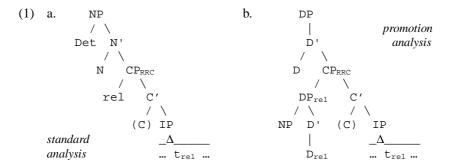
Appositive Relative Clauses

Mark de Vries

1. Introduction

The difference between restrictive and appositive relativization is usually represented in syntax as complementation versus adjunction with respect to the antecedent noun. Instead I propose that an appositive relative clause (ARC) is coordinated with its antecedent. This approach avoids problems that come with the adjunction analysis, and it predicts some interesting facts.

First consider the structure of restrictive relatives. The two major analyses that can be found in the literature are depicted in (1).



Crucially, both analyses involve complementation. In the standard analysis (e.g. Jackendoff 1977, Chomsky 1977), which can of course be reformulated under a DP-analysis, the restrictive relative is a sister of the antecedent noun. In the promotion or raising analysis (cf. Kayne 1994, Åfarli 1994, Bianchi 1995, De Vries 1996; all based on earlier ideas by Vergnaud 1974/1985) the relative is a complement of the matrix determiner; the antecedent noun is raised from within the relative.

Clearly, these representations cannot be used for appositives, since D (Det) takes scope over the relative, which is not correct for ARCs. In other words, there must not be a node containing N+ARC (or ARC containing N) that excludes the matrix determiner/specifier (cf. Smits 1988:112-113). This is illustrated in (2), where the meaning of the second root clause is paraphrased in b. (Throughout the article I will use the typographic convention that appositives are preceded by a comma, contrary to restrictives. Examples are from Dutch.)

- (2) a. Jij hebt twee violen, die trouwens al heel oud zijn, en ik heb er één. you have two violins, which besides already very old are, and I have R one
 - b. i) = \dots & I've got one violin.
 - ii) $\neq \dots$ & I've got one violin, which is already very old, by the way.

Given that the second implication is wrong, the elided constituent following the quantifier cannot contain N and ARC. That is, an ARC must be attached at a higher level.

Similarly, in (3), there is only one boy in the domain of discourse, viz. Annie's fat son. There is no 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 is restrictive.

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

Hence the analyses in (1) are inapt for appositives.

Appositives certainly do not involve complementation. But I don't believe they are generated separate from the antecedent, either. This option is known as the *orphanage* analysis.

Radical orphanage, e.g. Fabb (1990), means that an ARC is not part of syntactic structure at all; it would be a parenthetical expression. This hypothesis explains not a single relation between antecedent and ARC at all. But think of adjacency requirements, selection effects, ϕ -feature matching between antecedent and relative pronoun, conditions on extraposition, etc. See also Perzanowski (1980) and Borsley (1992) for comment.

Non-radical orphanage, c.f. Emonds (1979), among others, generates an ARC apart from its antecedent in syntax. However, this analysis can be excluded simply on the basis of the verb second property of Dutch (cf. Smits 1988:114); see (4).

(4) Annie, die viool speelt, heeft een nieuwe strijkstok gekocht. Annie, who violin plays, has a new bow bought In other words: NP+ARC must form a constituent together, since both antecedent and ARC precede the finite verb *heeft* 'has' in (4). This is confirmed by the fact that NP+ARC can be replaced by a pronoun. This would not be possible if a parenthetical like *zo vertelde Mieke* 'so Mieke told' is used instead of the ARC. (Moreover, unlike ARCs, parentheticals can be inserted at any sentence position.)

I conclude that an appositive must be connected to its antecedent, but not by means of complementation. In this article I will explore the possibility that they are structurally coordinated, as an alternative to the standard adjunction analysis (e.g. Smits 1988), and other approaches (e.g. Platzack 1997, Lipták 1998).

