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Appositional constructions

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Appositional constructions

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Appositional constructions

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to Jonathan, my son

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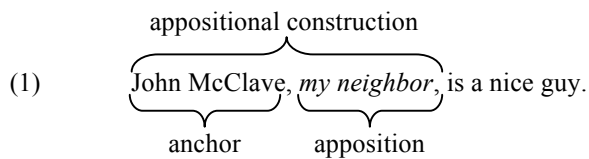
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1. Introduction

This thesis is about appositional constructions. A prototypical example involving such a construction is given in (1):



As indicated above, the first element of the construction, here *John McClave*, will be called the anchor (following Huddleston & Pullum 2002). The second element, here *my neighbor* will be called the apposition. I will use italics to highlight this element. Together, the anchor and the apposition form the appositional construction.

Before 1970, almost everything written on appositional constructions was found in linguistic handbooks. During the seventies, there was quite some discussion on the topic, but after that only once in a while someone picked up the subject again. This does not mean, however, that there is a consensus on the analysis of the construction. The overviews of Acuña-Fariña (1996: 13-22, 71-127) for the English, Spanish and French literature, and Klein (1977: 1-10) for the older literature in English and Dutch, show that linguists even use different definitions for the concept of apposition, resulting in a variety of analyses. In this chapter, I will describe the most important issues and thus introduce the topic of this thesis. Starting out from the discussion of the existing literature, section 1.7 outlines my approach to investigate appositional constructions in more detail in the coming chapters in order to get a better understanding of these interesting constructions.

1.1 Close versus loose appositions

As stated above, the discussion on appositional constructions starts with the problem of definition. Especially some of the older works, such as Delorme & Dougherty (1972) and Den Hertog (1973), consider as apposition a whole range of different constructions, referring to the literal meaning of the term ('set beside') and using as their only criterion that a noun is placed next to another noun. The examples below are taken from a long list in Acuña-Fariña (1996: 15-17), citing Poutsma (1904), Jespersen (1909-49), Curme (1947), Bitea (1977), and Meyer (1991) amongst others.

- (2) a. a little wine
 b. the hero Roberts
 c. Professor Osbert Chadwick
 d. lady friends
 e. we boys

- (3) a. She insisted upon our establishing a servant in livery - *a boy, that is, of about sixteen.*
- b. He is obsessed with death, *or rather, to borrow Poe's phrase, the terror of the soul which leads to death.*
- c. About 40 representatives of Scottish bodies, *including the parents of some of the children flown to Corsica...*
- d. Cavendish stood there, *a maypole round which the others executed a three-step.*

Most authors, however, starting as early as Brill (1852) and Curme (1931), make a distinction between close and loose apposition, the apparent difference being that loose appositions are set off by so-called comma intonation, whereas close appositions are not, as illustrated in the difference between the examples in (2) and those in (3). Acuña-Fariña (1996) notes that what is crucial in this respect is not the comma intonation between the anchor and the apposition, but rather the comma intonation that follows the apposition. This distinguishes them from correction constructions, as will be discussed below. This special intonation pattern, in written speech often indicated by commas, dashes, brackets, or other punctuation marks, is taken to be characteristic of parenthesis (see chapter 4) in general.

Although comma intonation is mentioned all over the literature and intuitively seems to be obviously present, there is no clear one-to-one relation between this descriptive notion and a single phonetic feature. Whereas commas intuitively represent pauses, these are often not realized. The boundaries between a parenthetical phrase and its host can also be marked by a change in pitch (the parenthetical tends to be lower), pitch range (might change either way), or speech rate (the parenthetical is usually articulated faster). As a result of these boundaries, the parenthetical phrase gets its own intonation contour (see Döring 2007). Dehé (2007) notes that the boundaries cannot always be measured as clear as one would expect, even if all the cues given above are taken into account. According to her, parenthetical phrases often have an integrated prosody. She considers a whole range of parenthetical constructions, however, and it is not clear to me to what extent these remarks apply to appositional constructions. A very interesting study that gives a separate and detailed analysis of the prosody for appositions comes from Astruc (2005) and Astruc and Nolan (2007). They found that appositions behave in a way similar to parentheses and appositive relatives (in contrast to dislocations, quotation marks, and epithets) with respect to prosody. Appositions are accented and reduplicate the tonal pattern of their anchor (see also Wichmann 2000, who calls this tonal parallelism), at a lower voice level and a compressed pitch range. They are prosodically detached from the matrix clause by tonal movements and pauses in almost all cases (88% for English; 83% for Catalan). If only one pause is realized, it is always the one to the right of the apposition. This is consistent with Acuña-Fariña's idea mentioned earlier: that the comma-intonation following the apposition is crucial. It follows, then, that the prosody of appositions reflects their function with respect to the host sentence. On the one hand, it shows tonal subordination (reduplication, lower voice level, reduced pitch range), which reflects that the appositional construction is connected to the matrix and forms just an aside to it. On the other hand, it shows prosodical independence (pauses, tonal movements), which

reflects that appositions do not restrictively modify their anchors, but convey supplementary information. This, I think, is a major insight. I will argue that this ambivalent nature of being related to (an element of) the main clause and simultaneously providing an independent message is the main characteristic of appositions. This ambivalence can also explain why the prosodic detachment is not always detectable. For the speaker, there is a trade-off between showing the apposition's relation to the matrix and the apposition's independence of the matrix. Emphasizing one of these characteristics may affect the clarity of the prosodic detachment. Therefore, even though the described comma intonation is the most apparent distinction between loose and close apposition, it cannot be used as an absolute test. The main difference, I think, is in the interpretation, as explained below.

For close appositions, which lack the special intonation pattern described above, I only consider those here that resemble the loose variant the most, such as example (2b): *the hero Roberts*. This construction is restrictive. The two elements in this case are both required to describe their extralinguistic referent together. Loose apposition, on the other hand, is non-restrictive. One of the elements alone gives a unique description of the extralinguistic referent. The other just adds some extra information on that referent. Consider the following examples, for instance:

- (4) a. My brother Peter is still at college.
 b. My brother, *Peter*, is still at college.
- (5) a. The poet Pushkin was born in Moskow.
 b. The poet, *Pushkin*, was born in Moskow.

The restrictive example (4a) suggests that the speaker has several brothers and picks out the one called *Peter*. In the appositive variant (4b), however, the anchor refers to only one brother and the apposition just adds that this brother is called Peter. Similarly, in the restrictive (5a), *the poet Pushkin* can be used to introduce someone the speaker did not know before, whereas *the poet* in itself does not have a referent yet. In (5b), on the other hand, a poet must have been introduced in the previous discourse. Therefore, *the poet* directly refers to this person and the apposition just adds that his name is Pushkin.

Though almost everyone mentions both close and loose apposition nowadays, the main focus is on the loose, or non-restrictive, construction. This construction is usually taken as apposition proper. In the common view, loose and close apposition are not considered two variants of one construction, but two different constructions with a different structure and meaning. Still, a relatively new work like Meyer (1992) views the two as just two classes of the same grammatical phenomenon. However, I think that close and loose apposition do not only differ in intonation and meaning, but also in structure. The first argument in favor of this idea comes from Acuña-Fariña (1996), who shows that the first element of a close apposition cannot be restrictively modified by a PP or a relative clause, whereas this is possible for the anchor of a loose apposition (see also Wiers 1978). Compare the examples in (6) and (7):

- (6) a. * The linguist of the year Johnson is a brilliant man.
 b. * The linguist I like best Johnson is a brilliant man.
- (7) a. The linguist of the year, *Johnson*, is a brilliant man.
 b. The linguist I like best, *Johnson*, is a brilliant man.

In addition, Molitor (1979) demonstrates that the second element in close appositions cannot be expanded by an attributive adjective or a determiner. Compare the examples in (8) and (9). The b-examples are from Molitor (1979: 24); the glosses are mine:

- (8) a. De beroemde hoofdstad Amsterdam trekt jaarlijks [Dutch]
 the famous capital Amsterdam draws annually
 miljoenen internationale bezoekers.
 millions international visitors
 ‘The famous capital of Amsterdam draws millions of international
 visitors every year.’
 a’. * De hoofdstad (het) beroemde Amsterdam trekt jaarlijk miljoenen
 the capital the famous Amsterdam draws annually millions
 internationale bezoekers.
 international visitors
 b. Auch das neutrale Ländchen Schweiz unterhält [German]
 also the neutral country:DIM Switzerland maintains
 eine Armee.
 an army
 ‘Also the neutral little country Switzerland maintains an army.’
- (9) a. De hoofdstad, *het beroemde Amsterdam*, trekt jaarlijks [Dutch]
 the capital the famous Amsterdam draws annually
 miljoenen internationale bezoekers.
 millions international visitors
 ‘The capital, *the famous city of Amsterdam*, draws millions of
 international visitors every year.’
 b. Das Bankenland, *(*die Schweiz*), will die Zufuhr des [German]
 the bank.country the Switzerland wants the supply the
 Geldes drosseln.
 money:GEN restrict
 ‘The bank country, *Switzerland*, wants to restrict the supply of money.’

Furthermore, Burton-Roberts (1975) shows that close appositions have to be definite, whereas loose appositions can have an indefinite anchor:

- (10) a. * Mary invited a linguist Johnson to her party.
 b. Mary invited a linguist, *Johnson*, to her party.

Finally, Lasersohn (1986: 311) notes that close and loose apposition differ with respect to their possibilities for VP ellipsis:

- (11) a. * My friend, *Fred*, lives in Pittsburgh, and so does my friend, *Dave*.
 b. My friend Fred lives in Pittsburgh and so does my friend Dave.

Taking the arguments above into account, together with the clear difference in intonation and meaning, I conclude that close and loose appositions are structurally different constructions. I therefore exclude the restrictive construction from the class of appositions. For more details on the restrictive construction, I refer to De Vries (2008a), who analyses most of its subtypes as attributive modifying direct speech. In the rest of this thesis, I will only be concerned with the non-restrictive variant.

1.2 Equivalence

We already saw that the older handbooks took appositional constructions to consist of two juxtaposed nouns. Often, one or more extra criteria are used which require these nouns to be in some relation of equivalence. Sopher (1971), for instance, argues that the two parts of an appositional construction have to be equivalent both syntactically and semantically. Syntactically, the two members make up a single constituent. Semantically, the two members must have a single referent and they must be notionally equivalent. Several tests have been proposed in the literature to check the equivalence of the two elements of apposition. Quirk et al. (1985: 1302) list the following:

- I. The parts of nominal apposition construction must be identical in reference or the reference of one must be included in the other.
- II. Each of the appositives (their term for both anchor and apposition) can be separately omitted without affecting the acceptability of the sentence.
- III. Each fulfils the same syntactic function in the resultant sentences.
- IV. It can be assumed that there is no difference between the original sentence and either of the resultant sentences in extralinguistic reference.

They illustrate these conditions with the following example:

- (12) a. A neighbor, *Fred Brick*, is on the telephone.
 b. A neighbor is on the telephone.
 c. Fred Brick is on the telephone.

Here, Quirk et al. state that the reference of *Fred Brick* is included in the reference of *a neighbor*. Omitting the anchor or the apposition from (12a) results in the sentences in (12b) and (12c) respectively. Both of these sentences are acceptable, in both cases the element that is left behind functions as the subject of the sentence, and both sentences have the same meaning as the original.

The alternative to reference equivalence in the first criterion, reference inclusion, is not standard. Not only might it be used for sentences like (12a), but also for examples like the following:

- (13) a. Rose reads a lot of books, *including comics*.
 b. His pets, *for example Aquarius the goldfish*, are very important for Adrian.

If we want to take into account these inclusive appositions, Koktová's (1986: 6) less rigid version of this criterion may be better. She states that 'the members of apposition are essentially understood as related to a common referent, including inclusion.' In chapter 2, I will indeed take inclusion to be one of the semantic classes of appositions.

Hannay and Keizer (2005: 162-163) note that coreference as a criterion is problematic, because not all appositions are referential. They illustrate this with the sentences in (14):

- (14) a. But in the 1830s, Dr Thomas Arnold, *Headmaster of Rugby School*, saw a different side of sport.
 a'. * But in the 1830s, Headmaster of Rugby School saw a different side of sport.
 b. Mr. Kinkel, aged 55, *a former head of West German intelligence and a high profile justice minister*, is well-regarded by MPs [...]
 b'. * A former head of West German intelligence and a high profile justice minister is well regarded by MPs.

In (14a), the apposition is a bare nominal, which means that it cannot be referential, as shown in (14a'), since putting the bare nominal in an argument position results in ungrammaticality. In (14b), two conjoined DPs apply to the same referent. This is impossible if these DPs are referential, as the ungrammaticality of the single verb morphology in (14b') shows. In chapter 3, I will use examples like these to argue that appositions are actually predicates, which means that they are indeed not referential.

The examples in (14) also show that the second criterion from Quirk et al., omission of anchor or apposition without change of acceptability, does not always hold. Omitting the anchor from (14a-b), as in (14a'-b'), results in ungrammatical sentences. O'Connor (2008) points out that omission of the anchor also results in ungrammaticality if a temporal adverb is used in the apposition. In chapter 3, the presence of adverbs like these will be used to argue in favor of a predicative status for appositions.

- (15) a. James, *back then a little boy*, impressed his audience.
 b. * Back then a little boy impressed his audience.
 c. Er staat eenman, *vermoedelijk de voorzitter*, voor [Dutch]
 There stands a man presumably the chairman in front of
 de deur.
 the door.
 'There is a man, *presumably the chairman*, at the door.'
 d. * Er staat vermoedelijk de voorzitter voor de deur.
 There stands presumably the chairman in front of the door.

Also, as Hannay and Keizer (2005: 163-164) show, both the apposition and the context may contain elements that depend on the presence of either the anchor or the apposition, leading to unacceptability if the relevant element is omitted:

- (16) a. John, *already owner of three supermarkets*, is going to buy another one.
 a'. # John is going to buy another one.
 b. Emma, *an ardent fan of Liverpool herself*, shared his passion for football.
 b'. * An ardent fan of Liverpool herself, shared his passion for football.

Furthermore, even if omitting the anchor or the apposition does result in a grammatical sentence, the fourth criterion, the preservation of the extralinguistic reference, might be violated:

- (17) a. Robert, *a brilliant linguist*, gave a talk on syntax.
 b. Robert gave a talk on syntax.
 c. A brilliant linguist gave a talk on syntax.

Without the connection between *Robert* and *a brilliant linguist* provided by the appositional construction in (17a), the sentences in (17b) and (17c) do not have the same meaning. After all, *a brilliant linguist* in (17c) does not necessarily refer to Robert.

All in all, if we want to take into account all the examples given above, we cannot use the discussed conditions on equivalence. Since the differences between the examples that do obey equivalence conditions and those that do not seem to be semantic and pragmatic, rather than syntactic, I would like to include all these examples in the class of appositions. Therefore, I will adopt Koktová's (1986) idea that the anchor and the appositions are essentially understood as relating to the same referent, without specifying that relation any further. In chapter 2, I will show that all kinds of partial ordering relations (see Hirschberg 1991) are possible, such as type/subtype, entity/attribute, part/whole and identity.

1.3 Coordination versus subordination

Hockett (1955) argues that the equivalence of the two elements implies a symmetric relation between the two. He states that neither of the two elements is clearly the head or the attribute. Instead, both are heads and both are attributes of each other.

This issue is closely related to the question that in my opinion lies at the heart of the debate on appositions, namely how the relation between the anchor and the apposition has to be characterized with respect to the two main relations between elements in syntax: coordination and subordination. At first sight, there are four possible answers to this question. First, the appositionive relation can be a subtype of the coordinate relation. Second, this relation can be a subtype of the subordinate relation. Third, apposition can be a third type of relation, next to coordination and subordination. Fourth, the appositionive relation can be excluded from syntax at all and analyzed as a purely pragmatic phenomenon, for example. All these options are

represented in the literature. Moreover, it turns out that this list is not exhaustive and people have argued for all kinds of combinations of these views.

The first possibility, apposition as a subtype of coordination, is advocated by Hocket (1958). He characterizes the construction as double-headed and therefore concludes that it cannot be subordination, leaving no other option than coordination. Sturm (1986) claims that apposition and coordination are syntactically indistinguishable. The only difference between them is in the interpretation. In appositions, the relation between its two members is interpreted as identification. In coordination, this relation is interpreted as taking two different referents together. He gives the following example (p. 245), where one form can be interpreted either as asyndetic coordination or as apposition. The glosses are mine:

- (18) We hebben Pollini, de beste pianist ter wereld en de [Dutch]
 we have Pollini the best pianist in.the world and the
 dirigent van die avond, in de pauze gesproken.
 conductor of that evening in the break spoken
 ‘During the break, we spoke to Pollini, the best pianist in the world and
 the conductor of that evening.’

For Burton-Roberts (1975), it is not an option to analyze appositional constructions as nominal coordination of the anchor and the apposition, because of the coreference of the two. Still, he wants to take into account the resemblances with coordination and argues that apposition and nominal coordination are derived from the same deep structure, namely the coordination of two sentences. The first sentence is the matrix, including the anchor. The second sentence is exactly the same, except that the anchor is substituted by the apposition. The position of the coordinator can be filled by an apposition marker. Thus, the sentences in (19), from Burton-Roberts (1975: 406), can all be derived from the same deep structure, basically (19c).

- (19) a. Manchester United, *the champions*, play today.
 b. Manchester United and the champions play today.
 c. Manchester United play today and the champions play today.

For appositions, transformations make sure that the doubly represented part of the sentence is deleted and that the anchor and the apposition are juxtaposed.

The second possibility, apposition as a subtype of subordination, can be found in the early literature, for example Curme (1947), who lists apposition as a type of attributive modification just like attributive adjectives or PPs. Here, the anchor is the head and the apposition is the modifier. In fact, this is also what Acuña-Fariña (1996) argues for. He analyses appositions as non-restrictive modifiers of their anchor. According to him, the difference between restrictive and non-restrictive modifiers of a noun is that non-restrictive modifiers are on a higher level: they modify the head including the restrictive modifiers.

Other people came up with the idea that the relation of subordination between the anchor and the apposition is of a special type, namely predication. Doron (1994) argues most extensively that the apposition has the features of a nominal predicate. In this predication relation, then, the anchor is the subject. Doron

does not say explicitly how this relation of predication comes about. Other people claimed that this is just part of the semantic interpretation. Potts (2005), for example, argues that appositions are syntactically simply right adjuncts to their anchor. A comma feature in the structure triggers an interpretation of predication, resulting in a secondary proposition.

