not valid any longer in the pertinent CFR theory.

Bianchi’s argument boils down to four points. First, she claims that, theoretically, there is no evidence for an external D in ARCs, whereas a real free relative is a DP. This is clearly incorrect, both theoretically and empirically. Theoretically, because i) the conditions on coordination force a DP and so a D; ii) ARCs can be compared to appositions, which are DPs; iii) a CP without an external D (or a correlate) cannot be interpreted as a relative clause since then there would be no sign of a pivot; and iv) an external D is necessary for Case checking. Empirically, because i) D can be made visible as a pronoun, e.g. in (117) above; and ii) D must be visible in e.g. French ARCs with a non-DP antecedent; see (118), taken from Canac-Marquis & Tremblay (1997:9). (The glosses are mine.)

(118)  
\begin{align*}
\text{(a) Marcelle est très fatiguée, ce que Marie n’est pas.} \\
\text{Marcelle is very tired, DEM which Marie NEG-is not}
\end{align*}

\begin{align*}
\text{(b) Marcelle est arrivée en retard, ce qu’elle ne fait jamais.} \\
\text{Marcelle has arrived \_ late, DEM which-she NEG does never}
\end{align*}

Notice that all these arguments are evidence for the CFR, and against coordination with a bare CP.

Second, Bianchi objects that in the conjunction approach a relative pronoun would be a ‘relative determiner’ (D\textsubscript{rel}) in a restrictive relative, but a pronoun in an appositive, whereas restrictive and appositive relatives usually use the same relative elements. Whereas this may be a problem for the bare CP analysis, the objection simply does not apply to the CFR approach where a relative pronoun is a (bound) relative determiner in both restrictives and appositives. As shown in (117), appositives have a pronoun in addition to D\textsubscript{rel}, viz. N+D\textsubscript{2}.

Third, Bianchi notes that free relatives and appositives can use different relative pronouns. As argued in the previous subsection, this actually follows from the CFR approach, where appositives are false free relatives. Hence a relative pronoun in an ARC (like in restrictives) is a bound pronoun, whereas in true free relatives D\textsubscript{rel} is combined with the abstract antecedent and becomes a ‘free’ pronoun comparable to an interrogative pronoun. This may explain the wie\textsubscript{FR}/die\textsubscript{ARC} contrast in Dutch discussed above. Another example – brought up by Bianchi – of the difference between relative elements in free relatives and appositives (which are
false free relatives in the pertinent account, hence with a different configuration in the COMP domain) is the French/Italian opposition between *qui*_{FR} and *que*_{ARC} in object relatives. *Que* is arguably a relative complementizer c-commanded by a relative operator (i.e. a phonetically empty D_{rel}), whereas D_{rel} must surface as *qui* if it is combined with N and D into a free pronoun, which in turn leads to ‘deletion’ of the complementizer.\footnote{There are several theories on the surface forms of relative pronouns and complementizers, combinations of them, and the status of the ‘Doubly Filled COMP Filter’. See e.g. Dekkers (1999), Rooryck (1997) and the references there.}

Finally, there are differences in pied piping between appositives and free relatives; pied piping in FRs is restricted by matching effects. This, too, follows from the structural differences implied by the CFR. For an explanation I refer the reader to the previous subsection and section 5.5 on matching effects, and to sections 2.2:R2 and 5.4 on pied piping.

I conclude that appositive relativization is specification of an antecedent with a false free relative. Bianchi’s objections to Koster’s conjunction approach do not apply to this CFR theory.

5.4. The behaviour of appositives explained

With the CFR analysis in mind, consider briefly the properties of appositive relatives again, as discussed in sections 2 and 3 above.