2. Appositives, appositions and coordination

Phrases connected to an antecedent or 'first part' can be devided into three main groups: restrictive phrases (restrictive relatives, comparatives, N-complement PPs, etc.), appositive phrases (appositive relatives and appositions) and conjuncts. Appositives cannot involve complementation to the antecedent, as explained, so they must be treated as different from restrictives, even though there are obvious similarities. Restrictives are not discussed any further, here. In this section I will make a generalisation over the latter two groups: appositives and conjuncts.

Consider the different types of coordination one may distinguish. First, there is normal coordination: 'John and Pete and Mary'. Second, coordination may be asyndetic: 'John, Pete, Mary' (although the use of this is subject to constraints). Third, one recognizes *specifying* coordination: 'the White House, or the house with the Oval Office'. Cross-linguistically, there are many coordinative (complex) heads with a meaning like 'namely', 'in other words'; e.g. Dutch *ofwel*, *oftewel*, or *en wel*.

From these three types of coordination we predict a fourth one to exist: asyndetic specifying coordination (see also Rijkhoek 1998). The syntactic construction that exactly fits this pattern is apposition; e.g. 'Annie, our manager'. An apposition specifies the antecedent noun, but there is no overt coordinative head.

The idea that an apposition is syntactically coordinated to the antecedent is shared by Sturm (1986:VII§7.5). Of course in this short paper I cannot dwell upon the nature of coordination. I refer to the 'behindness' or '3-dimensional' approach in work by e.g. G. de Vries (1992) and Van Riemsdijk (1998), and the references there. For more discussion on appositions see e.g. Delorme & Dougherty (1972), Klein (1976/1977), Wiers (1978), Bennis (1978).

It seems to me that an appositive relative is nothing more than an extensive apposition. 'Annie, our manager' can be paraphrased as 'Annie, who is our

manager'. (Of course a sentence can express more than a noun, so the implication is unidirectional.) Thus my hypothesis is (5), to be elaborated below.

(5) *Hypothesis:* Appositive relatives and appositions involve (asyndetic) specifying coordination.

If so, two immediate predictions follow:

- (6) a. Prenominal appositive appositions do not exist.
 - b. Prenominal relatives are not appositive (hence restrictive, or of a 'third kind'; see Carlson 1977, Grosu & Landman 1998).

These seem to be true crosslinguistically. In English, (7) is a relevant example.

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

Notice that an adjunction analysis does not immediately predict that appositive phrases must be right-adjoined, e.g. (7a), not left-adjoined, e.g. (7b), whereas this follows straightforwardly from the semantics of specifying coordination. (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.) The fact that restrictive relatives cannot precede their antecedents in English either, has nothing to do with (7). Complements are always to the right in English. Moreover, many OV languages have prenominal restrictive relatives.

If appositive phrases are, by hypothesis, like coordination, one expects them to share properties. This is indeed the case, as shown below. (Of course, this reasoning cannot be turned around. For instance, restrictive relatives – which are obviously not coordinated with their antecedents – display similar behaviour in several respects; but, again, that follows from complementation-related properties that cannot be used as an explanation for appositives. For reasons of space I cannot go into the details of the syntax of restrictive relatives.)

Appositive relatives, appositive appositions and conjuncts form a constituent with the antecedent or first part, which can be shown by topicalisation in Dutch; see (8).

- (8) a. Jan en Piet heb ik _ gezien. Jan and Piet have I _ seen
 - b. Annie, onze directrice, heb ik _ gezien. Annie, our manager, have I _ seen

Annie, die een dochter van drie heeft, heb ik _ gezien.
 Annie, who a daughter of three has, have I _ seen

The two parts may not be separated by preposing one of the two, thereby stranding the remainder in the middlefield. This is shown in (9) and (10).

- (9) a. * Jan heb ik _ en Piet gezien.
 - b. * Annie heb ik _ , onze directrice, gezien.
 - c. * Annie heb ik _ , die een dochter van drie heeft, gezien.
- (10) a. * En Piet heb ik Jan _ gezien.
 - b. * Onze directrice heb ik Annie _ gezien.
 - c. * Die een dochter van drie heeft, heb ik Annie _ gezien.