If there is indeed a relation of subordination between the elements of an appositional construction, the question arises which of the two is the subordinate one and which is the head. In a predication relation, for example, which of the two is the predicate and which one is the subject? Up to here, I have assumed that the anchor would be the subject and the apposition the predicate. Though this is indeed the most common view, it is not necessarily the case. Molitor (1979) gives some arguments in favor of this idea. His main argument is about agreement: if some element in the matrix agrees with the appositional construction, it only agrees with the anchor. Molitor (1979: 32) cites the following example from Blümel (1911: II, 71). The glosses are mine:

- (20) a. Die Lise, *das arme Weib*, hat ihren Mann verlohren. [German]
 the:F Lise the:N poor wife has POSS:F husband lost
 ‘Lise, that poor woman, lost her husband.’
 b. Das arme Weib, *die Lise*, hat seinen Mann verlohren.
 the:N poor wife, the:F Lise has POSS:N husband lost
 ‘That poor woman, Lise, lost her husband.’

The third option, apposition as a third type of relation, next to coordination and subordination, appears in Sopher (1971). He states that his criteria for apposition exclude both of these relationships. The elements in apposition cannot be coordinated, since they are coreferential, whereas the first and second conjunct are not. They cannot be subordinated either, since they are functionally equivalent and elements in a relation of subordination always have different syntactic functions. Delorme & Dougherty (1972) share this view.

If appositions involve neither coordination nor subordination, some people argue that the appositive relation should be excluded from syntax at all. This view is mainly based on the idea that the apposition is an information unit independent from the host. Peterson (1999), for example argues that apposition is a non-syntagmatic relation, because anchor and apposition do not form a syntactic unit together and therefore are not hierarchically related. He uses VP-ellipsis to show this (p. 247). Note that this is a different VP-ellipsis test than the one used in (11) above:

- (21) a. John sold Mary, his best friend, a lemon, and Max did too.
 b. Tom owns a Stradivarius violin, once the property of Heifetz, and Jane has one too.

The a-example implies that Max gave a lemon to Mary, but not that she is Max’s best friend. The antecedent VP for the elided part in the second conjunct therefore does not include the apposition. Similarly, the b-example does not imply that Jane’s violin was the property of Heifetz before, again suggesting that the apposition is not a part of the VP. Peterson concludes that the apposition is not a part of the matrix

sentence, but only in loose association with the anchor, linked semantically and intonationally, but not syntactically. Koktová (1986) also argues that apposition is not part of syntax. Neither does it contribute to the semantics of the matrix in her opinion. It does not contribute to the truth-value of the sentence, but rather functions as a presupposition. Thus, she considers apposition to be a purely pragmatic phenomenon, intended to express a commentary of the speaker on the assertion of the sentence and thus giving secondary information by means of implicit predication. Still, she assumes that the underlying structure for appositional constructions is very similar to that of coordination. A slightly different analysis comes from Potts (2005), as mentioned before. Though he too considers appositional constructions to involve a secondary proposition, independent from that of the matrix, he argues that this is a conventional implicature, which he represents by a second level in the semantics. This secondary level of interpretation is triggered by the comma-intonation that characterizes the construction. Syntactically, he proposes that the apposition is an adjunct of the anchor. Burton-Roberts (1994) notes that the relation between anchor and apposition is very loose and arguably not a genuine syntactic relation. He states that the apposition is offered as a parenthetical, and sometimes metalinguistic attribution to the anchor. Finally, Hannay & Keizer (2005) argue that appositions are a particular kind of holophrastic expressions, independent discourse units with their own proposition.

As I said before, scholars do not always choose between coordination and subordination to analyze appositional constructions. A rather big group of authors makes a distinction between two types of constructions, either taking them as two classes of apposition, or one of them as apposition proper and the other as something else, for example reduced relatives. Poutsma (1928) already makes such a distinction. He gives the following examples (p. 994), where he calls the italicized element in (22a) an apposition and the one in (22b) an undeveloped clause:

- (22) a. Havelock, *the hero*, is dead (Bain 1863: 151)
 b. The young king himself, *a trained theologian and proud of his theological knowledge*, entered the lists against Luther. (J.R. Green, Short History of the English People: Ch. VI, §V, 321)

The term ‘undeveloped clause’ indicates the difference Poutsma (1904) saw between the two examples. The sentence in (22b) can be paraphrased with an appositive relative copular clause, whereas this is impossible for (22a):

- (23) a. * Havelock, who is the hero, is dead.
 b. The young king himself, who was a trained theologian, [...]

I will term the two groups that are often used identificational and attributive appositions. In chapter 2, I will come back to this classification. In identificational appositions, the apposition is taken to have the same function as the anchor. It gives an alternative description for the same referent. Therefore, this group is often analyzed as coordination. In the group of attributive appositions, the apposition is taken to modify the anchor. It attributes a certain property to the anchor’s referent. This group is therefore often analyzed as subordination.

A clear case of an analysis that divides appositions in two groups comes from Molitor (1979). He makes a distinction between subordinative appositions, which are derived from parenthetical copular clauses, and coordinative appositions, which are derived from two coordinated sentences, similar to the analysis from Burton-Roberts (1975) for his apposition proper. One of Molitor's main arguments for a structural distinction between these two groups comes from case marking in German. Whereas coordinative appositions always get the same case as their anchor, subordinative appositions often get nominative case, irrespective of the case marking on the anchor. This is obligatorily so if the apposition contains a sentential adverb. The examples are from Molitor (1979: 5). The glosses are mine. Note that the anchor, *Peter*, is not overtly marked for case. Since it functions as the direct object of the matrix, however, it is taken to have accusative case.

- (24) a. Ich habe Peter, *früher mein bester Freund*, [German]
 I have Peter formerly my:NOM best:NOM friend
 sehr enttäuscht.
 highly disappointed
- b. * Ich habe Peter, *früher meinen besten Freund*,
 I have Peter formerly my:ACC best:ACC friend
 sehr enttäuscht.
 highly disappointed

For Burton-Roberts (1975) and McCawley (1998), the main test to distinguish between the two groups is the possibility to insert an apposition marker, such as *namely*. Though Burton-Roberts (1975), following Sopher (1971) and others, starts out with criteria requiring equivalence and excluding both subordination and coordination, in the end he concludes that the best test for apposition is the possibility to insert apposition markers. After all, these elements overtly mark an appositive relationship. By taking apposition markers as the ultimate test, he explicitly excludes attributive appositions, which he calls reduced relative clauses. Below, I will come back to the analysis of appositions on the basis of appositive relatives.

I will show that there are indeed clear differences between identificational and attributive appositions. However, I will argue that the syntactic structure is basically the same. Also, I will come back to the issues of case marking (chapter 6) and apposition markers (section 2.8) in detail.

Besides authors who divide appositions into groups with different structures, there are also scholars who claim that apposition is a gradable notion. They argue that there are no strict criteria to define appositions. Rather, constructions can be more or less appositive. At the beginning of section 1.2, we saw the criteria Quirk et al. (1985) give for apposition. They do not use these criteria strictly, however, but just to make a distinction between full and partial appositions. Full appositions meet all four criteria, whereas partial appositions may contradict one (or two) of them. Below, it will become clear that they also make a difference between strict and weak appositions. Thus, they suggest a gradience of being more or less appositive. Meyer (1992) argues more explicitly that apposition is an undifferentiated, or gradable, relation. According to him, central appositions are coordinate structures, whereas

peripheral appositions are subordinate. Besides this syntactic gradient of apposition, he also distinguishes a semantic gradient with respect to the appositional relation, running from an identity relation to a part-whole relation. Acuña-Fariña (2006) takes it that there is a prototypical apposition that is related to several similar constructions in a system of family resemblances and not so much to coordination and subordination directly.

In this thesis, I will argue that both identificational and attributive appositional constructions involve coordination-like structure and subordination simultaneously. In my opinion, the anchor and the apposition are related via parenthetical construal, a type of parallel construal, just like coordination. At the same time, the construction also involves a predicative, and therefore subordinate structure. In attribution, the features of the predicative structure are more apparent and in identification those of the coordination-like structure. The distinction is also related to different types of copula constructions: specificational and predicational.

1.4 Non-nominal and unbalanced appositions

Most scholars take it that in appositional constructions both elements are nominal. Burton-Roberts (1975), however, following Hockett (1955) and Sopher (1971), argues that elements of other categories should be included as well, as long as anchor and apposition are of the same category. This means that he has to abandon the criterion of coreference, since categories other than nouns usually are not seen as being coreferential. Quirk et al. (1985) take nominal appositions to be the core case, but consider other categories as well. Acuña-Fariña (1996: 173) argued that the non-nominal construction does not show the characteristic intonation pattern: according to him it lacks the intonation break after the apposition, as indicated by the arrows added to his examples below:

- (25) a. He ran, absolutely raced → up the hill.
 b. They sent him to Coventry, refused to speak to him → when they found out about the harassment.
 c. Under normal, peacetime → conditions.

I do not share Acuña-Fariña's conclusion, however. I think that (25a) is an example of a construction of correction, which indeed lacks the separating intonation after the correction, as discussed in section 1.6 below. The example in (25b), in my opinion, is ambiguous between a reading where the temporal adverbial clause is part of the apposition and one where the adverbial clause is part of the matrix. In the former case, the so-called comma-intonation would appear after the adverbial clause and therefore coincide with the end of the sentence, which results in the absence of a clear intonation pattern after the apposition. In the latter case, however, the appositive intonation is necessary in my intuition. Finally, I think that appositional constructions with attributive adjectives, as in (25c), are exceptional, because adjectives have a very close relation to the corresponding noun. This relation is probably so strong, that the two elements cannot be separated.

Here are some other examples of non-nominal appositions from the literature. I think intuitions about these examples clearly indicate that comma-intonation after the apposition is needed. Example (26a) is from Meyer (1992: 32), (26b-c) are from Acuña-Fariña (1996: 168), and (26d) is from Sopher (1971: 402):

- (26) a. To treat her as a person, *to offer her civilised manners*, took on with her almost the quality of an insult [...] (Survey of English Usage Corpus, W.16.2.97-3)
- b. We were amazed, *stunned*, by an event which clearly surpassed all of us.
- c. There, *in the heart of the forest*, nothing seemed to have changed for ages.
- d. It was studied both as an end in itself, *as a part of human culture*, and as a means to writing and conversing in the world of scholarship, and for the study of the ancient classical authors and the Latin Bible. (R.H. Robins)

As these examples show, whether the appositional construction consists of clauses, verbs, adverbials, or PPs, comma-intonation is required. For VPs, this is hard to test, because they usually appear at the end of the sentence and if they are followed by adverbials, it is often not clear whether these belong to the apposition or to the matrix. Yet, I think it is fair to conclude that non-nominal appositions cannot be distinguished by the intonation pattern and that they are really appositions. In section 1.6, I will show that non-nominal appositions differ from correction in this respect.

Appositions of attributive adjectives seem to form the only non-nominal appositions that do not get construction final comma intonation. As illustrated in (25c), the apposition and the noun it modifies are not separated intonationally. Here are some other examples in Dutch:

- (27) a. Zodra hij met ruimtelijke, *oftewel driedimensionale* → [Dutch]
 as.soon.as he with stereometric or three-dimensional
 figuren moest rekenen ging het mis.
 figures must:PST do.sums went it wrong
 ‘As soon as he had to do sums involving stereometric, *or three-dimensional* figures, things went wrong.’
- b. Alleen grammaticale, acceptabele → zinnen worden meegenomen
 only grammatical acceptable sentences are taken.along
 in het onderzoek.
 in the investigation
 ‘Only grammatical, *acceptable* sentences are taken into account in this investigation.’

As stated above, I think that attributive adjectives are so strongly related to the nouns they modify that they cannot be prosodically separated.

In addition to including non-nominal constructions, Quirk et al. (1985) make a distinction between strict and weak appositions, where the latter consist of two elements of a different syntactic category. O’Connor (2008) restricts herself to

constructions where the first element is nominal, but includes unbalanced appositional constructions where the apposition consists of an adjectival or prepositional phrase. However, the second element in the unbalanced constructions has a more flexible position in the sentence, as illustrated by the examples in (28) and (29):

- (28) a. John, drunk, knocked at the door.
 b. John knocked, drunk, at the door¹.
 c. John knocked at the door, drunk.
- (29) a. John, a nice guy, knocked at the door.
 b. *John knocked, a nice guy, at the door.
 c. *John knocked at the door, a nice guy.

Whereas the second element in the nominal construction has to be adjacent to the first, in the unbalanced construction it can have several other positions as well. Furthermore, note that the inclusion of categorically unbalanced constructions is hard to combine with a coordinative analysis, since coordination has to obey the Law of Coordination of Likes. See section 3.7 for a further discussion of the parallels between coordination and apposition.

1.5 Appositions: reduced appositive relatives?

Taking into account the obvious similarity between appositional constructions and appositive, or non-restrictive, relatives, it is not surprising that quite some people, such as Smith (1964), have proposed a transformation, known as relative reduction, that (among other things) turned appositive relative copular clauses into appositions by simply deleting the relative pronoun and the copula. Smith (1964: 42) gives the following example:

- (30) John, (who was) *a good salesman*, charmed them immediately.

Pollmann (1975) tried to extend this approach to several other sentence types and proposed a rule called ‘subject copula deletion’. Of course, analyses like these in turn raise the question which type of relation there is between an appositive relative and its antecedent. Again, the literature shows analyses both in terms of coordination and in terms of subordination. A new account that highlights the resemblances between appositions and non-restrictive relatives comes from O’Connor (2008). She argues that appositions underlyingly are non-restrictive relatives with a null relative pronoun as its subject. Another interesting recent analysis in this direction can be found in Cardoso and De Vries (2010). In their view, appositions are not to be analyzed as reduced relatives, rather appositive relatives are analyzed as complex appositions to their antecedents. These complex

¹ Note that (28b) is not as natural as (28a) and (28c). Yet, it is accepted by native speakers and it is at least clearly better than (29b).

appositions consist of an empty DP with a restrictive relative. This analysis allows them to assign the same structure to a whole range of appositive constructions.

There are also differences between appositions and appositive relative clauses, however. Obviously, only a subset of the appositive relatives can be taken into account in the parallel with appositions, namely those that contain a nominal predicate with the copula *be*. Furthermore, as shown in the discussion of (22) and (23) above, only a subset of appositions can be extended to an appositive relative, namely the attributive ones². Acuña-Fariña (1996) argues that appositive relatives, in contrast to appositions, cannot be stacked (see also Jackendoff 1977). De Vries (2006), however, shows that appositive relatives can be stacked as well. Example (31a) is from De Vries (2006: 23) and (31b) from Grosu (2000: 112). I added (31c) to show stacking in appositions. See also section 4.7.3 for further details on multiple appositional constructions.

- (31) a. this man, who came to dinner late, about whom nobody knew anything,
 ...
 b. John, who never finished high school, who can't in fact even read or write, wants to do a doctorate in astrophysics.
 c. John, *a man without a high school diploma, an illiterate even*, wants to do a doctorate in astrophysics.

It has also been argued that appositive relatives, unlike appositions, cannot be extraposed. Again, De Vries (2006) shows that this is incorrect. The example in (32a) is from Fabb (1990: 59). Extraposition of an apposition is illustrated in (32b):

- (32) a. I met John yesterday, who I like a lot.
 b. I met John yesterday, *a really nice guy*.

Differences as described above, particularly the restriction to attributive appositions, led scholars like Motsch (1966) and Klein (1976) to adjust the transformation analysis from relative clauses, while maintaining the idea of clause reduction. Instead of appositive relatives, they use parenthetical clauses as the basis for their clause reduction transformation. This means that identificational appositions can be included as well. Consider the following example, based on Klein (1977: 62):

- (33) a. There was a bird, *a wild swan*, in the air.
 b. * There was a bird, which was a wild swan, in the air.
 c. There was a bird - it was a wild swan - in the air.

My analysis, which involves predication with an empty pronoun as the subject, in fact reflects a very similar idea.

² This generalization seems not entirely correct cross-linguistically. As far as I know, identificational appositions in Dutch never have an acceptable equivalent relative copular clause. English native speakers are more flexible in this respect. I leave this issue for further research.

Burton-Roberts (1975), as stated above, makes a distinction between apposition proper, which cannot be derived by reducing a relative clause, and reduced relatives, which are derived by such a transformation.

1.6 Related constructions

The most important construction that is related to apposition is of course the appositive relative clause, which was discussed in section 1.5 above.

Absolute constructions, also called sentence adjuncts, free adjuncts or verbless adverbial clauses, are very similar to appositions as well. The example in (34a) is from Burton-Roberts (1975: 410) and the one in (34b) from Quirk et al. (1985: 1314):

- (34) a. A millionaire, Pontefract → showered money everywhere.
 b. The heir to a fortune, her friend → did not care about passing examinations.

The most important difference between absolutes and appositions concerns the status of the two parts. In appositional constructions, the first element is the most important with respect to the proposition of the whole utterance, whereas in absolute constructions, this is true for the second element. If one of the elements in an absolute construction would be termed the anchor, it would be the second one. This difference can also be shown by adding 'being' to the construction. In absolute constructions, it is always possible to add this to the first element. In appositions, if such an addition is possible at all, it has to happen in the second element. Therefore, one might conclude that absolute constructions are the inverse of appositional constructions.

Sopher (1971) argues that there is another difference with appositions, namely the lack of the typical prosody, the comma-intonation after the second element, as indicated by the arrows in (34). However, if these constructions are indeed inverse appositional constructions, what matters is the intonation after the first element, which then corresponds to the apposition. There, comma-intonation is present. O'Connor (2008: 23) also notes an additional difference: whereas it is rather unnatural for appositions to have a personal pronoun as their anchor, this is not a problem for the second element in absolute constructions. Here is a pair of her examples, including her judgment:

- (35) a. A millionaire, he showered money everywhere.
 b. ? He, *a millionaire*, showered money everywhere.

It seems to me that (35b) is not ungrammatical, however. It is probably just unusual.

Finally, absolute constructions clearly have a different meaning. Usually, the absolute is interpreted as the cause of the rest of the sentence. In that sense, they are very similar to adverbial subordinate clauses, but distinguished because they do not overtly express their connection with the matrix, as an adverbial clause would, using a subordinator like 'because', for example (cf. Stump 1985). Although a

causal interpretation is not impossible for certain appositions, it is definitely not the most common one. One might conclude, then, that absolute constructions are inverse appositional constructions and that this inversion causes a special, causal meaning.