*Behaviour related to coordination:*

- The independency of the role of the pivot constituent (both semantic and syntactic) in the ARC with respect to its role in the matrix clause (cf. §2:intro), is guaranteed automatically, because the antecedent and the relative pronoun are in separate conjuncts.
- Since ARCs are complex appositions, hence specifying conjuncts, they are not essential for the grammatical status of the matrix: they are additional information. Therefore they can be deleted without the loss of acceptability, like many adverbal phrases.
- The theory of extraposition (cf. Ch7) allows – at least – for extraposition of any phrase that is not an argument of the matrix predicate. Since ARCs are specifying conjuncts, i.e. only an apposition to an argument (or something else), it follows that extraposition is possible in principle, which is correct (cf. §3.1:M1).
- The theory of coordination must allow for more than two conjuncts (cf. Ch7§6.2), i.e. multiplicity. Since ARCs are specifying conjuncts, it follows that stacking is in principle allowed (cf. §3.1:M2).
- Appositive relatives follow restrictive relatives and other complements of the antecedent (cf. §2.3:E1). This follows automatically from the present approach, where these complements are embedded within the maximal projection of the antecedent DP in the first conjunct. Therefore they precede specifying material such as an ARC, which resides in a second conjunct.
Finally, consider the following fact from Swedish: if the usual definite suffix on the noun is absent, a ‘free determiner’ is allowed in restrictive, but not appositive relative constructions (cf. §2.1:A5). That is, we have det hus som... (RRC) ‘the house that’ versus * det hus, som... (ARC) ‘the house, that’, whereas det huset som (RRC/ARC) ‘the house-the(, ) that’ is always acceptable. I do not wish to go into the syntax of double definiteness (but see e.g. Delsing (1993) and Platzack (2000)), and I will simply assume that, given the promotion theory of relativization, the interplay of the external determiner, the head noun, the relative determiner and the relative complementizer in a restrictive relative, provides the means to derive det hus(et) som.... What is relevant here is that * det hus, som... in an appositive is impossible. This follows from the CFR approach – in which the overt antecedent as a whole, which is a DP, resides in the first conjunct – simply because *det hus is ungrammatical. A free determiner can only be added to a definite DP, hence det huset is the desired form.

**Behaviour related to the implied antecedent:**

- In both restrictive and appositive relative constructions a relative pronoun (whether overt or not) is a kind of bound pronoun (cf. §2:intro). However, in an ARC the link to the overt antecedent is indirect: the relative pronoun is syntactically bound by the implied antecedent of the free relative, φx in (117). In turn, φx refers to the overt antecedent, which is the first conjunct. Since the antecedent does not c-command the second conjunct, this cannot be established syntactically. As argued by Sells (1985) – see also Demirdache (1991) and others – the relation between the antecedent and the referring element in the relative clause (φx in my terms, the relative pronoun in theirs) is ‘cospesification’, i.e. discourse linking. Even though this may explain why the referring element does not have a free/indeterminate antecedent, it does not automatically exclude the possibility of reference to another phrase in the matrix. I think it is the concept of specifying coordination that helps to force the right interpretation. If in the configuration (119), φx would refer to some unrelated entity DP, it cannot be the case that j ⊆ i. Therefore DP cannot be interpreted as a specification of DP, which leads to a semantic anomaly.

\[
(119) \quad \ldots \text{DP}\ldots \left[\& [\text{DP}_1], \sum: [\text{DP}_2: \phi_x [\text{CP} [D_{rel}] \ldots]]\right]
\]

Thus this reasoning ad absurdum shows that an ARC as a specifying conjunct makes sense only if the empty element is cospesified with the visible antecedent. Therefore it is unnecessary to stipulate a constraint like ‘the referring element in an ARC must be cospesified with the nearest preceding phrase’.

- Now consider the fact that ARCs can have an antecedent of any category (e.g. CP, AP, PP), contrary to restrictives (cf. §2.1:A4). The latter is not difficult to explain in the promotion theory, given that i) the visible antecedent must be selected by Drel within the restrictive relative clause; ii) the relative CP must be selected by the head of the category that represents the whole construction. This is only possible with nominal projections. For instance, if an AP would take a restrictive relative, the head of some unknown extended projection YP of AP must select a relative CP, within
which D_{rel} takes AP as a complement, which is then raised and formally linked to Y. This is not a plausible scenario; therefore let us turn to the appositive relative construction. The relevant structure is (120), where XP is a non-DP antecedent, and the second conjunct a false free relative (hence a DP) in which D_{rel} is the relative pronoun, and N+D the empty pronoun \( \alpha_k \) that represents the implied antecedent of a free relative.

(120) \[
\begin{align*}
\text{[\& p [XP]} \quad &
\&: \ [\text{DP [D N+D]} [\text{CP [DP-rel [NP \( \alpha_k \)] D_{rel} t_{np}]} (C) \ldots t_{\text{dp-rel} \ldots}]]
\end{align*}
\]

Since XP \( \neq \) DP, the coordination is syntactically unbalanced. I argue that this is permitted if \( \alpha_k \), the head of the second conjunct, refers to XP, so that the two conjuncts are functionally equivalent. This is possible in principle because a pronoun may refer to concepts, places, times, events, facts, things, etc. This implies that it can refer to any syntactic category. See for instance (121). I have included some more familiar examples of syntactically unbalanced coordination.