Notice that the adjunction analysis does not immediately exclude leftward movement of the adjunct as in (10b/c) – whereas this follows straightforwardly from the Coordinate Structure Constraint.

Quite different from (9) and (10), the general mechanism of extraposition (cf. De Vries 1999) provides the possibility of positioning the second part on the right edge; see (11).

- (11) a. Ik heb Jan _ gezien, en Piet.
 - b. Ik heb Annie _ gezien, onze directrice.
 - c. Ik heb Annie _ gezien, die een dochter van drie heeft.

The idea that appositives would not be able to extrapose (e.g. Smits 1988:187) is clearly incorrect. Another example is *Gisteren heb ik mijn zuster bezocht, die blond haar heeft, zoals je weet* 'I visited my sister, yesterday, who has blond hair, as you know'.

Another shared property is *multiplicity*: there may be a third, fourth, ...part whose status equals the second, cf. (12).

- (12) a. Jan en Piet en Klaas, ...
 - Voetbalvandalen, dat tuig, dat schorriemorrie, ...
 football hooligans, that scum, that ragtag
 Joop, onze held, onze redder in nood, ...
 Joop, our hero, our saviour in distress
 - Annie, die gek is, van wie niemand de woonplaats kent,...
 Annie, who crazy is, of whom nobody the residence knows

Most authors assume that appositives cannot be stacked (e.g. Smits 1988:174). This is plainly false, as shown in (12c) and (13), although examples are relatively rare. See also Lehmann (1984), one of the most important data-oriented works.

- (13) 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
 - b. Ik woon in Amsterdam, dat 750000 inwoners heeft, waar bovendien
 vele toeristen komen.
 I live in Amsterdam, that 750000 habitants has, where moreover
 many tourists come

Multiplicity naturally follows from a coordination approach. (If, however, my claim is wrong, this is counterevidence to the idea that there is a maximum of one adjunct per projection, e.g. contra Smits 1988:114.)

Finally, as for appositions, if they involve specifying coordination, it is clear why they get the same Case as the antecedent, since normal conjuncts always bear equal case (apart from some instances of syntactically unbalanced coordination as reported in Johannessen (1998)). Note that within an adjunction analysis this is less clear.

In short: if one subsumes appositive appositions and relatives under coordination, many properties of appositions can be attributed to the latter. Moreover, a coordination analysis of appositive appositions has clear advantages over an adjunction approach.

3. Structure and properties of appositive relatives

Given (5), what is the syntactic structure of an ARC? A CP cannot be coordinated with a noun phrase just like that. It seems plausible that two conjuncts are of equal category (unless they are semantically equivalent). Is it possible that the relative is a DP, not CP? Certainly; this is the case if it has the structure of a free relative. In short: *appositive relativisation means specifying an antecedent with a free relative*. This is sketched in (14), where &: denotes specifying coordination.

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(14) [_{DP1} \text{ Annie}]_{i} &: [_{DP2} \emptyset_{k} [_{CP} \text{ who}_{k} \text{ is our manager}]]_{i}
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The second DP specifies the first one. They denote the same entity, which is indicated by the subscript i. Within the second conjunct – a free relative – CP modifies an abstract pronominal head. Here I follow Groos & Van Riemsdijk (1981), Alexiadou et al. (in press: Introduction, §3.2), and others. Sometimes the empty elements can be spelled out, e.g. *Annie, die onze directrice is* 'Annie, who is our manager' can become *Annie, oftewel zij die onze directrice is* 'Annie, or she who is our manager'. Here *oftewel* 'or' fills the specifying coordinative head, and zij 'she' the empty pronoun ϕ_k . (The questions when and why coordination may be asyndetic, and if normal coordination and specifying coordination differ in this respect are relevant, but fall outside the scope of this article.)