Another construction that at first sight seems to be very close to apposition is correction, as illustrated in (36):

- (36) a. John plays the piano, or rather the organ.
 b. The video player, I mean the dvd player → broke down.

Burton-Roberts (1975: 410-411) states that ‘apposition could very well be described as a pseudo-correction, a correction that has acquired the status of a rhetorical figure.’ Schindler (1990: 236), following Rath (1975) and Ortner (1985), even includes correction as one of the semantic classes of apposition (see also Quirk et al. 1985, who consider revision as a semantic subclass). He also provides an argument to exclude them, however, namely the lack of comma-intonation after a correction, as indicated by the arrow in (36b). Later on, he states that the special marking (note that Schindler focuses on symbols in written language, rather than on intonation) can be present after correction as well, which, in his opinion, means that they do not have to be distinguished from appositions. He cites the following example from Ortner (1985: 239); the glosses are mine:

- (37) Einmal berücksichtigen die Anhänger (...) nicht genügend - [German]
 once consider the followers not sufficiently
 richtiger überhaupt nicht - den physiologischen Unterschied (...).
 better at.all not the physiologic distinction
 ‘Once, the followers do not sufficiently consider the physiologic
 distinction, or better, they do not consider it at all.’

Indeed, it may be possible for correction to be separated from the rest of the sentence prosodically. However, I think it is important to make a distinction between constructions where this is possible and those where it is obligatory, such as apposition. As far as I can see, the comma-intonation after correction, as in (37), is optional. Here are some examples in Dutch, where non-nominal appositions are contrasted to corrections:

- (38) a. Piet wist dat achter hem, *in dat donkere bos*, een vijand [Dutch]
 Piet knew that behind him in that dark forest an enemy
 op hem loerde.
 on him lurked
 ‘Piet knew that behind him, *in that dark forest*, an enemy was lurking for him.’

- a'. Piet wist dat achter hem, nee, ergens bij hem in de
 Piet knew that behind him no somewhere near him in the
 buurt(,) een vijand op hem loerde.
 neighborhood an enemy on him lurked
 'Piet knew that behind him, no, somewhere near to him an enemy lurked
 for him.'
- b. Het publiek applaudisseerde, *oftewel klapte*, bijna een kwartier.
 the audience applauded or clapped nearly a quarter
 'The audience applauded, *that is clapped*, for nearly a quarter of an
 hour.'
- b'. Het publiek applaudisseerde, wat zeg ik, juichte(,) bijna
 the audience applauded what say I cheered almost
 een kwartier.
 a quarter
 'The audience applauded, I mean cheered for almost a quarter of an
 hour.'

A second argument to make a distinction between correction and apposition comes from Molitor (1979), who shows that corrections are not predicative, whereas appositions are (see chapter 3). In my opinion, this is the most important argument. Corrections simply convey a different message than appositions. In a correction, the speaker replaces the first element by the second, because the first was a mistake. Although this element initially had the same referent in the speaker's mind, later on he realizes that it does not really refer to the concept he actually wanted to express. Even in the speaker's mind, then, the mistaken term and the correction are not coreferential at the moment that the correction is generated. The correction replaces the other element, also in the structure. In the case of an appositional construction, on the other hand, the speaker explicitly wants to express a relation between the anchor and the apposition. The apposition does not replace the anchor. Rather, it provides some extra information about it. The main proposition of the sentence still involves the anchor, whereas in the case of correction, the hearer is supposed to ignore the mistaken term in the interpretation of the utterance. Consider the examples in (39), where the main proposition and the secondary proposition of (39a) are given in (39a') and (39a'') respectively. Example (39b) does not have a secondary proposition. Its interpretation is given in (39b'):

- (39) a. Suddenly, the dogs, *Jack and Charlie*, came in.
 a' Suddenly, the dogs came in.
 a'' The dogs are called Jack and Charlie.
 b. Suddenly, the dogs, I mean the cats → came in.
 b' Suddenly, the cats came in.

This difference in interpretation also explains the lack of comma intonation after correction. There is no use in separating the correct term from the rest of the sentence, since it would not signal the end of an independent message in this case.

A construction related to correction is repetition. In this construction, an element is repeated literally. Consider the examples in (40):

- (40) a. One of the Reserve Sheriffs in Los Angeles is a camel, yes, a camel!
 b. There are too many people without health care insurance, again, people without health care insurance, in the US.

Schindler (1990) also includes repetition as a semantic class of apposition and calls it a literal paraphrase. Again, however, the function of repeating an expression is not to provide extra information on it or to express a relation with itself, but just to put more emphasis on it. The message of the complete utterance remains exactly the same if the repetition is left out. Therefore, I exclude it from the definition of apposition.

Klein (1977: 114-115) notes that appositions are related to a special kind of epithets: emotional expressions that the speaker attributes to some element in the utterance. (Notice that the Latin word *appositum* means exactly the same as the Greek word *epitheton*: 'set beside'.) Here are some examples:

- (41) a. Bill, that fool, bought a very expensive car.
 b. Mary gave me her book, the sweetheart.

Klein (1977) points out the following differences. As (41b) shows, it is quite natural for epithets to appear in a sentence final position, instead of being adjacent to their antecedent. Although extraposition is possible for appositions, this is much more restricted. In that case, the anchor has to be in focus. Compare the examples in (42) with (41b):

- (42) a. * Mary gave me her book, a sweet girl.
 b. Mary, *a sweet girl*, gave me her book.
 c. MARY gave me her book, *a sweet girl*.

Another interesting feature of epithets is the fact that they always have to be definite, whereas especially attributive appositions can easily be indefinite:

- (43) a. * Bill bought a very expensive car, a fool.
 b. * Mary gave me her book, a sweetheart.
 c. Bill, *a crazy guy*, bought a very expensive car.
 d. Mary, *a lovely girl*, gave me her book.

Finally, appositions can occur with sentential adverbs (see also section 3.9, where this is used as an argument in favor of predication), but epithets cannot, even though they are clearly attributive:

- (44) a. Mike, *unfortunately a poor man*, cannot buy what he needs.
 b. * Mike, unfortunately that poor fellow, lost his girl friend.

Note that epithets do not have to be used in an apposition-like construction. They also occur as referring expressions, without comma-intonation:

- (45) a. Alan was fined, because the idiot ignored a red light.
 b. Caroline promised to help me, which cost the sweetheart a lot of time.

In this sense, epithets are very similar to anaphors (see Corazza 2005). In both uses, epithets and appositions have in common that they convey a secondary message, providing some extra speaker-oriented information or commentary, related to an element in the sentence or recent discourse (cf. Potts 2005 and Corazza 2005).

Finally, the literature from the field of pragmatics mentions a type of construction that seems to be very similar to apposition: reformulation or restatement. Del Saz Rubio (2003: 211) defines reformulation as ‘a recharacterization of the message conveyed by the whole previous discourse segment, or one of its constituents.’ Interestingly, she focuses on the fact that reformulation goes along with the presence of a marker, indicating the type of relation between the original segment and its reformulation: discourse markers of reformulation. Generally, these markers are the same lexical items I described as appositive markers. Here are some examples from Del Saz Rubio (2003: 265, 345):

- (46) a. The first problem arises once we admit that in order for ‘a system’ (I shall use this neutral term) to think, its thoughts must have reference, that is to say, they must refer to things regarded by the system as existing and enduring independently of itself. (British National Corpus, AOT 323, *The pursuit of mind*)
 b. For document reuse something more particular is wanted. Namely, the retrieved material must be organized into a sequential, cohesive document. (British National Corpus, CGA 19, *Electronic Publishing*)

Often, the relevant discourse segments are sentences, but this can easily be extended to fragment utterances and in particular DPs. Jasinskaja (2006, 2007) calls this nominal restatement. Since appositional constructions typically involve DPs as well, these restatements come very close to them. Consider the following examples, from Jasinskaja (2007: 347):

- (47) A. What does this piece start with?
 B. An anacrusis. An unaccented note which is not part of the first full bar.
 (48) A. Who came to the party?
 B. My best friends. John, Mary and Bill.

Jasinskaja (2007) notes several similarities between appositions and nominal restatements, but she also points out some differences. Her main argument says that nominal restatements behave differently with respect to quantifiers. Whereas Potts (2005) argues that appositions are out of the scope of quantifiers in the anchor or the rest of the matrix, and the other way around, Jasinskaja claims that nominal restatements can function in the scope of the element they restate and vice versa. Compare the following examples (from Potts 2005: 131 and Jasinskaja 2007: 352, respectively):

- (49) * We spoke with Tanya, Ashley, and Connie, every secretary in the department, about the broken printer.
- (50) A Who got their travel costs reimbursed?
 B i. 13 employees. Everyone who submitted their application in time.
 ii. Every employee who submitted their application in time. 13 people.
 iii. John, Mary, Bill, and Sue. Everyone who submitted their application in time.
 iv. Everyone who submitted their application in time. John, Mary, Bill, and Sue.

Whereas (49) is ungrammatical, Jasinskaja claims that (50Biii), which looks very similar, is acceptable. In the end, however, the differences seem very subtle. The nominal restatement counterpart to (49) does not seem that fine to me:

- (51) A With whom did you speak about the broken printer?
 B ??Tanya, Ashley and Connie. Every Secretary in the department.

In chapter 4, I will come back to the scope of quantifiers in appositions. With respect to the relation between appositional constructions and nominal restatements, I conclude that they are two terms for the same phenomenon, analyzed from a different perspective. Taking into account non-nominal appositions, and in particular sentential appositions, appositional constructions might be equated to reformulation in general. The terms reformulation and restatement seem to imply that they do not cover attributive relations, however. Indeed, Jasinskaja (2006, 2007) considers the two elements in nominal restatement to be coreferential, which would exclude attributive relations. It is not clear to me whether this is a principled choice, however. The only clear example of an attributive relation discussed by Jasinskaja (2006: 156) is the following:

- (52) A Who snores?
 B i. A linguist. Mary.
 ii? Mary. A linguist.

She attributes the question mark in (52Bii) to pragmatic awkwardness. Indeed, if we know already that it is Mary who snores, it seems pointless to add that she is a linguist in a neutral context. Suppose, however, that someone just before claimed that linguists never snore and in order to test this hypothesis asks who snores. In that case, the information that Mary is a linguist makes perfect sense in the answer. Therefore, I think that the attributive relation should not be excluded from nominal restatement, which is then just another term for appositional constructions, used in a particular context.

1.7 Overview

As stated in section 1.1, I only include non-restrictive constructions in my definition of apposition. Therefore, the other chapters will be dedicated only to this type of constructions. In order to understand such appositional constructions better, I think the focus of study should be on the relation between the two main elements in these constructions: the anchor and the apposition. In the remaining chapters, then, I will look at this relation from several different perspectives.

In chapter 2, I will characterize the relation between the anchor and the apposition from a semantic point of view. I will discuss a semantic classification of the constructions at hand in three categories: identification, attribution and inclusion. These classes are characterized on the basis of the relative position of the anchor and the apposition on a specificity scale, ranging from generic to definite. Thus, the three semantic classes represent three different types of relation between the anchor and the apposition.

Chapter 3 starts out by studying the relation between the anchor and the apposition from the perspective of pragmatics and discourse analysis. I argue that the speaker uses an apposition to convey a secondary proposition about the anchor, thus providing extra information about a particular element from the main message of the sentence. I characterize this secondary proposition as a conventional implicature and argue that this information is always new to the hearer. Furthermore, I argue that this proposition is not only implied pragmatically or semantically, but is also present in syntax. This leads to the idea that appositional constructions involve a predicational relation between the anchor and the apposition, represented in syntax by a complete clausal structure, including TP and CP.

In chapter 4, I continue the syntactic point of view, this time focusing on the ambivalent nature of the relation between the apposition and the sentence it occurs in, including the anchor. At the same time, the apposition seems to be integrated and non-integrated. Thus, I show that the apposition is not simply subordinated to the anchor and the rest of its host. Rather, appositions should be included in the special class of parentheses. I argue that this class of constructions relates to their matrix sentence via a special type of syntactic construal: supplementation. Furthermore, I show that this type of construal, and therefore the relation between the anchor and the apposition, resembles coordination.

Chapter 5 concerns the order in which the anchor and the apposition occur. As the discussion of the difference between absolute constructions and appositional constructions in section 1.6 shows, one might wonder whether the apposition always has to follow its anchor, or whether 'inverted' appositional constructions may exist as well. I consider this question from a cross-linguistic perspective, especially focusing on head-final languages and Japanese in particular. If inverted cases do exist, one might expect them in these languages, since the apposition can be seen as a modifier of the anchor. I argue that the data I present supports the idea that appositions cannot precede their anchors.

In chapter 6, I come back to the discussion in section 1.3 with respect to the question whether the relation between the anchor and the apposition should be characterized as subordination, coordination or something else. This question is related to an apparent contradiction between chapters 3 and 4. Whereas chapter 3

seems to support the idea of subordination (in the form of predication), chapter 4 may be used to argue in favor of coordination. In chapter 6, I use case marking data from several languages to shed more light on this issue. Since languages have different patterns for marking predication and coordination, these data can help to get a better insight in this relation. Again, it turns out that the data provide support for both predication and coordination. I present an analysis that combines these two notions in one structure.

Finally, I summarize my conclusions in chapter 7.

2. A semantic classification

In this chapter, a revised version of Heringa & De Vries (2008a), I propose a semantic classification for appositional constructions. I argue that there are three types of relationships between the anchor and the apposition: *identification*, *attribution* and *inclusion*. This division is based on the relative position of the apposition and its anchor on a complex scale of specificity that ranges from generic via non-specific to definite. I will also show that the classes defined in this way can be related to classes of copula constructions.

As we saw before, there is no clear consensus in the literature on which constructions exactly belong to the class of appositions, let alone which subclasses of appositional constructions there are. Following the definition I gave in chapter 1, the question remains whether all constructions within the defined group of appositions have the same structure and meaning. As the previous chapter showed, several linguists argue that there are at least two different classes, which I call identificational and attributive appositions. Here, I will outline the differences between these two classes and introduce a third class: inclusive appositions. I will show that these three classes can be divided using basic semantic concepts, such as specificity and genericity. In the next chapter, I will argue that the difference between the two main classes, *identification* and *attribution*, is purely semantic. *Inclusion*, on the other hand, arguably differs also syntactically.

A similar classification to the one proposed here can be found in Quirk et al. (1985). They distinguish three main classes as well: equivalence, attribution, and inclusion. Equivalence has a subdivision of appellation, designation, identification, and reformulation. Inclusion is divided into exemplification and particularisation. Another classification that looks like the one discussed here comes from Hannay and Keyzer (2005). They describe their classes in terms of discourse relations between the anchor and the apposition and relate it to a classification of copula constructions. As stated before, I will do this as well. Hannay and Keyzer's major categories are identification (which includes both the classes of equivalence and inclusion in terms of Quirk et al. (1985)'s system), justification (similar to attribution in Quirk et al.), and labelling. The difference between identification and labelling is that in labelling the proper name or description given in the apposition is new to the hearer, whereas in identification the apposition relates to the hearer's knowledge. In section 3.4, I will discuss this in more detail and argue that appositional information is always new to the hearer. Schindler (1990) gives a semantic classification as well. His main classes are specification (comparable to inclusion), non-specification (the inverse of inclusion), alternation, reference clarification (the last two together are similar to identification), and attributive predication. The approaches mentioned have quite some ideas in common and all seem to be on the right track. These classifications are basically descriptive, however, and their basis is not always totally clear.

Here, I will propose a classification based on clearly defined semantic characteristics. In order to get to a clear semantic classification, I characterize the

anchor and the apposition independently and consider the possible relationships between these two elements of the construction.

2.1 *A preliminary overview*

Characterizing both the anchor and the apposition in terms of specificity makes it possible to systematically analyze all the combinations that result in a grammatical appositional construction. Later on in this chapter, I will introduce a complex scale of specificity, but first I give a basic outline of the classification, using the terms generic, non-specific and specific without explicit formal definitions.

2.1.1 *Identification*

The table below gives the first result. The cells with a number represent the possible combinations and refer to the relevant example sentences.

Table 1. Identification

<i>Anchor</i> \ <i>Apposition</i>	Generic	Non-specific	Specific
Generic	(1a)		
Non-specific		(1b)	
Specific			(1c)

Below are examples for the three acceptable combinations from table 1. The specificity of the anchor and the apposition is given between brackets. The examples to illustrate the possible combinations in this chapter are all in Dutch. Note that specificity or genericity is not an inherent feature of a noun phrase, but depends on the context. This also means that for this table and all the similar ones that follow in the rest of this chapter, it is impossible to give examples for the empty cells. These cells do not simply represent ungrammatical examples, but impossible combinations of the required interpretation of identification for the anchor and the apposition. Since the specificity or genericity of nominal constituents is not determined by the lexical elements alone, but also by the context, an example that potentially could have the interpretation combination represented by an empty cell will not be ungrammatical, but the interpretation of the elements will shift to a combination that is represented by a filled cell. This process is discussed and illustrated at the end of section 2.4.

- (1) a. De leeuw, *de panthera leo*, wordt met uitsterven (generic, generic)
 the lion the panthera leo is with extinction
 bedreigd.
 threatened
 ‘The lion, *the panthera leo*, is threatened with extinction.’

- b. Jan wil graag een aapje, zo 'n (non-specific, non-specific)
 Jan wants gladly a monkey:DIM such.a
leuk bewonertje van de Apenheul, op zijn schouder.
 nice inhabitant:DIM of the Apenheul on his shoulder
 'Jan would like to have a little monkey, *such a nice inhabitant of the Apenheul* (lit. monkey hill) on his shoulder.'
- c. De jongste bewoner van de Apenheul, *dit* (specific, specific)
 the youngest inhabitant of the Apenheul this
lieve diertje, sprong op Jans schouder.
 sweet animal:DIM jumped on Jan's shoulder
 'The youngest inhabitant of the Apenheul, this sweet little animal, jumped on Jan's shoulder.'

It seems that prototypical appositions only appear at the diagonal of the table, that is when the anchor and the apposition are equally specific. Intuitively, this can be explained by the idea that an appositional construction describes the same concept twice. After all, the pragmatic function of the construction is to introduce a concept from several points of view, in order to help the hearer to identify the concept (cf. Berckmans, 1994). This concept has the same degree of specificity in both descriptions. In short, the typical appositional construction involves a relation of *identification* between the anchor and the apposition.