(121) \[
\begin{align*}
\text{DP: the man } & \rightarrow \text{ he and Mary} \\
\text{PP: behind you } & \rightarrow \text{ there and behind you} \\
\text{CP/VP: she is dull } & \rightarrow \text{ it, that (I don’t believe) that, but rather that she is ill.} \\
\text{AP: corrupt } & \rightarrow \text{ that (Is she corrupt?) That, and stingy (too).}
\end{align*}
\]

Relatives appositive to non-DP antecedents are less common than those with DP antecedents (cf. Lehmann 1984:277). This is in line with the analysis in (120), since syntactically unbalanced coordination is more marked than balanced coordination in general.

– Contrary to restrictives, but like free relatives, appositives can (marginally) contain an epithet NP that functions as an internal head (cf. §2.2:R3). This is repeated in (122).

(122) \[
\begin{align*}
a. & \quad \text{Deze roman welk boek Reve geschreven heeft, is herdrukt.} \quad \text{[RRC]} \\
b. & \quad “\text{De avonden”, welk boek van Reve veel gelezen wordt, is herdrukt.} \quad \text{[ARC]} \\
c. & \quad \text{Welke onverlaat zoiet s doet, verdient straf.} \quad \text{[FR]}
\end{align*}
\]

Clearly, there is no available position for the additional nominal phrase book in the promotion theory of restrictive relatives, since the NP complement position of D_{rel} is occupied by the antecedent that is to be raised.\(^{45}\) This explains why (122a) is impossible. By contrast, the epithet may take the position of the implied antecedent in a free relative. Similarly, in an appositive relative, the complement position of D_{rel} may be taken by an epithet, i.e. book in (122b). The antecedent De avonden is in the

\(^{45}\) Notice, however, that there is one in the (revised) standard analysis. Thus this is another advantage of the raising approach.
first conjunct; the second conjunct acts as an internally headed free relative. This is shown in (123).

(123) \[\varphi \left[\begin{array}{l}
\text{DP}_1 \text{De avonden} \\
\varphi \left[\begin{array}{c}
\text{CP} \text{welk} \left[\begin{array}{l}
\text{NP} \text{boek}
\end{array}\right]
\end{array}\right] \text{C} \left[\begin{array}{c}
\text{D}_{\text{rel}} \text{t} \text{rel}
\end{array}\right] \text{t}_{\text{comp}}
\end{array}\right]\]

In Dutch only the relative pronoun welk(e), which is morphologically a wh-word, can act as a dependent relative pronoun. Here it is the epithet NP that refers to the antecedent, instead of some pronominal element \(\phi_k\). At least in the Romance and Germanic languages (and perhaps in any language) appositive relatives must be introduced by a relative element, whereas in some languages this is not obligatory for restrictive relatives (cf. §2.2:R1 and §3.1:M4). Probably this difference follows from the different configuration in the COMP area. Compare (124a/b), where both \(D_{\text{rel}}\) and \(C\) are empty:

(124) a. \[\varphi \left[\begin{array}{l}
\text{DP} \text{D} \left[\begin{array}{l}
\text{CP} \text{NP} \text{D}_{\text{rel}} \text{t} \text{rel} \text{t}_{\text{np}}
\end{array}\right] \text{C} \left[\begin{array}{c}
\text{D}_{\text{rel}} \text{t} \text{rel} \text{t}_{\text{np}}
\end{array}\right] \text{t}_{\text{comp}}
\end{array}\right] \text{t}_{\text{comp}}
\]

   'I like the man I saw yesterday'

b. \[\varphi \left[\begin{array}{l}
\text{DP}_1 \text{Joop} \\
\varphi \left[\begin{array}{c}
\text{DP}_2 \left[\begin{array}{l}
\text{D}_{\text{rel}} \text{N+D}_2 \text{t} \text{rel} \text{t}_{\text{np}}
\end{array}\right] \text{C} \left[\begin{array}{c}
\text{D}_{\text{rel}} \text{t} \text{rel} \text{t}_{\text{np}}
\end{array}\right] \text{t}_{\text{comp}}
\end{array}\right] \text{t}_{\text{comp}}
\]

   * 'I like Joop, I saw yesterday'