The structure in (14) is independent of the internal structure of relative clauses. A version of the standard analysis (1a) could be pursued. But for my purposes it is relevant that (14) is compatible with both antisymmetric phrase structure as proposed in Kayne (1994) – contrary to a right-adjunction approach of appositives – and the promotion analysis of relative clauses. In that case, promotion is performed within the second conjunct; ϕ_k corresponds to the raised antecedent in restrictive relatives.

In the remainder of this section I will review some properties of ARCs and indicate how they follow from, or at least are compatible with the structure proposed in (14).

- A. The antecedent can have any thematic/syntactic role de main clause, and the relative pronoun can have any thematic/syntactic role in the subordinate. This follows automatically from the independent status of the antecedent and the relative pronoun, as is the case for restrictive relatives.
- B. Contrary to restrictives, ARCs have an appositive status, so may be left out without loss of grammaticality. Obviously, a specifying conjunct is extra information, so it does not affect the main clause grammar.
- C. A specifier or determiner of the antecedent does not take scope over an ARC (contrary to restrictives) cf. (2)/(3). The ARC specifies the whole antecedent in (14), including a specifier or determiner which is embedded within the first conjunct, hence cannot take scope over the second.
- D. Contrary to restrictives, appositives do not allow for split collocations, or binding into the relative clause. See (15); cf. also Bianchi (1995).
- (15) a. * The headway, which we made, was great.
 - a.' * De duik, die we namen, was verfrissend. the dive, which we took, was refreshing
 - b. * De verhalen over zichzelf, die Joop, hoorde, waren gelogen. the stories about SE-SELF, which Joop heard, were lied

The reason is that there is no c-command relation between elements in different conjuncts.

- E. ARCs follow restrictive relatives and other complements of the antecedent. Complements of the head are embedded within the maximal projection of the antecedent, hence within the first conjunct. Therefore they precede specifying material, which resides in the second conjunct.
- F. Contrary to restrictives, ARCs can (marginally) contain an epithet NP see (16).
- (16) a. *De avonden*, welk boek van Reve veel gelezen wordt, is herdrukt. *De avonden*, which book of Reve much read is, has been reprinted
 - b. Ze schaamden zich diep, onze mannen, welke stakkerds geen Ferrari hebben.
 - they shamed SE deeply, our men, which 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

Whereas this is impossible for normal restrictives, free relatives (marginally) allow for the same phenomenon:

- (17) a. Ik lees welk boek hij (ook maar) leest. 'I read which(ever) book he reads.'
 - b. ? Welke idioot dit gedaan heeft, verdient straf! which idiot this done has, deserves punishment

Independently of the exact structure of these examples – probably ϕ_k has lexical content – (14) predicts this parallel.

- G. ARCs can have antecedents of any category (contrary to restrictives) cf. (18), where the ARC takes a CP, AP, PP and VP antecedent, respectively.
- (18) a. CP: De drie wijze mannen adviseerden het aftreden van de Commissie, wat een juiste beslissing was. 'The three wise men advised the retreat of the

Commission, which was a just decision.'

- AP: Cresson ontkende corrupt te zijn, wat ze echter wel degelijk is.
 'Cresson denied to be corrupt, which she is indeed, however.'
 Hij werkte hard, hetgeen is hoe een ambtenaar behoort te werken.
 'He worked hard, which is how a civil servant ought to work.'
- c. PP: De vakgroep vergaderde van 9:30 tot 12:30, wat erg lang was. 'The chair group meeted from 9:30 till 12:30, which was very long.' Verschrikt keek hij achter zich, waar echter niets was te zien. 'Frightened, he looked behind himself, where there was nothing to see.'
- d. VP: De kat heeft overgegeven, wat de hond hopelijk niet zal doen. 'The cat has vomited, which the dog hopefully won't.'

Thus, the first conjunct may contain an antecedent of any category XP. In (14), the empty pronoun ϕ_k refers to something of category DP. However, a pronoun may refer to concepts, places, times, events, facts, things, etc. – hence to any syntactic category, cf. the left-hand column of (19).