2.1.2 Attribution

At first sight, combinations of degrees of specificity seem impossible. On further consideration, however, it turns out that a different type of relationship between the anchor and the apposition enables this combination. I am hinting here at the part-whole relation. The anchor can refer to a part and the apposition to the whole: a bigger group to which the anchor belongs, just like an attributive adjective is used to inform the hearer that a certain noun phrase belongs to some bigger class. This is reminiscent of the semantic set theory of properties. For an individual to have a certain property means that it is a member of the set of individuals with this property. Similarly, if an apposition describes a group, this results in assigning the features, or attributes, of this group to the anchor. This type of appositional constructions therefore belongs to the class Quirk et al. (1985) call *attribution*.

Table 2. Attribution

<i>Anchor</i> \ <i>Apposition</i>	Generic	Non-specific	Specific
Generic	(2a)		
Non-specific	(2b)		
Specific	(2c)		

As the table shows, the attributive apposition is always generic. In section 2.5, I will explain why we are dealing with generic noun phrases here.

Below, an overview with examples for all possible combinations is given:

- (2) a. Jan heeft de bermzakspin, *een geslacht* (generic, generic)
 Jan has the yellow.sac.spider a genus
van de spooerspinnen, ontdekt.
 of the long-legged.sac.spiders discovered
 ‘Jan discovered the yellow sac spider, *a genus of the long-legged sac spiders.*’
- b. Om zijn aap te vangen heeft Jan hulp (non-specific, generic)
 to his monkey to catch has Jan help
 van een oppasser, *een vakman,* nodig.
 of a keeper a professional necessary
 ‘In order to catch his monkey, John needs the help of a keeper, *a professional.*’
- c. Jans huisdier, *een baviaan,* laat zijn tanden zien (specific, generic)
 Jan’s pet a baboon lets his teeth see
 als hij boos is.
 when he angry is
 ‘Jan’s pet, *a baboon,* shows its teeth when it is angry.’

As (2a) shows, attributive appositions can have a generic anchor as well. It might seem that this would be a case of identification. However, even if two DPs both refer to a generic class, one class might be a subset of the other. If the anchor refers to a class that is part of the class to which the apposition refers, this results in attributive apposition.

2.1.3 Inclusion

It turns out that it is also possible to reverse the part-whole relation between the anchor and the apposition in attributive constructions. In that case, the apposition describes a part of the concept to which the anchor refers. This relationship corresponds to the class Quirk et al. (1985) call *inclusion*. In order to enable the apposition to describe just a part of the anchor, it is necessary to use an apposition marker. Sometimes, these markers indicate that we are dealing with an example, immediately explaining the term Quirk et al. use for these cases: *exemplification*:

- (3) Een dierentuin, *zoals de Apenheul,* kost veel geld.
 a zoo such.as the Apenheul costs much money
 ‘A zoo, *such as the Apenheul,* costs a lot of money.’

An apposition marker of *inclusion* can also indicate that the predicate applies to the part of the anchor stressed by the apposition to a greater extent. In that case, the predicate needs to be gradable. The situation has to be able to be applicable to a greater or lesser extent. If this is not the case, the sentence becomes ungrammatical (4b):

- (4) a. Een aap, *maar vooral de gorilla van Jan*, houdt veel van bananen.
 an ape but especially the gorilla of Jan holds much of bananas
 ‘An ape, *but especially Jan’s gorilla*, likes bananas a lot.’
- b. * Kinderen, *maar in het bijzonder Jan*, groeien op bij hun ouders.
 children but in the particular Jan grow up at their parents.
 Lit. ‘Children, *but in particular Jan*, grow up with their parents.’

For these cases, Quirk et al. use the term *particularisation*. The relation of *inclusion* appears most often with generic anchors, because these state something about a class, which of course can function as a whole very easily. However, it is also possible for a specific or non-specific noun phrase to describe a group. Keeping all this in mind, the table can be completed:

Table 3. *Inclusion*

<i>Anchor</i> \ <i>Apposition</i>	Generic	Non-specific	Specific
Generic	(5a)		(5b)
Non-specific		(5c)	(5d)
Specific			(5e)

Here is an example for every acceptable combination from table 3:

- (5) a. De aap, *maar vooral de orang-oetan*, wordt (generic, generic)
 the ape but especially the orangutan is
 met uitsterven bedreigd.
 with extinction threatened
 ‘The ape, *but especially the orangutan*, is threatened with extinction.’
- b. Een aap, *in het bijzonder de gorilla van Jan*, is (generic, specific)
 an ape in the particular the gorilla of Jan is
 een goede klimmer.
 a good climber
 ‘An ape, *in particular Jan’s gorilla*, is a good climber.’
- c. Jan wil een exotisch huisdier, (non-specific, non-specific)
 Jan wants an exotic pet
bijvoorbeeld een aap, voor zijn verjaardag.
 for.example an ape for his birthday
 ‘Jan wants an exotic pet, *for example an ape*, for his birthday.’
- d. Jan wil een huisdier, *zoals de aap die* (non-specific, specific)
 Jan wants a pet such.as the ape that
hij bij de dierenwinkel zag, voor zijn verjaardag.
 he at the pet.shop saw for his birthday
 ‘Jan wants a pet, *such as the ape he saw in the pet shop*, for his birthday.’

- e. Jan kwam de groep apen die de buurt (specific, specific)
 Jan came the group apen that the neighbourhood
 onveilig maakt, *waaronder* de chimpansee van Pietje, tegen.
 unsafe makes among.which the chimpanzee of Pietje against
 ‘Jan met the group of apes that prowl around the district, *among which*
Pietje’s chimpanzee.’

Here, we can add the following remarks. In table 3, the relation of *inclusion* is located above and on the diagonal. This shows that for such a relation, the apposition has to be more specific than the anchor. This is a logical conclusion: after all, a part is more specific than a whole. Strikingly, however, the combination of a generic anchor and a non-specific apposition is missing. It seems to be the case that the generic reading is so strong that an indefinite apposition (which can have a generic reading) always has to be interpreted in this way (for example: *an ape, such as a gorilla, is a nice animal*). See section 2.3 for a more extensive explanation. It might seem that in examples like (5a, c, e) the anchor and the apposition are equally specific. Indeed, they have the same degree of specificity on the scale we use so far. Still, the anchor in these cases is more specific, because it refers only to a part or member of the anchor’s referent.

It is striking that inclusive appositions always need an apposition marker, whereas for attributive appositions, this is usually impossible.

2.1.4 Inverse inclusion?

Above, I suggested that inclusion is the reverse of attribution. After all, both relations are between a part and a whole and the difference is in the order: in inclusion the apposition is the part, in attribution the anchor. Attribution seems to be more than an expression of this relation, however. Whereas inclusion just states that the apposition is a part of the anchor, attribution uses the fact that the anchor is part of the apposition in order to characterize it, stressing that the anchor has all the features of the group described by the apposition. Therefore, it may seem that there is a class of appositions that is closer to the inverse of inclusion. Here are some examples:

- (6) a. Chimpansees, of liever apen in het algemeen, zijn goede klimmers.
 chimpanzees or rather apes in the general are good climbers
 ‘Chimpanzees, or rather apes in general, are good climbers.’
 b. Semantici, of in feite alle taalkundigen, onderzoeken de menselijke
 semanticists or in fact all linguists investigate the human
 taal.
 language
 ‘Semanticists, or in fact all linguists, investigate human language.’

I think, however, that these constructions are not appositional constructions at all, but belong to the class of corrections. As we saw in chapter 1, appositional constructions are used to express a relation between the anchor and the apposition. In inclusion, the speaker wants the hearer to know that the referent of the apposition

is part of the referent of the anchor. Still, the main predicate of the construction is applied to the referent of the anchor and only by implication, the hearer can conclude that the predicate can also be applied to the referent of the apposition. In the examples in (6), on the other hand, the speaker does not express that the referent of the first element is part of that of the second. Rather, the speaker realizes that his proposition applies to a bigger group and expresses this. The second element therefore does not provide information on the first, but replaces it. In the interpretation, the hearer may ignore the first element. Thus, whereas a sentence with an attributive apposition like *Peter, my brother, is ill* conveys the information that Peter is my brother, the example in (6a) is not intended to provide the information that chimpanzees are apes (in general), even though the implication that chimpanzees are apes is of course correct.

As far as I can see, this is the only way to use these constructions. The only reason to use an apposition that refers to something bigger than the anchor is to indicate that the apposition has the features of the class it belongs to and that is what happens in attribution.

2.1.5 Intermediate conclusion

If we combine the information from the previous sections, we get an overview of the possible relations between the anchor and the apposition in terms of their relative specificity, as represented in table 4. In this table, the possible relations are represented by symbols: ‘=’ for *identification*; ‘ \supset ’ for the part whole relation, or *attribution*, and ‘ \subset ’ for the reverse relation: *inclusion*. Note that both for the names of the classes and for the symbols related to them, the perspective goes from the apposition to the anchor (in contrast to their linear order in the sentence). In inclusion, the apposition is included in, a subset of (\subset) the anchor. In attribution, the apposition attributes something to, is a superset of (\supset) the anchor.

Table 4. Preliminary overview

<i>Anchor</i> \ <i>Apposition</i>	Generic	Non-specific	Specific
Generic	\supset /=/ \subset		\subset
Non-specific	\supset	=/ \subset	\subset
Specific	\supset		=/ \subset

I conclude that there are three types of appositional constructions: *identification*, *attribution* and *inclusion*. *Identification* appears on the diagonal of the table, that is, when the anchor and the apposition are equally specific. *Attribution* is possible in the generic column, in other words if the apposition has a generic reading, hence constitutes a class. *Inclusion* is possible above and on the diagonal, that is, if the apposition is more specific than the anchor. The canonical appositional construction involves an *identification* relation, but *attribution* is fairly common as well. Inclusion seems to be more marked and less frequent. Meyer (1992: 74) confirms this in his study on apposition in large English corpora. Though he uses different classes and even a different definition, it is clear that inclusion (his exemplification

and particularization) is rather infrequent (11% of his examples). Attribution (his characterization), however, is not very frequent either (16%). The main problem in using these data is that Meyer includes close apposition in his definition, which probably increases especially the numbers for identification. Gómez Penas (1994) uses the same classification as Meyer, but investigates only loose appositions. Her corpus is much smaller, but her results indeed suggest that attribution is more common. She finds 5,7% inclusion and 47% attribution, leaving 47,3% for identification. This again confirms that inclusion is marked, whereas identification and attribution are quite common.

2.2 *Intermezzo: definiteness, genericity and specificity*

As described above, appositions can be classified by comparing the specificity of the anchor and the apposition. Appositions can be equally specific as the anchor, as in *identification*, less specific, as in *attribution*, or rather more specific, as in *inclusion*. The tables suggest that there is a simple scale, ranging from generic to specific. This is partially correct, but it is not the whole story. In order to get a better understanding, it is necessary to know what the terms genericity and specificity mean exactly. Here, I will give a short introduction. More extensive descriptions and further references can be found in Thu (2005, chapter 3) and Robinson (2005, chapter 1), among others.

2.2.1 *Definiteness*

The difference between definite and indefinite nominal constituents in a lot of languages is expressed by the determiner, often the article. Whether a speaker uses a definite or an indefinite article depends on several factors. Russell (1905: 479) took *uniqueness* to be the main characteristic, using the famous example in (7):

(7) *The king of France is bold.*

The use of the definite article in this case leads to the conclusion that France has only one king. Later on, this was replaced by the characteristic *inclusiveness* (Hawkins 1978), in order to extend the idea to plurals and mass nouns. After all, in those cases it is impossible to conclude that a definite noun refers to one single specimen. Rather, a definite description refers inclusively to the totality of objects or mass within the relevant pragmatic set. In an example like (7), the relevant set happens to contain only one individual.

(8) a. You have to walk *the dogs*.
 b. Bring *the water* to a boil.

Christophersen (1939) shows that there is another aspect related to the use of the definite article, namely *familiarity*. Strawson (1971) extended this to *identifiability*. This involves the knowledge of the hearer with respect to the reference of the noun phrase. The hearer needs to know the entity to which the speaker refers. This might

be the case because the referent was introduced earlier in the discourse, but sometimes it is necessary for the hearer to deduce the referent's existence from the context by means of association and world knowledge - *bridging* in Clark's (1977) terms:

- (9) a. Recently, I visited a zoo where *the apes* run free.
 b. John wanted to arrive at the zoo at ten, but *the train* was delayed.

In (9a), the hearer has to conclude that the zoo that the speaker visited houses apes, even though it is not clear which zoo is meant. From (9b), the hearer has to draw the conclusion that John took the train to the zoo that according to the schedule should arrive there just before ten. The context enables the hearer to identify *the train* and *the apes*.

In addition to identifiability, inclusiveness is still necessary in order to explain the use of a definite article.

- (10) a. A bee hive has moved. *The queen* determined the new location.
 b. John and his gorilla Abe watched the moon.

In (10a), the hearer is able to identify *the queen*, because a hive has been introduced. In order to understand the use of the definite article, however, the hearer does not only need to know that queen bees exist, but also that every hive has only one queen. Similarly, in (10b) there is only one moon under consideration - in a normal context the moon of the earth.

In many cases, inclusiveness is the result of a more detailed description following the noun within the noun phrase. This is sometimes called cataphoric definiteness:

- (11) a. John plays with *the ape he got from his mother*.
 b. Abe looks down from *the tree that is in the centre of his cage*.

The ape and *the tree* are not introduced in the discourse, but still get a definite article, because the restrictive relative results in a unique referent.

A test for definiteness that is often used is 'there insertion' (Peterson 1979). This test is based on a phenomenon Milsark (1977) called the 'definiteness restriction': definite noun phrases cannot occur as the postverbal argument in an existential sentence. An example is given in (12):

- (12) There is an / *the ape in the class room.

In an existential sentence, the NP under consideration is introduced. Therefore, it is not identifiable for the hearer on the basis of earlier or different information. The existence of the referent of a definite description, on the other hand, is already presupposed (see Strawson 1971, Von Stechow 2004, and others). Finally, Milsark (1977) noted that the possibility to occur in existential *there*-sentences cannot only be tested for noun phrases with a definite or indefinite article, but also for those containing other determiners, including quantifiers. In order to include these

elements, he uses the terms weak (behaving as indefinite) and strong (behaving as definite) determiners. See also De Hoop (1992) for more details on the weak/strong distinction. Here, I focus on noun phrases involving an article, in order to avoid confusion.

2.2.2 Specificity

The notion specificity is used particularly to make a distinction between different interpretations of indefinite noun phrases. An interpretation is specific if the speaker has in mind a certain individual or a certain group of individuals. This distinction becomes particularly clear in combination with a quantified element, because in that case it usually corresponds to a difference in scope:

(13) Every day, John plays with an ape.

In the specific reading, John plays with the same ape every day, which means that the indefinite operator scopes over the universal quantifier (*an > every*). In the non-specific reading, John can play with a potentially different ape every day, which means that the universal quantifier scopes over the indefinite operator (*every > an*). However, indefinite noun phrases can be ambiguous with respect to specificity in other contexts as well. These can be disambiguated by insertion of *certain*. In specific readings this is possible; in non-specific readings it is not.

(14) John plays with a (*certain*) ape.

The context can disambiguate indefinite noun phrases as well:

- (15) a. i The animal keeper misses *an ape*. Abe is not there. (specific)
 ii The animal keeper misses *an ape*. There are only ten of them instead of eleven. (non-specific)
 b. i John wants to buy *a gorilla*, but his mother thinks he is too expensive. (specific)
 ii John wants to buy *a gorilla*, but they do not have one in the shop. (non-specific)

Vangsnes (2000) gives a test for the specificity of indefinite noun phrases. A specific interpretation is impossible within the scope of negation in an existential sentence.

(16) There is no (**certain*) ape in the class room.

Following Vangsnes, we can draw the following conclusion about specificity and definiteness. In case of a specific noun phrase it is possible to identify a referent, but not always for both participants of the speech act at hand (speaker and hearer). In case of a definite specific noun phrase, both the speaker and the hearer are able to identify the referent, whereas in the case of an indefinite specific noun phrase, only the speaker has a unique referent in mind; the hearer does not necessarily know that

referent. Vangsnes (2000: 35) represents this in the following table, where +/- indicates whether the concept is identifiable or not:

Table 5. *Specificity*

	Speaker	Hearer
Unique	+	+
Specific	+	-
Non-specific	-	-

It should be added that it is not always the speaker who has the referent in mind. It can also be the subject of the sentence, as in (15). For these sentences, it does not matter whether the speaker knows which *ape* is referred to, but whether *the animal keeper* or *John* knows it. In cases like these, terms like relational or relative specificity are used.

A special form of a definite noun phrase is the proper name. Proper names typically have a fixed referent in (conceptual) reality¹.

2.2.3 Genericity

A noun phrase is considered generic when it refers to a class as a whole. This means that noun phrases can get three different readings: generic, non-specific and specific. The context determines the interpretation.

- (17) a. *An ape* climbed the tree. It was Abe. (specific)
 b. *An ape* climbed the tree. I did not know which ape it was. (non-specific)
 c. *An ape* climbs trees. That is in his nature. (generic)

Both definite and indefinite noun phrases can get a generic reading, though not all linguists agree on this (see Chesterman 1991). An indefinite noun phrase refers to a prototypical specimen of the class and enables generalizing expressions in this way (18a). A definite generic noun phrase refers directly to a class (18b), or to a so-called individual concept (18c-d):

- (18) a. *A baboon* has to be aware of its place in the group hierarchy. (generic indefinite)
 b. *The hamadryas baboon* was a sacred animal to the ancient Egyptians. (generic definite: class)
 c. The ape of the year is always chosen by the public. (generic definite: individual concept)

¹ This is actually not always true. Even proper names are polysemous and may refer to an infinite range of things. See for instance Koster (2009: 8) and earlier work. He shows that a name like *Washington*, for example, can refer to a certain city, but is more often used to refer to things related to this city, such as the American political establishment as in *Washington is not the problem, but the solution!* In this way, a proper name may also be used to refer to a class rather than an entity. One may use *Schubert*, for instance, to refer to the class of pieces of music written by Schubert: *Every boy played Schubert.*

- d. The leader of a community serves as an example to others. (generic definite: individual concept)

Bacon (1973) calls the noun phrases that others termed *individual concepts* (e.g. Janssen 1984) *generic*. I adopt this idea. Ranging over time and/or place, an individual concept can refer to different individuals. Expressing something about the concept therefore in fact means expressing something about a whole group of individuals, namely all individuals that fit the description of the concept. This is the function of a generic operator: generalize over an entire group

Noun phrases that can be used to express an individual concept can also get a normal specific reading, as illustrated in (19):

- (19) a. Yesterday, I observed *the ape of the year*. (specific definite)
 b. Yesterday at three, I shook hands with a Nobel Prize winner. (specific indefinite)

Whether a particular noun phrase is generic is therefore, as always, dependent on the context.