In the restrictive there is at least one lexical element in the COMP domain: the antecedent noun, i.e. man in (124a). In an appositive there would be three empty elements in the COMP area in a zero relative. Apparently, this is not possible. One may state the demand that the CP layer cannot exist if it is completely lexically empty. Another possible approach to this matter is the assumption that \(\phi_k\) must be syntactically licenced by a lexical element, e.g. an overt \(D_{\text{rel}}\). I will not expand on this, and simply assume that it can be formalized.47

**Behaviour related to scope:**
- A specifier or determiner of the antecedent does not take scope over an ARC, contrary to the situation in restrictives (cf. §2.4:S1). In a restrictive relative construction the relative CP is the complement of \(D\), hence material embedded in CP is in the scope of \(D\). In an appositive relative construction the ARC specifies the whole antecedent — including a specifier or determiner — which is embedded within the first conjunct. The overt antecedent does not c-command the ARC, hence cannot take scope over it.

---

46 At present the data fail me on the basis of which it can be determined if there is a formal (covert) link between \(N\) (and/or \(D_{\text{rel}}\)) and \(D_2\).

47 Notice that it is again the promotion analysis of relativization (in combination with the CFR theory) that predicts the difference between restrictives and appositives. In the (revised) standard analysis, the antecedent is not included in the relative CP, hence the COMP domain is completely empty in restrictives, too.
For the same reason, appositives do not allow for split collocations, or binding into the relative clause, contrary to restrictives (cf. §2.4:S3/4). There is no c-command relation between the two conjuncts.

An appositive is opaque for syntactic licencing relations (cf. §2.4:S2). Consider variable binding as an example, e.g. (125):

(125) *Everyone, spoke about the Millennium Dome, which he, had visited.

Here the binder is not the antecedent of the ARC but an element higher in the matrix. Hence it does c-command the relative construction. The reason why the example is unacceptable is that it violates in a sense the Across-The-Board constraint on coordination (i.e. the CSC). If there is variable binding into one conjunct, there should be a parallel relation with the other conjunct. Obviously, this is not the case here: everyone does not bind a variable in the first conjunct, the Millennium Dome. However, it has been pointed out to me that examples of variable binding into a regular conjunction are possible. An example could be (126):

(126) [Elke vader], beweerde dat Cruijffs zoon en zijn, eigen zoon samen every dad claimed that Cruijff's son and his own son together op voetbal hadden gezeten.
on soccer had been

I don't think this counters my argumentation, since there are examples of variable binding into an ARC as well, as noted before; see for instance (127):

(127) [Elke vader], geeft zin een bouwpakket, dat hij, vervolgens zelf every dad gives his son a do-it-yourself.kit, which he subsequently SELF in elkaar zet.

According to Sells (1985) these examples do not involve syntactic binding but cospecification. This is subject to specific conditions, viz. the discourse must be continuative (cf. section 2.4:S2). In (126) the coordinated DPs are in the same predicate, hence the conditions on cospecification are automatically fulfilled. It seems to me that syntactic variable binding is preferred to cospecification, since examples like (126) and (127) are more marked than those in which there is a regular c-command relation, e.g. [Every dad], tells his, son that he, played soccer well in his, youth.

In short, I conclude that the behaviour of appositive relatives (partly as opposed to restrictives) can be explained well within the CFR approach.

5.5. Matching effects

Finally, I want to present some curious facts concerning appositive relatives, namely the existence of matching effects in appositives with a pronominal head (in Dutch). In general, I think these facts support the analysis of appositive relative
constructions as involving a free relative, although a formal analysis has not been developed as yet.

First, notice that although a relative pronoun is a third person pronoun, it can refer to a first or second person antecedent (cf. §2.2:R4). Some examples in Dutch are provided in (128) and (129).

(128) a. Dat ik, die jouw leerling ben, jou terecht moet wijzen…
that I, who your pupil am, you right must set...
b. Wij, die dappere soldaten zijn, bombarderen alles plat.
we, who brave soldiers are, bomb everything flat
c. Jij, die zo goed rennen kan, moet snel vertrekken.
you_sp, who so good run can, must quickly leave
d. Jullie, die zo goed in rekenen zijn, gaan door naar de finale.
you_pl, who so good at calculus are, go on to the final