(19) DP: the man → he [he and Mary]
PP: behind you → there [there and behind you]
CP/VP: he's gone → it, that
AP: corrupt → that (Is she corrupt?) [That, and stingy] (too)

The second conjunct, the 'free relative', must be a DP by definition. So, if the antecedent is not of category DP, the whole construction is a kind of syntactically unbalanced coordination, comparable to the phrases indicated in (19). It seems to me that this prediction is right, because non-DP antecedents are a little awkward and have restricted contexts.

Although this survey is not complete, it covers most important properties of ARCs. I conclude that they follow unproblematically from the theory proposed.

4. Matching effects

The Dutch relative pronoun *die* is 3rd person. Still, its antecedent can be 1st or 2nd person; see (20).

- (20) 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, who so good run can, must quickly leave
 - d. Jullie, die zo goed in rekenen zijn, gaan door naar de finale. you, who so good at calculus are, go on to the final

If an ARC has a pronominal antecedent, the empty pronoun in the free relative structure in the second conjunct equals the antecedent semantically. This means that the antecedent is defective: it is not independent. Hence the free relative (the second conjunct) is the only thing that counts.

At this point an interesting prediction can be made, given the coordination approach of ARCs: like in sentences with normal free relatives, matching effects are expected to appear. That is, if the Case requirement in the subordinate contradicts the one in the main clause, the sentence becomes degraded. This

prediction is correct, cf. (21), (22) and (23), where there are contradictory nominative and objective requirements on the pronoun in the latter two.

- (21) 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 shooted-at have, prisoned
 - c. De koningin gaf jou, die zij niet persoonlijk kende, een lintje. the queen gave you, who she not personally knew, a ribbon
- (22) a. * TAFKAP keek naar mij, die zijn grootste bewonderaar ben! TAFKAP looked at me, who his biggest fan am
 - b. * Ze namen ons, die toch dappere soldaten zijn, gevangen. They took us, who yet brave soldiers are, prisoned
 - c. * De koningin gaf jou, die zoveel gedaan hebt voor demaatschappij, een lintje.

The queen gave you, who so-much done have for the society, a ribbon

(23) * ik/jij/zij/wij, die hij berispt had, ben(t)/zijn 15 jaar oud. I/you/they/we, whom he rebuked had, am/are 15 years old

Finally, matching effects are known to vanish if the pronoun concerned shows no morphological difference between the different Cases (cf. Groos & Van Riemsdijk 1981). Hence this effect should appear with Dutch *jullie* 'you_{pl}', which is both nominative and accusative; see (24).

- (24) a. Ik geef jullie, die zo goed in voordragen zijn, het woord. I give you,, who so good at reciting are, the word
 - b. Ik geef jullie, die ik voordragen wel toevertrouw, het woord. I give you,, who I reciting indeed trust, the word

As expected, both variants are grammatical.

5. Conclusion

Appositive relative clauses differ from restrictives on crucial points. Whereas the syntax of restrictives must involve complementation, this cannot be so for appositives. Concerning the syntax of appositives, there are different proposals around. I rejected the orphanage and adjunction analyses. Instead, I showed that the concept of specifying coordination makes it possible to generalize over normal conjuncts, appositive appositions and appositive relatives. Hence we can

attribute many properties of the latter two to coordination. The hypothesis that an ARC is an asyndetic specifying conjunct leads to a structural proposal (14) in which the specifying conjunct is a kind of free relative (which in turn is compatible with the promotion analysis of relative clauses). I showed that many properties of appositives can be derived from this structure. Moreover, some interesting predictions are made with respect to prenominal phrases and matching.

References

Åfarli, T. (1994) 'A promotion analysis of restrictive relative clauses'. *The Linguistic Review* 11, 81-100.

Alexiadou, A. et al., eds. (in press) Relative Clauses.

Bennis, H. (1978) 'Appositie en de interne structuur van de NP'. Spektator 8:5, 209-228.