In many contexts, both the definite and the indefinite variant of a generic noun phrase can be used, without a clear difference in meaning. Yet, the distinction is important. This can be shown if we use predicates that can only be related to a complete class, such as *become extinct* (with the generic noun phrase as subject), or *invent* (with the generic noun phrase as object):

- (20) a. The / #an ape will not become extinct in the near future.
 b. In 1974, Ernő Rubik invented the / #a Rubik's cube.

(The indefinite article can only be used here for a rather marked, taxonomical reading. In that case, the sentences are about a particular ape species or a certain type of Rubik's cube.) An indefinite generic reading, on the other hand, can be required by predicating an attribute that applies to all or most individuals of a class.

- (21) A / *the wild boar is dangerous if there are young nearby.

Farkas and De Swart (2009) represent the distinction between definite and indefinite genericity. For the definite variant, a class is introduced as the sum of all the individuals in that class in all worlds. The indefinite variant introduces one single specimen of the class in a situation *s* and uses an operator binding situations to generalize over all specimens of that class. The examples in (22) can be represented as in (23), where the exclamation mark stands for uniqueness quantification:

- (22) a. The ape is widespread.
 b. An angry baboon shows its teeth.

- (23) a. $\exists!k(\text{Ape}(k) \wedge \text{Widespread}(k))$
 b. $\text{Gen}_s((\exists x \text{Baboon}(x,s) \ \& \ \text{Angry}(x,s)), \text{shows teeth}(x,s))$

One might wonder how this definiteness distinction for the generic reading relates to that for the individualistic reading. Farkas and De Swart (2009) show that also for the generic reading, identifiability is the key factor. This becomes clear if we realize that a generic reading with a definite article can only be used if the class at hand is a familiar class (see Partee 1987, Krifka et al. 1995):

- (24) a. The olive baboon (or anubis baboon) has a dog-like muzzle.
 b. The angry baboon shows its teeth.
 c. An angry baboon shows its teeth.

The olive baboon in (24a) can get a generic reading, because it is an existing class. *The angry baboon* in (24b), on the other hand, is not a familiar class and therefore gets an individualistic (specific) reading. In this case, the noun phrase has to be familiar from the discourse. Because of this, the definite generic has a determined reference, which is represented in (23a) by the exclamation mark. With an indefinite article, a generic reading gets possible (24c): by generalizing over angry baboons, a new class is introduced.

Noun phrases with a generic reading can also be formed using a plural. In that case, the noun phrase has to be indefinite (without an article). Definite plural noun phrases do not really refer to a class, but to the sum of taxonomic subclasses:

- (25) a. Apes are just like people. That makes them interesting.
 b. The great apes (chimpanzees, gorillas, and orangutans) have the most in common with humans.

For Dutch, the only difference between plural and singular indefinite noun phrases is their number. Therefore, they occur with the same predicates (26). In English, on the other hand, the indefinite plural can be used to express both a generalized reading and class predicates, as shown in the translations of (26). The romance languages often use the definite plural to realize a generic reading (cf. Farkas and De Swart 2007).

- (26) a. *Bavianen* laten hun tanden zien als ze boos zijn.
 baboons let their teeth see when they angry are
 ‘Baboons show their teeth when they are angry.’
 b. * *Bavianen* sterven voorlopig niet uit.
 baboons die temporary not out
 Int. ‘Baboons will not become extinct in the near future.’
 c. * Jan heeft *apenkooien* uitgevonden.
 Jan has ape.houses invented
 Int. ‘Jan invented ape houses.’

Just like the indefinite singular variants in (20), the bare plural in Dutch cannot be used with predicates that apply to the class as a whole, as illustrated in (26bc).

2.3 The specificity scale

Above, the following notions were introduced to characterize noun phrases: specific definite, specific indefinite, non-specific, proper name, generic indefinite, generic definite class, and generic definite individual concept. Now, it is possible to set up a complex specificity scale. It is clear that the non-generic characterizations can be put on a scale from more to less specific (that is, from proper name to non-specific). Though generic noun phrases (or at least the indefinite ones and the individual concepts) are less specific than specific noun phrases, they are not more or less specific than non-specific noun phrases. Therefore, genericity cannot be compared to non-specificity in this respect. The complete picture therefore looks like a tuning fork diagram, see figure 1.

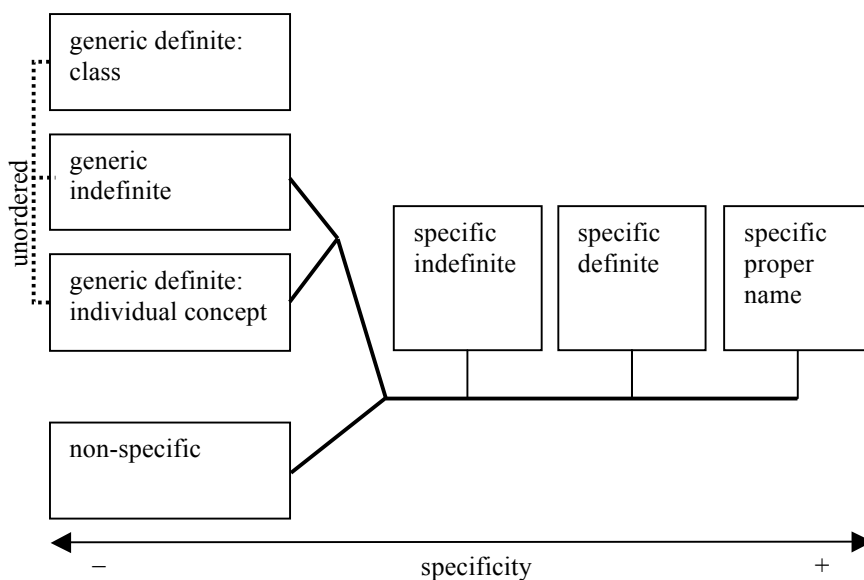


Figure 1. Specificity scale

The scale works as follows. Everything that is connected *horizontally* (the bold lines) has a relative specificity with respect to each other. For example, a non-specific noun phrase is less specific than a specific indefinite noun phrase. This is also true for a generic indefinite noun phrase. The interpretations that are connected *vertically* (the dotted line), namely the three types of generic noun phrases, can be compared to each other with respect to specificity (this will become clear in the next section), but do not have an inherent ordering. Interpretations that are connected *horizontally* nor *vertically*, such as the generic readings with respect to the non-specific reading, cannot be compared to each other at all. It will turn out that combinations like these do not result in possible appositional constructions for the relations *identification* and *inclusion*. *Attribution* is possible, because this relation

does not depend on the relative specificity of the anchor and the apposition: the only requirement is that the apposition has to be generic, see also section 2.5. Finally, I would like to point out that the generic definite class is not connected to the specific noun phrases. This will also be explained in more detail in section 2.5.

The specificity scale for noun phrases enables us to investigate in more detail which combinations are acceptable and forces us to work out whether the described minor differences give cause to revise and/or split the appositional classes used so far. This is the subject of the next four sections.

2.4 Identification II

Based on the specificity scale in figure 1, we can now extend or specify the preliminary results in table 4. This is presented in three tables: one for each relation. One has to keep in mind that the successive interpretations in these tables do not necessarily indicate an ordering. In the tables, the cells for which the combination is not expected to occur are marked with grey. These expectations are first of all based on the scale in figure 1, from which impossibilities for identification and inclusion follow. Furthermore, the conclusions from section 2.1.5 are followed: identification occurs only on the diagonal, inclusion occurs above and on the diagonal, and attribution only occurs with a generic apposition. This means that grey cells that get filled after all, need an explanation. The same is true for white cells that do not get filled.

It will turn out that unexpected combinations on the basis of our previous results indeed cannot be found (with the exception of one combination, which has a good explanation) and that the combinations that are predicted to be possible indeed occur (with some exceptions, which will be discussed in more detail). Furthermore, it turns out that the differences in nuance within the generic and specific readings are useful, since the specific and generic readings do not show the same behavior for the entire blocks of specific and generic combinations. Finally, it is of course possible to give each cell a distinct label, but that would obscure the generalizations described before. Therefore, I stick to three appositional relations: *identification*, *attribution*, and *inclusion*, which will be discussed in this order below.

With respect to identification, it is striking that this relation does not only occur on the diagonal anymore (some of the grey cells are filled):

Table 6. Identification

Apposition \ Anchor	generic definite class	generic indefinite	generic definite individual concept	non-specific	specific indefinite	specific definite	specific proper name
generic definite class	(28a)						
generic indefinite		(28b)					
generic definite individual concept			(28c)				
non-specific				(29)			
specific indefinite					(27a)	(27b)	(27c)
specific definite					(27d)	(27e)	(27f)
specific proper name					(27g)	(27h)	(27i)

The various specific readings for the anchor and the apposition form a block in this case, which means that they behave similarly with respect to each other, see the examples in (27). Even though the types of specific readings without a context have a natural ordering of specificity, ranging from indefinite via definite to proper name, the context can force them to be interpreted as equally specific, as will be explained below. This makes it possible for all combinations of specific types to occur in identification.

- (27) a. Jan heeft een pentagram, *een vijfpuntige ster*, (spec-ind, spec-ind)
 Jan has a pentagram a five-pointed star
 getekend, maar zijn moeder vindt hem niet mooi.
 drawn but his mother finds him not nice
 ‘Jan drew a pentagram, *a five-pointed star*, but his mother didn’t like it.’
- a’. Jan kocht iets moois: *een zilveren kegel*. (spec-ind, spec-ind)
 Jan bought something beautiful a silver cone
 ‘Jan bought something beautiful: *a silver cone*.’
- b. Piet speelt met een kegel, *dit leuke gadget* (spec-ind, spec-def)
 Piet plays with a cone, this nice gadget
van Jan.
 of Jan
 ‘Piet plays with a cone, *this nice gadget of Jan*.’
- c. Piet heeft een speelgoedruimteschip, de (spec-ind, spec-prop)
 Piet has a toy.spaceship the
Enterprise, voor zijn verjaardag gekregen.
 Enterprise for his birthday got
 ‘Piet got a toy spaceship, *the Enterprise*, for his birthday.’

- d. De kegel van Piet, *een bepaald cadeau van* (spec-def, spec-ind)
 the cone of Piet a certain present of
zijn oma, siert zijn bureau.
 his grandma adorns his desk
 ‘Piet’s cone, *a certain present from his grandma*, adorns his desk.’
- e. De kegel van Piet, *het speeltje dat hij van zijn* (spec-def, spec-def)
 the cone of Piet the toy:DIM that he from his
moeder kreeg, is verdwenen.
 mother got is disappeared
 ‘Piet’s cone, *the toy he got from his mother*, has disappeared.’
- f. Het ruimteschip van Piet, *de Enterprise*, is er (spec-def, spec-prop)
 the spaceship of Piet the Enterprise is there
 ook niet meer.
 also not anymore
 ‘Piet’s spaceship, *the Enterprise*, isn’t there anymore either.’
- g. De Enterprise, *een ruimteschip dat Piet van* (spec-prop, spec-ind)
 the Enterprise a spaceship that Piet from
zijn oma kreeg, heeft de kegel van Jan meegenomen.
 his grandma got has the cone of Jan taken.along
 ‘The Enterprise, *a spaceship Piet got from his grandma*, took along Jan’s cone.’
- h. De Enterprise, *het ruimteschip van Piet*, heeft (spec-prop, spec-def)
 the Enterprise the spaceship of Piet has
 de kegel van Jan meegenomen.
 the cone of Jan taken.along
 ‘The Enterprise, *Piet’s spaceship*, took along Jan’s cone.’
- i. De Enterprise, *ofwel de U.S.S. Enterprise* (spec-prop, spec-prop)
 the Enterprise or the U.S.S. Enterprise
NCC-1701, krijgt een nieuwe missie.
 NCC-1701 gets a new mission
 ‘The Enterprise, *or the U.S.S. Enterprise NCC-1701*, will get a new mission.’

The distinction between definite and indefinite generics, on the other hand, turns out to be a matter of significance in this respect. *Identification* is only possible if both elements are of the same type:

- (28) a. De reuzenpanda, *de Ailuropoda melanoleuca*, eet (gen-dcl, gen-dcl)
 the giant.panda the *Ailuropoda melanoleuca* eats
 voornamelijk bamboe.
 mainly bamboo
 ‘The giant panda, *the Ailuropoda melanoleuca*, eats mainly bamboo.’

- a'. De WNF-afgeezant hield een lezing over het dier (gen-dcl, gen-dcl)²
 the WWF.envoy held a lecture on the animal
 van het jaar, *de panda*.
 of the year the panda
 'The WWF envoy gave a lecture on the animal of the year, *the panda*.'
- b. Een Guinees biggetje, *oftewel een cavia*, maakt (gen-ind, gen-ind)
 a guinean piglet or a cavy makes
 knorrende geluiden.
 grunting noises.
 'A guinea pig, *or a cavy*, makes grunting noises.'
- c. De machtigste man ter wereld, *de president van* (gen-dco, gen-dco)
 the mightiest man in.the world the president of
de Verenigde Staten, woont in het Witte Huis
 the United States lives in the White House
 'The mightiest man in the world, *the president of the United States*, lives
 in the White House.'

The combination of two different generic noun phrases is impossible for *identification*: the ways in which the genericity gets about differ too much.

Here follows an example of non-specific *identification* in order to be complete:

- (29) Jan wilde graag eens een aapje, (non-specific, non-specific)
 Jan wanted gladly once a monkey:DIM
zo'n leuk bewonertje van de Apenheul, aaien.
 such.a nice inhabitant:DIM of the Apenheul stroke
 'Jan would like to stroke a monkey, *such a nice inhabitant of the Apenheul*, once.'

In contrast to (27a), the two noun phrases in this case do not refer to a uniquely identifiable concept.

It turns out that the anchor and the apposition, though they can be inherently ambiguous with respect to their exact location on the specificity scale, in a relation of identification always get the same reading. This can be explained as follows. As stated before, noun phrases can be disambiguated by their context. Since the anchor and the apposition form an appositional construction together, they are in the same context. The entire construction gets only one reading, which is shared by the anchor and the apposition. Furthermore, the anchor and the apposition itself actually are part of each other's context. This means that there are three things, each of which

² At first sight, *het dier van het jaar*, 'the animal of the year', may seem an individual concept. Here, it does not refer to the group of animals that received this title over all years, but only to the animal that received it this year. Yet, this title is not assigned to one individual animal here, but to a species of animals, the panda. Thus, the anchor is interpreted as a definite class, just like the apposition. Note that this element would have been interpreted as an individual concept if the apposition were absent. Thus, the anchor and the apposition influence each other's interpretation. This phenomenon is discussed at the end of this section.

can have its own restrictions on the possible readings for the anchor and the apposition: the forms of both the anchor and the apposition themselves, and the rest of the sentence (or an even larger context). The construction as a whole gets a possible reading only if one particular reading obeys the restrictions of all three parts. Each single part then gets the interpretation of the entire construction in retroaction. Therefore, the set of possible interpretations for the appositional construction consists of the intersection of the sets of possible interpretations for the anchor, the apposition, and the context.

In the examples below, the possible interpretations are indicated by braces surrounding the parts in question with the labels G, N, and S, for generic, non-specific, and specific. The possible readings for the entire construction are given in brackets at the end of the sentence. For example, in (30a), the indefinite anchor potentially can get all three readings: generic, non-specific, or specific. The context (the apposition excluded) does not impose any additional requirements on its reading. Therefore, if the apposition in (30a) were left out, the sentence would be ambiguous with respect to the reading of the subject, *een knuffelaar*. The presence of the apposition, the definite description *het cadeau dat Jan van zijn moeder kreeg*, changes this, however. Since this description only refers to one particular present, it has to be interpreted specifically. The appositional construction makes sure that the anchor and the apposition have the same identity. Therefore, if the apposition is interpreted as specific, the anchor has to be interpreted as specific as well. Similarly, in (30bc), the context imposes requirements on the interpretation of the anchor and the apposition.

- (30) a. {_{G/N/S} Een knuffelaar}, {_S *het cadeau dat Jan van zijn moeder kreeg*}, {_{G/S/N} ligt op de grond}. (S: specific)
 a teddy.monkey the present that Jan from his mother
 got lies on the ground
 ‘A teddy monkey, *the present Jan got from his mother*, is lying on the ground.’
- b. Jan wil {_{G/N/S} een aap}, {_{G/N/S} *een gorilla*}, kopen, {_N maar hij
 Jan wants an ape a gorilla buy but he
 kan er geen vinden}. (N: non-specific)
 can there not.one find
 ‘Jan wants to buy an ape, *a gorilla*, but he can’t find one.’
- c. Jan wil {_{G/N/S} een aap}, {_{G/N/S} *een gorilla*}, kopen, {_S maar de huidige
 Jan wants an ape a gorilla buy but the present
 eigenaar wil hem niet kwijt}. (S: specific)
 owner wants him not lost
 ‘Jan wants to buy an ape, *a gorilla*, but the present owner doesn’t want to dispose of it.’

This also explains that the part of the appositional construction that requires the most specific reading determines the interpretation of the complete construction. Noun phrases that can get a less specific reading can also get a more specific one, but not the other way around.