(129) a. TAFKAP keek naar mij, die hij nooit eerder opgemerkt had!
TAFKAP looked at me, who he never before noticed had
b. Ze namen ons, die ze beschoten hebben, gevangen.
they took us, who they shoot-at have, imprisoned
c. De koningin gaf jou, die zij niet persoonlijk kende, een lintje.
the queen gave you_sp, who she not personally knew, a ribbon
d. De directeur feliciteerde jullie, die hij niet persoonlijk kende.
the manager congratulated you_pl, who he not personally knew

If an ARC has a pronominal antecedent, the empty pronoun in the free relative structure in the second conjunct looses its independent status and takes over all features of the antecedent pronoun. Therefore the free relative cannot be viewed as a false free relative anymore. Hence, as with true free relatives, we might expect Case matching effects to appear. That is, if the Case requirement in the subordinate contradicts the one in the matrix clause, the sentence becomes degraded. This prediction is correct; see (130) and (131), where there are contradictory nominative and objective requirements on the pronoun. Notice that the general pattern is

Similarly, a pronoun can take a non-restrictive apposition, e.g. *I, the president of the United States.* It seems to me that all this demands an external perspective: the speaker looks at the situation from the outside. Probably this explains the possibility of a first or second person antecedent, which can be paraphrased as ‘the person who I am/you are’.

I came across some examples in German which are at odds with these findings in Dutch. The sentences are from Günter Grass, *Die Blechtrommel* (1959), taken from Deutscher Taschenbuch Verlag, 8. Auflage, 1999, pages 28, 28, 750, and 768, respectively.

(i) [...] und [er] erlaubte ihr, die ihm standesamtlich angetraut war, [...] vier Röcke und [er] erlaubte ihm standesamtlich angetraut war, four skirts on.top.of.each.other.to.wear

(ii) Man mag mir, der ich darauf brenne, den Beginn eigener Existenz anzeigen zu dürfen, one may me_sp, who-I am, on.keen.am, the beginning of own existence indicate to can, erlauben, die Wrankas […] unbeobachtet zu lassen […] allow, the Wrankas unnoticed to let

*to be continued...*
clearly unacceptable, although there are small differences in the judgements concerning individual sentences.

(130) a. * TAFKAP keek naar mij, die zijn grootste bewonderaar ben!
TAFKAP looked at me\textsubscript{obj}, who\textsubscript{nom} his biggest fan am
b. * Ze namen ons, die toch dappere soldaten zijn, gevangen.
they took us\textsubscript{obj}, who\textsubscript{nom} yet brave soldiers are, prisoned
c. * De koningin gaf jou, die zoveel gedaan hebt voor de maatschappij,
the queen gave you\textsubscript{pl, obj}, who\textsubscript{nom} so much done have for the society,
een lintje.
a ribbon

(131) a. * Ik, die hij berispt had, ben pas 14 jaar oud.
I, (namelijk) the one who he had rebuked, am only 14 years old
b. * Wij, die hij berispt had, zijn pas 14 jaar oud.
we\textsubscript{nom}, whom\textsubscript{obj} he rebuked had, are only 14 years old
c. * Jij, die hij berispt had, bent pas 14 jaar oud.
you\textsubscript{pl, nom}, whom\textsubscript{obj} he rebuked had, are only 14 years old

If we substitute a false free relative for the free relative, the sentence becomes grammatical, e.g. for (131a): Ik, (namelijk) degene die hij berispt had, ben 14 jaar oud ‘I, (namely) the one who he had rebuked, am only 14 years old.’ Furthermore, matching effects are known to vanish if the pronoun concerned shows no morphological difference between the different Cases; see e.g. Groos & Van Riemsdijk (1981). Hence this effect should appear with Dutch jullie ‘you\textsubscript{pl},’ which can be nominative or objective. This is shown in (132).

(132) a. Ik geef jullie, die zo goed in voordragen zijn, het woord.
I give you\textsubscript{pl, (obj)}, who\textsubscript{nom} so good at reciting are, the word
b. Jullie, die ik nog niet ken, krijgen eerst het woord.
you\textsubscript{pl, (nom)}, whom\textsubscript{(obj)} I yet not know, get first the word

As expected, both variants are grammatical.