Bianchi, V. (1995) *Consequences of Antisymmetry for the syntax of headed relative clauses*. PhD dissertation, Scuola Normale Superiore, Pisa.

Borsley, R. (1992) 'More on the difference between English restrictive and non-restrictive relative clauses'. *Journal of Linguistics* 28, 139-148.

Carlson, G. (1977) 'Amount Relatives.' Language 53: 520-542.

Chomsky, N. (1977) 'On *Wh*-Movement'. In P. Culicover et al., eds., *Formal Syntax*. Academic Press, New York.

Delorme, E. & Dougherty, R. (1972) 'Appositive NP Constructions'. Foundations of Language 8, 2-29.

Emonds, J. (1979) Appositive Relatives Have No Properties. *Linguistic Inquiry* 10:2, 211-243.

Fabb, N. (1990) 'The difference between English restrictive and nonrestrictive relative clauses'. *Journal of Linguistics* 26, 57-78.

Groos, A. & Van Riemsdijk, H. (1981) 'Matching Effects in Free Relatives: A Parameter of Core Grammar.' In A. Belletti et al., eds., *Theory of Markedness in Generative Grammar*. Scuola Normale Superiore, Pisa, 171-216.

Grosu, A. & Landman, F. (1998) 'Strange Relatives of the Third Kind'. Natural Language Semantics 6: 125-170.

Jackendoff, R. (1977) X'-Syntax: A Study of Phrase Structure. The MIT Press, Cambridge, Mass.

Johannessen, J. (1998) Coordination. Oxford University Press, Oxford.

Kayne, R. (1994) The Antisymmetry of Syntax. The MIT Press, Cambridge, Mass.

Klein, M. (1976) 'Appositionele NP' s in het Nederlands. De nieuwe taalgids 69:2, 139-153.

Klein, M. (1977) *Appositionele constructies in het Nederlands*. PhD diss. Katholieke Universiteit Brabant.

Lehmann, C. (1984) Der Relativsatz. Gunter Narr Verlag, Tübingen.

Lipták, A. (1998) 'On Restrictive versus Appositive Relative Clauses'. Talk presented at the Taalkunde In Nederland conference, Utrecht.

Perzanowski, D. (1980) 'Appositive Relatives Do Have Properties'. NELS X, 355-368.

- Platzack, C. (1997) 'A Representational Account of Restrictive and Non-Restrictive Relatives: The Case of Swedish'. Working papers in Scandinavian Syntax 59, 65-95.
- Riemsdijk, H. van (1998) 'Trees and Scions Science and trees'. In *Chomsky* 70th *Birthday Celebration Fest-Web-Page*, http://mitpress.mit.edu/chomskydisc/riemsdyk.html.
- Rijkhoek, P. (1998) On degree phrases and result clauses. PhD diss. Rijksuniversiteit Groningen.
- Smits, R. (1988) *The Relative and Cleft Constructions of the Germanic and Romance Languages*. PhD diss. Katholieke Universiteit Brabant. Foris, Dordrecht.
- Sturm, A. (1986) *Primaire syntactische structuren in het Nederlands*. PhD diss. Universiteit Utrecht. Martinus Nijhoff, Leiden.
- Vergnaud, J.-R. (1974) French Relative Clauses. PhD diss. MIT.
- Vergnaud, J.-R. (1985) Dépendences et niveaux de représentation en syntaxe. John Benjamins Publishers, Amsterdam.
- Vries, G. de (1992) On Coordination and Ellipsis. PhD diss. Katholieke Universiteit Tilburg.
- Vries, M. de (1996) *Relatieve bijzinnen in de zinsstructuur van Kayne*. MA Thesis, Rijksuniversiteit Groningen.
- Vries, M. de (1999) 'Extraposition of relative clauses as specifying coordination'. In T. Cambier-Langeveld et al., eds., *Proceedings of ConSole* VII, 293-309.
- Wiers, E. (1978) 'Kleins 'Appositionele constructies' '. Spektator 8, 62-80.