2.5 Attribution II

Attribution turns out to be possible with appositions of two types of generic noun phrases: indefinites and individual concepts:

Table 7. Attribution

Anchor \ Apposition	generic definite class	generic indefinite	generic definite individual concept	non-specific	specific
generic definite class		(31a)	(32a)		
generic indefinite		(31b)	(32b)		
generic definite individual concept		(31c)	(32c)		
non-specific		(31d)	(32d)		
specific indefinite		(31e)	(32e)		
specific definite		(31f)	(32f)		
specific proper name		(31g)	(32g)		

The possible combinations for *attribution* with an indefinite generic apposition are illustrated in (31):

- (31) a. Het prisma, *een ruimtelijke figuur*, heeft (gen-dcl, gen-ind)
 the prism a three-dimensional figure has
 toepassingen in de optiek.
 applications in the optics
 ‘The prism, *a three-dimensional figure*, is applied in optics.’
- b. Een cilinder, *een ruimtelijke figuur*, kan (gen-ind, gen-ind)
 a cylinder a three-dimensional figure can
 gemaakt worden van een vlak vel papier.
 made be of a plane sheet paper
 ‘A cylinder, *a three-dimensional figure*, can be made from a plane sheet of paper.’
- c. De aap van het jaar, *een mooie en slimme aap*, wordt gekozen door het publiek. (gen-dco, gen-ind)
 the ape of the year a good-looking and
smart ape, wordt gekozen door het publiek.
 smart ape is chosen by the public
 ‘The ape of the year, *a good-looking and smart ape*, is chosen by the public.’
- d. Jan wil een tetraëder, *een bijzonder veelvlak*, tekenen. (non-spec, gen-ind)
 Jan wants a tetrahedron a special
 polyhedron draw
 ‘Jan wants to draw a tetrahedron, *a special polyhedron*.’

- e. Jan heeft een bepaalde raket, *een moordwapen*, (spec-ind, gen-ind)
 Jan has a certain missile a murder.weapon
 afgevuurd, maar het ding heeft niets geraakt.
 launched but the thing has nothing hit
 ‘Jan launched a certain missile, *a murder weapon*, but it didn’t hit anything.’
- f. De kegel van Piet, *een speelattribuut*, is helder rood. (spec-def, gen-ind)
 the cone of Piet a toy is bright red
 ‘Piet’s cone, *a toy*, is bright red.’
- g. De Enterprise, *een ruimteschip*, ziet er goed uit. (spec-prop, gen-ind)
 theEnterprise a spaceship sees there good out
 ‘The Enterprise, a spaceship, looks good.’

At first sight, it is hard to tell whether the appositions in these example sentences have a non-specific or a generic reading. Nevertheless, I would like to say that it has to be a generic one. After all, *attribution* uses the typical features of an indefinite generic reading. An individual noun phrase (here the apposition) is lifted to represent a class, by (implicitly) applying a universal quantifier. This makes it possible to choose a member, or several members, of this class. This is exactly what happens in the appositional constructions at hand. In (31g), for instance, *The Enterprise* is an individual from the class of spacecrafts.

Furthermore, attribution is clearly related to predication. A feature is attributed to the subject, which is comparable to the anchor. The apposition therefore can be seen as a predicate complement (see Doron 1994 and chapter 3). In a case like this, where a noun phrase functions as a predicate, the predicate is always on the *individual level*. In other words, the predicated feature is not about a temporary state of affairs, but indicates a semi-permanent feature of the individual, which is not necessarily related to the here and now. This type of predicates is inherently generic (see Chierchia 1995 for further argumentation).

The possible combinations for *attribution* with a definite generic apposition are illustrated in (32):

- (32) a. De gorilla, *het eeuwige slachtoffer van stropers*, (gen-dcl, gen-dco)
 the gorilla the eternal victim of poachers
 dreigt uit te sterven.
 threatens out to die
 ‘The gorilla, *the endless victim of poachers*, threatens to become extinct.’
- b. Een zwijn met jongen, *het gevaarlijkste dier* (gen-ind, gen-dco)
 a boar with young the most.dangerous animal
in Nederland, leeft in afzondering.
 in the.Netherlands lives in seclusion
 ‘A boar with young, *the most dangerous animal in the Netherlands*, lives in seclusion.’

- c. De burgemeester van een stad, *de* (gen-dco, gen-dco)
 the mayor of a city the
eerstverantwoordelijke voor de inwoners, moet door hen gekozen
 most.responsible.person for the inhabitants must by them chosen
 worden.
 be
 ‘A city’s mayor, *the person who is most responsible for the inhabitants*,
 has to be chosen by them.’
- d. Jan wil voor sinterklaas een i-pod, *het meest* (non-spec, gen-dco)
 Jan wants for sinterklaas an i-pod the most
begeerde item door jongens van zijn leeftijd.
 desired item by boys of his age
 ‘Jan wants an i-pod, *the most desired item for boys of his age*, for
 sinterklaas (Dutch feast of St. Nicholas).’
- e. Marie bezocht een zus van Jan die in (spec-ind, gen-dco)
 Marie visited a sister of Jan who in
 Amerika woont, *het lievelingetje van zijn moeder*.
 America lives the favorite of his mother
 ‘Marie visited a sister of Jan who lives in America, *his mother’s*
favorite.’
- f. De broer van Jan, *de beste van zijn klas*, (spec-def, gen-dco)
 the brother of Jan the best of his class
 had een tien voor taal.
 had a ten for language
 ‘Jan’s brother, *the best in his class*, got a ten (the highest score) for
 language skills.’
- g. Cohen, *de populairste burgemeester van* (spec-prop, gen-dco)
 Cohen the most.popular mayor of
Nederland, wil de boel bij elkaar houden.
 the.Netherlands wants the lot at each.other keep
 ‘Cohen, *the most popular mayor of the Netherlands*, wants to keep the lot
 together.’

Note that definite noun phrases in these sentences are considered predicative then. This is a surprising result. Chierchia (1995) states in a footnote that, according to him, definite noun phrases (in contrast to indefinite noun phrases) do not occur in predicative, but always in equative sentences. This is incorrect (see, for instance, (33a) below), but the distinction between predicative and equative sentences is useful (see chapter 3, Blom and Daalder 1977, and Higgins 1979, for instance). I think this distinction is reflected in the difference between identificational and attributive appositions. The predicate complement of a predicative sentence can be used as an attributive apposition and the predicate complement of an equative sentence can be used as an identificational apposition. In section 3.7, I will come back in more detail to the correlation between classes of appositions and types of copular clauses.

Higgins (1979) already notes that definite noun phrases can also be used in a predicative sentence. This can be shown if we use a test from Rothstein (1995). If a

noun phrase is able to function as the small clause complement of the verb *consider*, it is predicative. If this is not possible, the noun phrase is equative. *Het lievelingetje van zijn moeder*, ‘his mother’s favorite’ in (33a) is therefore predicative in the sentence *Jan is zijn moeders lievelingetje*, ‘John is his mother’s favorite’. *The reindeer* is equative in the sentence *The pet of the Lapps is the reindeer*. As stated before, this is connected to the fact that the apposition *his mother’s favorite* in (32e) is attributive, whereas *the reindeer* in *The pet of the Lapps, that is the reindeer, is used to severe circumstances*, for example, is identificational.

- (33) a. Peter considers John his mother’s favorite.
 b. Mary considers John the top of the class.
 c. * Mary considers the pet of the Lapps the reindeer.

The definite noun phrases that are possible in attributive appositions are of a special type, namely the individual concept, as described in section 2.2.3. Usually, these noun phrases are cataphorically definite (cf. Quirk et al. 1985), which means that a (post)modifier of the head is responsible for the definiteness; they are almost always definite because of their uniqueness in the given context (dependent, as stated before, on a variable setting), but not necessarily because they are familiar to the hearer. Since these noun phrases function as attributive appositions in the examples in (32), it seems reasonable to think that they indeed have a generic reading.

In order to determine the difference between attributive appositions and the other two classes, the possibility to paraphrase the apposition with an appositive relative clause with the copula *be* can be used as a criterion. This way of paraphrasing is only possible for attributive appositions.³ Compare the examples in (34) to those in (31) and (32):

- (34) a. De broer van Jan, die de beste van zijn klas (*attribution: gen-dco*)
 the brother of Jan who the best of his class
 is, had een tien voor taal.
 is had a ten for language
 ‘Jan’s brother, who is the best in his class, got a ten for reading and writing.’
 b. Cohen, die de populairste burgemeester van (*attribution: gen-dco*)
 Cohen who the most popular mayor of
 Nederland is, wil de boel bij elkaar houden.
 the Netherlands is wants the lot at each other keep
 ‘Cohen, who is the most popular mayor in the Netherlands, wants to keep the lot together.’
 c. Het prisma, dat/wat een ruimtelijke (*attribution: gen-ind*)
 the prism which a three-dimensional
 figuur is, heeft toepassingen in de optiek.
 figure is has applications in the optics
 ‘The prism, which is a three-dimensional figure, is applied in optics.’

³ For Dutch, this generalisation seems rather robust to me. English native speakers accept appositive relative paraphrases for identificational appositions in some cases.

- d. Jan, die een lapzwans is, verzuimde de afwas (*attribution: gen-ind*)
 Jan who a drip is omitted the dishes
 te doen.
 to do
 ‘Jan, who is a drip, omitted to do the dishes.’

Now, compare the examples in (35) to those from (27):

- (35) a. * Het ruimteschip van Piet, *dat de* (*identification: spec-prop*)
 the spaceship of Piet whichthe
Enterprise is, is er ook niet meer.
 Enterprise is is there too not anymore
 Lit. ‘Piet’s spaceship, which is the Enterprise, isn’t there anymore either.’
- b. * De reuzenpanda, *die de pandabeer is*, eet (*identification: gen-dcl*)
 the giant.panda which the panda.bear is eats
 voornamelijk bamboe.
 mainly bamboo
 Lit. ‘The giant panda, which is the panda bear, eats mainly bamboo.’
- c. * De kegel van Piet, *die het speeltje dat* (*identification: spec-def*)
 the cone of Piet which the toy that
hij van zijn moeder kreeg is, is verdwenen.
 he from his mother got is is disappeared.
 Lit. ‘Piet’s cone, which is the toy he got from his mother, has disappeared.’
- d. * Een veelvlak, *dat zoals een tetraëder* (*inclusion: gen-ind*)
 a polyhedron which such.as a tetrahedron
is, is opgebouwd uit veelhoeken.
 is is built.up from polygons.
 Lit. ‘A polyhedron, which is such as a tetrahedron, consists of polygons.’

This criterion was introduced by Wiers (1978) to distinguish between what she called real appositions and attributive noun phrases, suggesting that attributive appositions actually are not appositions at all, but a different syntactic construction with its own structure. I will argue that they are just a semantic class, however.

Attribution is only possible with two of the three generic readings: the indefinite generic reading and the definite generic reading referring to an individual concept (see table 7). A relation of attribution turns out to be impossible for all combinations where the apposition has a definite generic reading referring to a class. Why is this the case and why do the other generic readings not face the same problems? This can be explained as follows. As described in section 2.2.3, the generic definite noun phrase refers directly to the entire class. This means that there is no variable referring to the individual members of that class. Therefore, this noun phrase cannot be connected with references to individual members. (Conversely, this also explains why there is no relation of inclusion between a generic definite class and a specific apposition, as will become clear in section 2.6 below.) Even combinations with a generic anchor are impossible. This means that a group of

individuals cannot be thought to be part of a class, since a class is opaque by definition.

The indefinite generic noun phrase and the individual concept, on the other hand, first introduce an individual member as a variable and then use an operator in order to generalize over the class. That way, a connection with expressions about individual members of the class is possible.

Finally, I want to point out a special kind of attributive appositions, namely the ones where the article is left out (see Quirk et al. 1985 and Doron 1994; the latter uses this fact as an argument to show that appositions are predicates):

- (36) a. Drs. Mallebroetje, *uitvinder van de automatische*
 MA Mallebroetje inventor of the automatic
appositieclassifier, doet niet mee aan de provinciale verkiezingen.
 apposition.classifier does not with at the provincial elections
 ‘Mallebroetje MA, *the inventor of the automatic apposition classifier*,
 does not take part in the provincial elections.’
- b. Jan, *schoenmaker in hart en nieren*, blijft altijd bij zijn leest.
 Jan cobbler in heart and kidneys remains always at his last
 ‘Jan, *a cobbler in heart and soul*, always sticks to his last.’

This possibility, which occurs especially in newspapers, is restricted to professions and similar cases. See section 3.5 for a more detailed discussion of this option. These noun phrases without a determiner are interpreted generically and therefore get an attributive function.

2.6 Inclusion II

The inclusion relation still occurs on or above the diagonal of the table, except in the (unordered) generic part, as can be predicted from figure 1. Furthermore, the prediction from figure 1 that an inclusion relation is impossible with a generic definite class for the anchor combined with a specific apposition is borne out. This was already explained in section 2.3.

Table 8. Inclusion

Apposition Anchor	generic definite class	generic indefinite	generic definite individual concept	non-specific	specific indefinite	specific definite	specific proper name
generic definite class	(38a)	(38b)	(38c)				
generic indefinite	(38d)	(38e)	(38f)		(39a)	(39b)	(39c)
generic definite individual concept	(38g)	(38h)	(38i)		(39d)	(39e)	(39f)
non-specific				(39g)	(39h)	(39i)	(39j)
specific indefinite						(37a)	(37b)
specific definite						(37c)	(37d)
specific proper name							

The possible combinations within the group of specific noun phrases are illustrated in (37):

- (37) a. Piet speelt met een paar kegels, *waaronder* (spec-ind, spec-def)
 Piet plays with a few cones among.which
de rode conus van Jan.
 the red cone of Jan
 ‘Piet is playing with a few cones, *among which Jan’s red cone.*’
- b. Piet speelt met een paar ruimteschepen, (spec-ind, spec-prop)
 Piet plays with a few spaceships
waaronder de Enterprise.
 among.which the Enterprise
 ‘Piet is playing with a few spaceships, *among which the Enterprise.*’
- c. Jan speelt met de raketten van de NASA, (spec-def, spec-def)
 Jan plays with the rocket of the NASA
waaronder de blauwe raket van Piet.
 among.which the blue rocket of Piet
 ‘Jan is playing with NASA’s rocket, *among which Piet’s blue rocket.*’
- d. De ruimteschepen van de NASA, *waaronder* (spec-def, spec-prop)
 the spaceships of the NASA among.which
de Orion, worden iedere week opgepoetst.
 the Orion are every week polished
 ‘NASA’s spaceships, *among which the Orion*, are polished every week.’

The definite noun phrase indeed turns out to be able to get a more specific reading than the specific variant of the definite noun phrase, but the converse is not true. Therefore, *inclusion* with a definite anchor does not occur with an indefinite specific apposition. The proper name, in turn, is more specific than the normal definite noun

phrase. This excludes an inclusion relation with a proper name as its anchor. The proper name is so specific that it is impossible to specify a part of it. This explains the absence of *inclusion* at the right bottom of the table. Finally, an inclusion relation seems impossible if both the anchor and the apposition are specific indefinite. I do not have a firm explanation for that. Intuitively, the reason seems to be that an indefinite anchor is rather interpreted non-specific in order to intensify the difference with the apposition.

Inclusion is always possible in constructions where the anchor and the apposition both get a generic interpretation. This shows that the various generic readings are not inherently ordered with respect to each other, as represented in figure 1. The possible combinations are illustrated in (38):

- (38) a. De aap, maar vooral de orang-oetan, heeft (gen-dcl, gen-dcl)
 the ape but especially the orangutan has
 een menselijke uitstraling.
 a human appearance
 ‘The ape, but especially the orangutan, has a human appearance.’
- b. ? De aap, maar in het bijzonder een gorilla, is (gen-dcl, gen-ind)
 the ape but in the particular a gorilla is
 erg sterk.
 very strong
 Lit. ? ‘The ape, but in particular a gorilla, is very strong.’
- c. De aap, maar in het bijzonder het alfamannetje (gen-dcl, gen-dco)
 the ape but in the particular the alpha.male
 van een groep, komt op voor zijn soortgenoten.
 of a group comes up for his congeners
 ‘The ape, but in particular a group’s alpha male, stands up for its congeners.’
- d. Een aap, niet in het minst de chimpansee, houdt (gen-ind, gen-dcl)
 an ape not in the least the chimpanzee holds
 van bananen.
 of bananas
 ‘An ape, not in the least the chimpanzee, likes bananas.’
- e. Een veelvlak, zoals een tetraëder, is (gen-ind, gen-ind)
 a polyhedron such.as a tetrahedron is
 opgebouwd uit veelhoeken.
 built.up from polygons
 ‘A polyhedron, such as a tetrahedron, consists of polygons.’
- f. Een kind, maar vooral de jongste van een (gen-ind, gen-dco)
 a child but especially the youngest of a
 gezin, wordt tegenwoordig vaak verwend.
 family is nowadays often spoiled
 ‘A child, but especially the youngest one in a family, is often spoiled nowadays.’

- g. De lievelingsdieren van Jan, waaronder de (gen-dco, gen-dcl)
 the favourite animals of Jan among which the
gorilla, zijn zonder uitzondering exotisch.
 gorilla are without exception exotic
 ‘Jan’s favourite animals, among which the *gorilla*, are without exception
 exotic.’
- h. De leider van een bestuurseenheid, zoals (gen-dco, gen-ind)
 the leader of a management unity such as
een decaan, heeft vaak kapsones.
 a dean has often airs.
 ‘The leader of a management unity, such as a *dean*, often gives himself
 airs.’
- i. De leider van een gemeenschap, zoals de (gen-dco, gen-dco)
 the leader of a community such as the
burgemeester van een stad, moet zijn achterban goed kennen.
 mayor of a city must his rank and file well know
 ‘The leader of a community, such as the *mayor of a city*, has to know his
 rank and file well.’

We observed before that a relation of inclusion is impossible for the combination of an indefinite generic anchor with a non-specific apposition. Now, we observe that non-specific appositions cannot be combined with any type of generic anchor. Furthermore, combinations with a non-specific anchor and a generic apposition do not exist. This shows that the non-specific reading and the generic reading cannot be compared to each other, as the specificity scale in figure 1 indicates. The same applies to the combination of an anchor of the generic definite class and a non-generic apposition (see also the previous section).

With respect to the remaining combinations, *inclusion* behaves as we would expect from the beginning:

- (39) a. Een exotisch huisdier, maar in het bijzonder een (gen-ind, spec-ind)
 an exotic pet but in the particular a
bepaalde aap van Piet, heeft extra aandacht nodig.
 certain ape of Piet has extra attention necessary
 ‘An exotic pet, but in particular a *certain ape of Piet*, needs extra
 attention.’
- b. Een aap, zoals de *bonobo van Jan*, vergt (gen-ind, spec-def)
 an ape such as the bonobo of Jan demands
 veel aandacht.
 much attention
 ‘An ape, such as *Jan’s bonobo*, demands a lot of attention.’
- c. Een planeet, zoals *Mars*, draait in een (gen-ind, spec-prop)
 a planet such as Mars circles in an
 ellipsvormige baan rond een ster.
 ellipse-shaped path around a star
 ‘A planet, such as *Mars*, circles in an ellipse-shaped path around a star.’