The patterns above must be reproducible with third person pronominal antecedents that are used deictically. This is indeed the case, although I find the judgements less clear in some cases; perhaps because of possible confusion with

... continued

(iii) Zwar ist mir, der ich von Beruf Dekorateur bin, das Anfertigen einer
indeed is me\textsubscript{gen}, who\textsubscript{nom} of profession window-dresser am, the manufacturing of a
Gipsform nichts Neues [...] a plaster mould nothing new

(iv) [...] der Text [...] setzte sich in mir, der ich mich in den Polstern erster Klasse verlor,
the text settled SE in me\textsubscript{gen}, who\textsubscript{nom} SE\textsubscript{1,pers} in the cushions of first class was swallowed,
fest [...] fixed

A more systematic inquiry is necessary to clear up this matter. Possibly, the peculiar German construction ich, der ich ‘I, the\textsubscript{nom} I’ is different in a relevant way from ik, die ‘I, who’.
restrictive relatives. See (133), which is unproblematic, and (134), where there are matching problems:

(133) a. Hij, die altijd al ongedurig was, zal spoedig vertrekken.
   he, who all.along restles has.been, will soon depart
b. Zij, die altijd al ongedurig waren, zullen spoedig vertrekken.
   they, who all.along restless have.been, will soon depart
c. Ik geef hem, die ik nog niet ken, eerst het woord.
   I give him, who I yet not know, first the word
d. Ik geef hun, die ik nog niet ken, eerst het woord.
   I give them, who I yet not know, first the word

(134) a. * Ik gaf het woord aan hem, die jou nog geholpen heeft.
   I gave the word to himobj, who(nom) you yet helped has
b. * Ik gaf het woord aan hen, die jou nog geholpen hebben.
   I gave the word to themacc, who(nom) you yet helped have
c. * Hij, die jij nog geholpen hebt, is pas 14 jaar.
   heacc, who(obj) you yet helped have, is only 14 years
d. * Zij, die jij nog geholpen hebt, zijn zojuist aangekomen
   they(nompl), who(obj) you yet helped have, have just arrived

Finally, consider restrictive relatives with a pronominal antecedent, i.e. false free relatives. As stated before, they do not display matching effects. A clear example is (135) in German.

(135) a. Der den ich kenne, steht dort.
   he who acc I know stands there
b. Ich kenne den der dort steht.
   I know himacc whoacc there stands

Here the antecedent der looks like an article. One can also use derjenige ‘the one’ and other determiners and pronominal elements. For some reason normal personal pronouns (er ‘he’) are not used in this construction. In Dutch the most usual pronominal antecedent is degene ‘the one’, but it is Case neutral, hence useless for our purposes. Fortunately, personal pronouns can also serve as an antecedent, as shown in (136).

(136) a. Hij die goed doet, zal goed ontvangen.
   he who good does, will good receive
b. Ik zag hem die jij beschreven hebt.
   I saw him who you described have

As in (135) the antecedent and the relative pronoun may bear different Cases. The judgements are a little less clear than in German; I suspect that this is because the Case on the relative pronoun is not morphologically overt. See (137).
Thus restrictive and appositive relatives with a pronominal antecedent behave quite differently in Dutch. This can be explained if the antecedent is in different positions in these constructions. In the CFR approach the antecedent of an appositive is in a first conjunct. The empty pronoun of the free relative in the second conjunct is then semantically vacuous, which turns the false free relative into a normal FR. This may cause matching effects. I will not try to formalize these ideas before comparable data from other languages becomes available.

6. Conclusion

Appositive relatives differ from restrictives in several ways. I have reviewed differences with respect to possible antecedents, scope, relative elements, et cetera. Along the way, some misconceptions were cleared up. For instance, I have shown that appositives can be extraposed and stacked. There is a large number of competing analyses of appositive relativization in the literature. These have been ordered and evaluated. I have argued that apposition in general is specifying coordination to an antecedent. This allows us to generalize over appositions and appositive relatives. Appositive relatives are extended appositions. To be precise: they are false free relatives (with an empty head) that are in apposition to the antecedent. (Clearly, an appositive is different from a true free relative; neither can it be a bare CP.) I have called this approach CFR, the coordination-plus-free-relative theory. It implies constituency of the antecedent plus the appositive relative. The antecedent is in the first conjunct, the free relative in the second. Within the false free relative, there is promotion of the empty head – which, by the way, can be made overt in some cases. (It is this element that refers to the overt antecedent – the relative pronoun does so only indirectly.) Thus the syntax of relativization is maximally general: it now covers all syntactic and semantic main types of relatives. The specific configuration in which an appositive relative occurs has been shown to explain why its behaviour deviates from restrictives in several respects. Finally, I have presented some new data concerning matching effects in appositive relatives.