- d. De geboren leider van een apengroep, zoals (gen-dco, spec-ind)
 the born leader of a group of apes such as
een bepaalde aap van Marie, toont zich zelfs dominant ten
 a certain ape of Marie proves himself even dominant to the
 opzichte van mensen.
 respect of people
 ‘The born leader of a group of apes, such as a certain ape of Marie, even
 proves itself dominant with respect to people.’
- e. Het pronkstuk van een verzamelaar, bijvoorbeeld (gen-dco, spec-def)
 the showpiece of a collector for example
de raketkop van Jan, moet er altijd stralend uitzien
 the warhead of Jan must there always radiant look
 ‘A collector’s showpiece, for example Jan’s warhead, always has to look
 radiant.’
- f. De nieuwste raket van de NASA, maar in het (gen-dco, spec-prop)
 the latest rocket of the NASA but in the
bijzonder de Ares V, wordt altijd met argusogen bekeken.
 particular the Ares V is always with Argus’ eyes looked at
 ‘NASA’s latest rocket, but in particular the Ares V, is always looked at
 with Argus’ eyes.’
- g. Jan wil een leuk dier, bijvoorbeeld een aap, (non-spec, non-spec)
 Jan wants a nice animal for example an ape
 voor zijn verjaardag.
 for his birthday
 ‘Jan wants a nice animal, for example an ape, for his birthday.’
- h. Jan wil een paar voertuigen, waaronder (non-spec, spec-ind)
 Jan wants a few vehicles among which
een raket van Piet, tekenen.
 a rocket of Piet draw
 ‘Jan wants to draw a few vehicles, among which a rocket of Piet.’
- i. Jan wil ook een leuk huisdier, zoals de (non-spec, spec-def)
 Jan wants too a nice pet such as the
chimpansee van Piet.
 chimpanzee of Piet
 ‘Jan wants a nice animal, such as Piet’s chimpanzee, too.’
- j. Jan wil een ruimteschip, bijvoorbeeld de (non-spec, spec-prop)
 Jan wants a spaceship for example the
Enterprise, natekenen.
 Enterprise draw
 ‘Jan wants to draw a spaceship, for example the Enterprise.’

In short, *inclusion* is possible if the apposition is more specific than the anchor. Depending on the meaning of the words that are used, this is also possible if both belong to the same type, as for example in (39g).

2.7 Final overview

A complete overview of the classification described in the previous sections is given in table 9 on the next page. Remember that the symbols are used as follows: ‘=’ for *identification*; ‘ \supset ’ for *attribution*, and ‘ \subset ’ for *inclusion*.

In sum, this overview shows the following. *Attribution* only appears with generic appositions (but not with the generic definite class). *Identification* only occurs if the anchor and the apposition are equally specific (where specific indefinite, specific definite and proper name potentially count as equal). *Inclusion* only occurs if the reading of the apposition is more specific than the one of the anchor (where it holds that the three types of generic noun phrases are inherently unordered). With respect to all this, I use the specificity scale as proposed in figure 1. Notice that if we take everything described above into account, it follows that none of the discussed relationships is possible between a specific anchor and a non-specific apposition. Also, it is shown that the generic definite class cannot be combined with the non-generics.

Table 9. Overview

Apposition Anchor	gen-dcl	gen-ind	gen-dco	non-spec	spec-ind	spec-def	spec-pro
gen-dcl		\supset (31a)	\supset (32a)				
	= (28a) \subset (38a)	\subset (38b)	\subset (38c)				
gen-ind		\supset (31b)	\supset (32b)				
	= (28b) \subset (38d)	\subset (38e)	\subset (38f)		\subset (39a)	\subset (39b)	\subset (39c)
gen-dco		\supset (31c)	\supset (32c)				
	= (28c) \subset (38g)	\subset (38h)	\subset (38i)		\subset (39d)	\subset (39e)	\subset (39f)
non-spec		\supset (31d)	\supset (32d)				
				= (29) \subset (39g)	\subset (39h)	\subset (39i)	\subset (39j)
spec-ind		\supset (31e)	\supset (32e)				
					= (27a) \subset (37a)	= (27b) \subset (37b)	= (27c) \subset (37c)
spec-def		\supset (31f)	\supset (32f)				
					= (27d) \subset (37c)	= (27e) \subset (37c)	= (27f) \subset (37d)
spec-pro		\supset (31g)	\supset (32g)				
					= (27g)	= (27h)	= (27i)

2.8 Apposition markers and the classification

In the literature, for example in Quirk et al. (1985), it is suggested that there is a connection between the type of appositive relationship and possible apposition markers. Schindler (1990) even based his analysis mainly on the relations expressed by apposition markers. In order to complete the overview, I listed apposition markers in Dutch, English and German and investigated which markers can be combined with which class(es). The result is given in table 10. The underscored markers from English are from Del Saz Rubio (2003: 212-213) or from Quirk et al. (1985: 1307). The German markers are from Schindler (1990: 237-249). It follows from the table that there is indeed a clear correlation between the various markers and the kinds of appositional constructions, which confirms the proposed classification. This list gives a good impression, but it is not exhaustive.

Table 10. Apposition markers – part I

Dutch	English	German	Identification (=)	Attribution (D)	Inclusion (C)
Ø [asyndetic]			X	X	
(...) namelijk te weten en wel dat wil zeggen	(...) <u>namely</u> <u>to wit, viz</u> and (...) <u>that is to</u> <u>say</u>	nämlich und zwar	X X X X		
dat is met andere woorden	(...) <u>that is, i.e.</u> (...) <u>in other</u> <u>words</u> <u>in a sense?</u>	das heißt mit anderen Worten	X X		
of of(te)wel simpel / anders gezegd	<u>or</u> <u>put (more)</u> <u>simply</u> / differently		X X		
in technische / wetenschappelijke / x termen	<u>in (more)</u> <u>technical</u> / <u>scientific</u> / <u>x</u> <u>terms</u> , <u>technically</u> <u>(speaking)</u>	anders, deutlicher gesagt mehr technisch ausgedrückt	X		
ook wel ik bedoel / ... bedoel ik	(...) <u>I mean</u>	ich meine	X X		
... weet je wel (...) zeg maar	... you know		X X		

Table 10. Apposition markers – part II

Dutch	English	German	Identification (=)	Attribution (D)	Inclusion (C)
overigens zoals je weet	by the way as you know	übrigens		X X	
zoals bekend		bekanntlich		X	
(E) ³	bijvoorbeeld waaronder zoals, zo ook zeg inclusief/... inluis	(...) <u>for example</u> , e.g., (...) <u>for instance</u> among them <u>such as</u> , like <u>say</u> <u>including</u> / ... <u>included</u>	beispielsweise, zum Beispiel unter anderem so auch, wie auch einschließlich, ... eingeschlossen		X X X X X
(P)	(maar) met name (maar) in het bijzonder (maar) hoofdzakelijk speciaal niet in het minst (maar) vooral, voornamelijk	<u>notably</u> (but) (...) <u>in particular</u> (but) <u>mainly</u> / <u>chiefly</u> / <u>mostly</u> (but) <u>especially</u> (but) <u>particularly</u>	namentlich besonders, insbesondere hauptsächlich, in der Hauptsache, in erster Linie, (zu)meist überwiegend, vor allem, vornehmlich		X X X X X X

Some representative examples are given in (40):

³ As described in section 2.1.3, the markers that facilitate inclusion can be divided into those that represent exemplification and those that relate to particularisation; this is indicated by (E) and (P). Since this distinction is the result of an external factor (the nature of the predicate in the matrix sentence) and not of the appositional construction itself, it is not essential for the classification of appositions.

- (40) a. mijn buurman, Jan (identification, \emptyset)
 my neighbour Jan
- b. mijn buurman, en wel Jan (identification, en wel)
 my neighbour and right Jan
 ‘my neighbour, namely Jan’
- c. mijn buurman, Jan weet je wel (identification, ... weet je wel)
 my neighbour Jan know you right
 ‘my neighbour, Jan you know’
- d. Jan, een lapzwans (attribution, \emptyset)
 Jan a drip
- e. een aantal buren, waaronder Jan (inclusion, waaronder)
 a number neighbours among.whom Jan
 ‘some neighbours, including Jan’

Usually, apposition markers occur at the front of the apposition. Some of them, however, such as *namelijk*, ‘namely’, and *zeg maar*, ‘say’, can also occur at the back. (This is indicated with dots in table 10.) There are even markers which obligatorily occur at the back of the apposition, for example *inclus*, included, and *weet je wel*, ‘you know’.

The asyndetic construction, where the anchor and the apposition are connected to each other without a marker, is remarkable. This connection can be used both for *identification* and for *attribution*:

- (41) a. De gorilla van Jan, *Appie*, slingert vrolijk heen (identification)
 the gorilla of Jan Appie swings cheerfully to
 en weer.
 and back
 ‘Jan’s gorilla, *Appie*, cheerfully swings back and forth.’
- b. *Appie, een aap*, houdt van slingeren. (attribution)
 Appie an ape holds of swing
 ‘Appie, *an ape*, likes to swing.’

For attribution, this is the most common way to form the construction. Why it is also possible to leave out the marker in *identification* is not totally clear. In general, however, we could say that the various apposition markers express the relation between the anchor and the apposition explicitly and therefore indicate which class of apposition is at hand.

The correlation in table 10 seems to be very robust. This means that the possibility to insert a certain marker can help us to classify an appositional construction semantically. If *namelijk* (namely) can be used as a marker, for instance, the apposition is identificational. If *overigens* (by the way), can be used as a marker, the apposition is attributive, and so on. The converse is not necessarily the case. For example, not every identificational relation can be expressed by *namelijk*, (namely).

2.9 Non-nominal appositions

Appositions are usually nominal constituents, but other categories are possible as well, as we saw in chapter 1. Here are some additional examples. They involve clauses, verbs, predicates, adjectives, and adverbials:

- (42) a. Ik doe mijn dagelijkse sportoefening, dat wil zeggen ik fiets naar mijn werk.
I do my daily sports.exercise that wants say I cycle to my work
'I'm doing my daily sports exercise, that is to say I'm cycling to work.'
- b. Marie gaf Piet de bons, dat wil zeggen maakte een einde aan hun relatie.
Marie gave Piet the bump that wants say made an end to their relation
'Marie gave Piet the push, that is to say she ended their relation.'
- c. Ik las een intrigerende, dat wil zeggen fascinerende, verhandeling.
I read an intriguing that wants say fascinating discussion
'I read an intriguing, that is to say fascinating, discussion.'
- d. De koningin zit daar, op de tafel.
the queen sits there on the table
'The queen is sitting there, on the table.'

Can the three classes *identification*, *attribution*, and *inclusion* also be attested for non-nominal appositions? The examples above are from the first (canonical) type. For adverbials of time and place, among others, a relation of *inclusion* is possible as well, see (43):

- (43) a. Het wordt de hele week, maar vooral morgen, erg warm.
it becomes the whole week but especially tomorrow very warm
warm
'This whole week, but especially tomorrow, it will be very warm.'
- b. Ik ben graag buiten, bijvoorbeeld in het bos.
I am gladly outside for.example in the forest
'I like to be outside, for example in the forest.'
- c. Het is goed om elke dag even, zeg een half uur, te bewegen.
it is good to every day a.while say a half hour to move
move
'It is good to move for a while, say half an hour, every day.'

Finally, *attribution* is illustrated in (44):

- (44) a. In het bos, buiten, krijg je veel frisse lucht.
in the forest outside get you much fresh air
'In the forest, outside, one gets a lot of fresh air.'

- b. In Zeeland, *aan de kust*, liggen de temperaturen ‘s zomers in Zeeland at the coast lay the temperatures in the summer laag.
low
‘In Zeeland, *at the coast*, the temperatures are low in summer.’
- c. Tussen twaalf en drie, *op het heetst van de dag*, kun je beter niet zonnen.
better not sun
‘It is better not to sun between twelve and three, *during the hottest part of the day*.’

In short, non-nominal appositions can be divided in three classes as well. This seems remarkable, because these classes are defined on the basis of a specificity scale, and specificity concerns nominal groups. I do not want to claim at all that the scale from generic to specific would apply to non-nominal constituents. Still, on the basis of the meaning of the words, it is possible to say that related words can be more or less specific with respect to each other. A relation like *identification*, *attribution*, or *inclusion* can be determined on the basis of the relative specificity that follows from the lexical meanings of the constituents at hand.

2.10 Conclusion

Appositions can be classified on the basis of semantic characteristics. Both the anchor and the apposition can be characterized on a complex scale for the interpretation of noun phrases, ranging from generic or non-specific to proper name. The differences in the relative specificity of the anchor and the apposition correspond with three possible relations: *identification*, *attribution*, and *inclusion*. For all possible combinations, I investigated on the basis of examples in Dutch whether they can be used in an appositional construction and why (not). All in all, I listed three main types and fifty possible subtypes of nominal appositional constructions. Furthermore, there is a clear correlation between the class to which an apposition belongs and the markers that are possible to express the relation between the anchor and the apposition. Finally, it was shown that non-nominal appositions occur as well. Although it is impossible to characterize these on the specificity scale directly, it turned out to be possible to classify them as *identification*, *attribution*, or *inclusion*, based on the fact that there are relative differences in specificity due to lexical meanings.

3. The secondary proposition: clausal predication

In this chapter, I argue that sentences that contain an apposition convey two separate propositions: a primary one from the matrix and a secondary one from the apposition. The appositive proposition states something like ‘[anchor] is [apposition]’. The speaker can use the appositive content to give a comment or some extra information on an element from the main proposition (3.1). The two propositions at hand can influence each other’s content via discourse relations (3.2).

Since the secondary proposition is only implicitly given in an appositional construction, one might wonder what kind of inference relation there is between the whole utterance and the appositive proposition. I will show that the appositive content is a conventional implicature: it follows from the conventional meaning and composition of words and yet it is not explicitly uttered. Moreover, the appositive content is not taken for granted. These characteristics distinguish the appositive content from presuppositions, conversational implicatures, and at-issue content (3.3). The appositive message might be called backgrounded in that it is less important than the matrix message, but not in the sense that it is part of the common ground. Rather, the speaker uses an apposition in order to provide the hearer with new information, or at least to refresh the hearer’s knowledge. Whereas the main proposition conveys information about the sentence topic, the appositive proposition conveys some extra information about the anchor (3.4).

After discussing these semantic and pragmatic issues, I come to the question how the appositive message follows from the syntactic structure of an apposition. First, I show that appositions behave as nominal predicates (3.5). Also, I show that appositions can have their own overt subjects within the appositive structure. I argue that appositions without such an overt subject involve a covert pronoun functioning as their subject (3.6). Thus, appositional constructions are based on a copular relation between (a representation of) the anchor and the apposition. This is confirmed by the fact that the semantic classification proposed in the previous chapter clearly correlates with a well-known taxonomy for copular clauses (3.7). Furthermore, it is shown that appositions can have their own temporal reference, independent from the matrix. This fact is used to argue that the appositive predicates may project functional structure, including tense. The presence of tense supports the idea of a covert subject in the appositive clause, since its specifier requires a subject (3.8). A more general argument for the presence of functional structure in the appositive clause comes from the presence of adverbs. All types of adverbs, whether related to a predicate or to a whole sentence, can occur in appositions. This implies that there is indeed more structure than just a predicate (3.9). Furthermore, I conclude that appositions in some cases even involve elaborate CPs by showing that the secondary proposition can have its own illocutionary force and that subordinators can be present (3.10). Finally, I conclude by presenting a schematic structure for the appositive clause that combines the results from all the other sections (3.11).

3.1 Sentences with an apposition involve two propositions

The first step in arguing that appositional constructions involve two propositions is to show that the apposition is related to the matrix in a very loose way. This gives the apposition the opportunity to provide the hearer with its own, secondary, message, separate from the main message expressed by the matrix. In order to get a clear idea of the looseness of the connection between the apposition and the matrix, consider VP ellipsis, as exemplified for Dutch in (1). If the anchor is part of the VP and one of the occurrences of that VP is elided, the apposition is not part of the interpretation of the ellipsis (see also Peterson 1999 for similar facts in English, cited in chapter 1):

- (1) a. Links ziet u een oude kerk, *een prachtig gebouw*, [Dutch]
 left see you an old church a beautiful building
 en rechts een nieuwe [e].
 and right a new
 ‘On the left, you see an old church, a beautiful building, and on the right, you see a new one.’
- b. (i) => ... and on the right a new church
 (ii) ≠> ... and on the right a new church, a beautiful building

Thus, the apposition is not taken into account in grammatical process in the rest of the sentence. It seems to be invisible.

Another phenomenon where the loose connection between the matrix and the apposition shows up is agreement. Consider the following examples from Quirk et al. (1985: 1304), where the anchor is in the subject position of the sentence, and the anchor and the apposition differ in number:

- (2) a. Land, brains, wealth and technology - *in other words everything we need*, are/*is plentiful in this country.
 b. Everything we need - *land, brains, wealth, technology* - is/*are plentiful in our country.

As the examples show, the verb only agrees in number with the anchor, not with the apposition. It seems that the apposition is ignored in the determination of the verbal morphology.

In chapter 4, I will give more evidence for the looseness of the connection between the apposition and the matrix and see how this can be represented in syntax, analyzing appositions as parenthetical constituents. For now, let us consider what the separate status of the apposition implies for its contribution to the discourse. Hannay and Keizer (2005) state that appositions are *holophrases*, which means that they do not have the form of a complete sentence, and yet behave sentence-like in the discourse. The apposition conveys its own proposition with its own truth-value (see also Berckmans 1994, Dever 2001, Potts 2005, among others).

If this is true, this means that every sentence containing an appositional construction involves at least two propositions. What do these look like? For the first proposition, this is quite obvious: it is exactly the same as the proposition of the

entire sentence, but omitting the apposition. It is not immediately clear what the secondary, appositional, proposition should be, however. In fact, three possibilities come up: (i) The secondary proposition is the same as the primary proposition, but the anchor is replaced by the apposition. (ii) The secondary proposition states that the term used as the anchor is coreferential with the term used as the apposition. (iii) The secondary proposition states that the reference of the anchor has a property described by the apposition.

The first option is suggested by the work of Burton-Roberts (1994). He claims that any sentence containing an appositional construction (where the anchor and the apposition are sentence constituents) can be expanded to an appositional construction where the anchor and the apposition are similar full sentences, one with the anchor and the other with the apposition. According to him, this paraphrase does not change the meaning. Blakemore (1996: 329-330), however, argues that this is not true. She gives the example in (3a), with the primary proposition in (3b):

- (3) a. The Republicans, *that is, the third party in the centre-left coalition*, disagreed with the legislation.
 b. The Republicans disagreed with the legislation.
 c. The third party in the centre-left coalition disagreed with the legislation.
 d. The term *the Republicans* is coreferential with the term *the third party in the centre-left coalition*.

Although (3c), the second sentence in Burton-Roberts's paraphrase, is logically implied by (3a), this does not mean that this is the proposition the speaker wants to convey; it is not more relevant for the speaker than the primary proposition (3b). If that would be the case, the speaker would have used the formulation in (4), instead of the one in (3a):

- (4) The Republicans disagreed with the legislation. That is, the third party in the centre-left coalition disagreed with the legislation.

In (4), the speaker chooses to reformulate the first sentence with the second. This shows that he considers the proposition in (3c) to have relevance over and above the one in (3b). The speaker of (3a), however, only communicates the relevance of (3d) in addition to (3b). Note that it is due to the presence of the apposition marker *that is* that this is the only possible interpretation here. If the marker is left out, as in (5a), the secondary proposition can not only be understood as (3d), but also as (5b), see Blakemore (1996: 342):

- (5) a. The Republicans, *the third party in the centre-left coalition*, disagreed with the legislation.
 b. The Republicans have the property of being the third party in the centre-left coalition.

Both of the possible secondary propositions for (5a) - (3d) and (5b) - can be represented with a paraphrase using the copula *be*, as in (6):

- (6) The Republicans are the third party in the centre-left coalition.

Therefore, let us take the secondary proposition in an appositional construction to have the form BE (Anchor, Apposition). The different readings of this proposition are related to the main semantic classes of apposition as described in the previous chapter. In section 3.7, I will come back to this issue.

At this point, it is important to note that appositional constructions in the class of inclusion differ from the identificational and attributive constructions in this respect. In the previous chapter, we saw that inclusion is different from the other classes because an apposition marker is obligatory in these constructions. The reason for this criterion is the different relation between inclusive appositions and their anchor. The apposition marker expresses that there is more to this relation than BE (Anchor, Apposition). The apposition refers to a (particular) example of the anchor's referent. Even if the apposition marker is included, it is impossible to paraphrase the secondary message of an inclusive appositional construction with a *be*-clause using the literal words from the construction. Consider the following examples:

- (7) a. The children liked the animals, *particularly the monkeys*.
 b. His clothes, *for instance his new shirt*, look shabby.

Using the literal words of the appositional constructions in (7) in a *be*-paraphrase results in ungrammatical sentences like (8):

- (8) a. * Animals are particularly the monkeys.
 b. * His clothes are for instance his new shirt.

But even grammatical versions of the sentences in (8), as in (9), do not paraphrase what the speaker of (7) wants to say:

- (9) a. Monkeys are a particular type of animals.
 b. His new shirt is an instance of his clothes.

According to (7a), monkeys are not just a particular type of animals, but a particular type of animals liked by children. Similarly, *his new shirt* in (8a) is an example of his shabby looking clothes. For this class of appositions, it seems to me that a paraphrase with clausal coordination as suggested by Burton-Roberts (1994) fares better:

- (10) a. The children like the animals and the children particularly like the monkeys.
 b. His clothes look shabby. For instance, his new shirt looks shabby.

I conclude that inclusive appositional constructions are different from identificational and attributive constructions and suggest that constructions in this class are based on some sort of sentence coordination. For this thesis, I choose to

focus on the other two classes, however and I leave the analysis of the inclusive class for future research.

The question now remains whether the secondary proposition in identificational and attributive appositional constructions really functions as a separate speech act. Several people (Koktová 1986, Dever 2001, among others) have tried to combine the truth-values for the two propositions into one value for the whole utterance. This does not seem to work, however. Of course, it is clear that the whole utterance is true if both propositions are true and that the whole utterance is false if both propositions are false. In mixed cases, however, the result is not that clear. Yet, intuitively, the truth-value of the primary proposition is much more important than that of the secondary one. I would even conclude that the truth-value of the primary predication determines the value of the whole utterance. Blakemore (1996: 341) illustrates this point by showing that the secondary proposition does not fall under the scope of a conditional in the matrix:

- (11) If the Republicans, *that is, the third party in the centre-left coalition*, disagreed with the legislation, then the situation is hopeless.

The speaker of (11) claims that the situation is hopeless if the Republicans disagreed with the legislation. This claim does not change if *the Republicans* are not *the third party in the centre-left coalition*. This identity claim is just a separate speech act, which does not (immediately) influence the truth of the utterance in which it is embedded. Of course, the secondary proposition itself can also be true or false. In section 3.3, I will show that this separate truth-value for the appositive proposition distinguishes it from presuppositions.

Potts (2005) gives another argument in favor of the independence of the appositive message, namely speaker-orientedness (see also Corazza 2005: 15). He shows that the speaker always has to commit himself to the proposition conveyed by the appositional construction, even if it is part of an embedded clause under a propositional attitude verb like *believe*, which ascribes the proposition of the embedded clause to the subject of the main clause. He gives the following example (Potts 2005: 115):

- (12) a. Sheila believes that the agency interviewed Chuck, *a confirmed psychopath*, just after his release from prison.
 b. \neq Sheila believes that Chuck is a confirmed psychopath and that the agency interviewed Chuck just after his release from prison.

Even though the proposition of the embedded clause, that the agency interviewed Chuck just after his release in prison, is attributed to the subject of the propositional attitude verb, *Sheila*, this is not true for the appositive message, that Chuck is a psychopath. Note that this does not mean that the subject of the main clause, here Sheila, does not believe the secondary message to be true, nor that she does not have a believe about the truth value of this proposition. Her believe in this matter is simply ignored in the interpretation of the utterance. The idea that the speaker has to be committed to the truth of the appositive message can be confirmed by the fact that the speaker cannot deny this message without contradicting himself:

- (13) Sheila believes that the agency interviewed Chuck, *a confirmed psychopath*, just after his release from prison. # But I think Chuck is not a confirmed psychopath.

The fact that the appositive content represents a comment of the speaker even if the clause in which it appears clearly represents the believes of someone else, shows the independence of the apposition.¹

Raabe (1979) provides some interesting data supporting the idea that appositions are always related to the speaker. He uses the German discourse subjunctive, Konjunktiv I, for this purpose. German speakers may use the Konjunktiv I in indirect speech to distance themselves from reported propositional content. Consider the following examples from Raabe (1979: 266); the glosses are mine:

- (14) a. Der Arzt sagte, Otto, der ein Trinker sei, solle [German]
 the doctor said Otto who a drunk be:KONJ must:KONJ
 vortreten.
 step.forward
 ‘The doctor said that Otto, who he supposed to be a drunk, should step forward.’
- b. Der Arzt sagte, Otto, der ein Trinker ist, solle vortreten.
 the doctor said Otto who a drunk is must:KONJ step.forward
 ‘The doctor said that Otto, who is a drunk, should step forward.’

In (14a), the Konjunktiv in the non-restrictive relative indicates that it is the doctor, not the speaker, who commits himself to the proposition that Otto is a drunk. In (14b), on the other hand, using the Konjunktiv in the matrix, but not in the relative, relates the relative’s proposition to the speaker. Raabe notes a difference between these two sentences with respect to the possibility to use the word *übrigens*, ‘by the way’. Whereas an appositive relative with Konjunktiv does not allow *übrigens*, the same construction without Konjunktiv does allow it (p. 269-270):

¹ It is possible for the speaker to explicitly relate the appositive message to someone else than himself or the matrix’s subject by commenting on the appositive proposition with another secondary message as in the following example:

- (i) The agency interviewed Chuck, *a psychopath*, Sheila believes, just after his release from prison.

Here, the speaker explicitly attributes the message that Chuck is a psychopath to Sheila. See also section 4.7.3, where I use examples like these as an argument against Pott’s (2005) account.

- (15) a. *Der Arzt sagte, Otto, der übrigens ein Trinker sei, [German]
 the doctor said Otto who by.the.way a drunk be:KONJ
 solle vortreten.
 must:KONJ step.forward
 Intended: ‘The doctor said that Otto, who he supposed to be a drunk, by
 the way, should step forward.’
- b. Der Arzt sagte, Otto, der übrigens ein Trinker ist solle [German]
 the doctor said Otto who by.the.way a drunk is must:KONJ
 vortreten.
 step.forward
 ‘The doctor said that Otto, who is a drunk, by the way, should step
 forward.’

Based on this observation, Raabe concludes that *übrigens* is always speaker-oriented. Interestingly, *übrigens* can be used in appositions (Raabe 1979: 270):

- (16) Der Arzt sagte, Otto, übrigens ein Trinker, solle [German]
 the doctor said Otto by.the.way a drunk must:KONJ
 vortreten.
 step.forward
 ‘The doctor said that Otto, a drunk, by the way, should step forward.’

Thus, Raabe concludes that appositions, like appositive relatives without Konjunktiv I, are related to the speaker rather than to the reported person.

To conclude, an utterance with an apposition contains two propositions, one related to the matrix and another related to the apposition. This latter, secondary proposition can be paraphrased by a copular clause with *be*, where the anchor is the subject and the apposition is the predicate. The appositive proposition has its own, independent truth-value and is always attributed to the speaker of the utterance.

3.2 The two propositions can enter into discourse relations

Given that an utterance involving an appositional construction indeed results in two separate propositions, the question rises what the relation between these two is. This section shows that the two propositions can enter into discourse relations and therefore that they can influence each other’s content.

First, note that the linear order in which the two propositions appear is unusual. Whereas normally a proposition is completed before the next one comes about, in appositional constructions the utterance of the main proposition is interrupted by the utterance of the secondary one. This has an interesting effect on the information structure. Whereas the appositive proposition is merely an aside to the main proposition, it is often uttered before uttering the matrix is completed. At the same time, some, or even all referents of the elements in the matrix are already evoked in the discourse before the appositive message is conveyed. This means that the apposition can relate to elements in the matrix and vice versa, depending on the exact position of the apposition in the matrix. In this way, several discourse relations

are possible between the two, such as contrast and parallelism. Consider the examples below from Wang et al. (2004: (25b) and (26b)):

- (17) a. John, *a good swimmer*, is also a good tennis player.
 b. John, *a swimmer*, is not a tennis player, however.

According to Wang et al., these examples challenge the idea that main clauses are independent from the appositive content, because the main utterance could not appear in a null context:

- (18) a. ? John is also a good tennis player.
 b. ? John is not a tennis player, however.

I think, however, that this does not mean that the examples in (17) do not result in two separate propositions. Because of the presence of the appositional construction, the main utterance does not appear in a null context. Since the appositive content is given in the discourse before the utterance of the main content is completed, the appositive content functions as the context. This means that the sentences in (17) are comparable to the discourses in (18):

- (18) a. John is a good swimmer. He is also a good tennis player.
 b. John is a swimmer. He is not a tennis player, however.

Similarly, the parallel or contrast can be marked within the apposition:

- (19) a. Swimming champion John congratulated Bill, *also a good swimmer*.
 b. Mary, *though not a big sports fan*, watched a soccer game.

Furthermore, appositions can contain pronouns referring to elements in the matrix sentence (cf. Amaral et al. 2007):

- (20) a. Actually, we wanted to interview several people about their hobbies, but Bill, the owner of an enormous stamps collection, talked so long about it, that we decided to postpone the other interviews.
 b. Last week, we visited an art exhibition. Helen, the painter of one of the most striking works, told us that she worked more than a year on it.
 c. The Woosters are such empty-headed people! I have always wondered how Jeeves, Bertie Wooster's valet, could ever live with him.

Again, this situation is exactly the same as in a discourse with two sentences, where coreference across sentences can take place:

- (21) a. Bill is the owner of an enormous stamps collection. He talked so long about it that we decided to postpone the other interviews.
 b. Helen is the painter of one of the most striking works at the exhibition. She told us that she worked more than a year on it.

- c. Jeeves is Bertie Wooster's valet. I've always wondered how he could ever live with him.

Similarly, the apposition can contain pronouns that relate to an element in the matrix, just like in a discourse:

- (22) a. The stamps, most of them quite rare specimens, represent a fortune.
 b. The stamps represent a fortune. Most of them are quite rare specimens.

Note that the order of the two sentences paraphrasing an appositional construction depends on whether the pronoun appears in the matrix or in the apposition. If the pronoun appears in the matrix as in (20), and therefore follows the apposition, the sentence paraphrasing the appositional message has to precede the sentence paraphrasing the primary message, as in (21). If the pronoun appears in the apposition, as in (22a), it is exactly the other way around (22b). The reason is, of course, that an anaphor cannot precede an antecedent in a separate sentence, and therefore it cannot precede an antecedent in an apposition either.

Note also that the partitive constructions with a pronoun in (22) seem to function as the subject for the appositional message. In section 3.6, I will come back to these constructions and argue that a similar, but covert, pronoun is present in other appositions as well.

To conclude, in this section I showed that the matrix and the apposition, despite of the fact that they convey their own independent proposition, can influence each other's content because they can enter into discourse relations and relations of coreference.

3.3 Appositive propositions are conventional implicatures

The independence of the two propositions in a sentence with an apposition does not imply that their status is equal and that they can have any arbitrary relationship. It is clear that the appositional content provides just an aside to the main message. Furthermore, the appositional proposition is not uttered explicitly, but has to be inferred. In this section, the inference relation between the utterance and the appositional content is explored. It is argued that appositional propositions are not presuppositions or conversational implicatures. Rather, they are conventional implicatures, following from the conventional meaning of the words.

At first sight, it seems that the apposition involves a backgrounded implication of the whole utterance, in the sense that it is not part of the main point. Chierchia and McConnell-Ginet (2000) show that appositional relatives, which are very similar to appositions in this respect, pass their test for backgrounding. This test says that a backgrounded implication of a sentence always remains attached to the sentence, whether the sentence is asserted, denied, questioned, or offered as a hypothetical assumption. The examples in (23) are from Chierchia and McConnell-Ginet (2000: 351). The sentences (23a-d) all imply (23e):

- (23) a. Jill, who lost something on the flight from Ithaca to New York, likes to travel by train.
 b. Jill, who lost something on the flight from Ithaca to New York, doesn't like to travel by train.
 c. Does Jill, who lost something on the flight from Ithaca to New York, like to travel by train?
 d. If Jill, who lost something on the flight from Ithaca to New York, likes to travel by train, she probably flies infrequently.
 e. => Jill lost something on the flight from Ithaca to New York.

As (24) shows, the results are exactly the same if we use examples with appositions instead of appositive relatives:

- (24) a. Jill, *my travelling companion on the flight from Ithaca to New York*, likes to travel by train.
 b. Jill, *my travelling companion on the flight from Ithaca to New York*, doesn't like to travel by train.
 c. Does Jill, *my travelling companion on the flight from Ithaca to New York*, like to travel by train?
 d. If Jill, *my travelling companion on the flight from Ithaca to New York*, likes to travel by train, she probably flies infrequently.
 e. => Jill was my travelling companion on the flight from Ithaca to New York.

In contrast to Chierchia and McConnell-Ginet, Potts (2005) states that appositions are not backgrounded. This does not mean that he denies the data in (23-24) above. This is a purely terminological issue. For Potts, the term backgrounding is not related to the question whether the information is part of the main point, but rather to the question whether the information conveyed is part of the knowledge of the hearer. What Potts means by saying that appositions are not backgrounded is that the information they convey is not part of the common ground of speaker and hearer. In the next section, I will come back to this issue.

The survival under the contexts discussed in (23-24) above is usually taken to be one of the main characteristics of presuppositions. Yet, Chierchia and McConnell-Ginet point out that appositive relatives do not belong to this class of meaning. In contrast to presuppositions, the truth of the appositive content is not taken for granted. They illustrate this by comparing the examples in (23a-d) with an example where the proposition in (23e) *is* presupposed, the pseudocleft in (25):

- (25) What Jill lost on the flight from Ithaca to New York was her new flute.

It simply does not make sense to utter (25) if the truth of (23e) is not already established in the previous discourse. In (23a-d), it is exactly the other way around. If the truth of (23e) were already established in the previous discourse, the appositive relative in (23a-d) would be pragmatically odd, because it explicitly conveys the truth of (23e), which would then be superfluous. Again, the argument also holds for appositions. Compare the following examples.

- (26) a. Tim has a brother and two sisters. Tim's brother often helps me.
 b. It was raining cats and dogs. Most people in the crowd didn't even realize that it was raining, however.
- (27) a. Bach was a German composer in the baroque period. # Bach, *a German composer*, was influenced by his colleagues from Italy and France.
 b. Bach's uncle was a famous musician when Bach was young. # Bach was introduced to the art of organ playing by his uncle, *a famous musician*.

In (26a), the definite description *Tim's brother* in the second sentence presupposes that Tom has a brother. This presupposition is already asserted in the preceding context. Similarly, in (26b) the truth of the complement of *realize*, that it was raining, is presupposed by the second sentence and given by the first. In both cases, the fact that the truth of a presupposition in the second sentence is already conveyed in the discourse is unproblematic. In the examples in (27), on the other hand, the preceding context provides the hearer with the information of the appositive content in the second sentence, that Bach was a German composer (27a) and that Bach's uncle was a famous musician (27b), respectively. This does cause problems for the sentences involving an apposition, because it makes the appositive content superfluous. In other words, whereas presuppositions may be given in the previous discourse, appositive content may not.

I conclude, then, that the appositive content is not interpreted as a presupposition of the matrix (see also Potts 2005).

Recall from section 3.1 that the appositive proposition and the matrix proposition have their own, independent, truth-value. If the secondary message is false, the main message still may be true. Also in this respect, the appositive proposition differs from presupposition. If a presupposition is false, the truth-value for the proposition of the whole utterance cannot be determined. It is neither true nor false. Compare the following examples:

- (28) a. Sally, *a carpenter*, made this table.
 b. Sally's brother made this table.

If the appositive message in (28a), that Sally is a carpenter, is false, we can still determine whether the main message, that Sally made the table under discussion, is true or false. In (27b), on the other hand, if the presupposition that Sally has a brother is false, it is impossible to say whether the proposition of the whole utterance is true or false.

Furthermore, Potts (2005) shows that the appositive propositions differ from presupposition in their behavior with respect to so-called presupposition plugs: verbs of saying and other performatives. Presupposition triggers are cancelled when they appear in the complement of these verbs. If an apposition occurs within their complement, however, the proposition it conveys still holds. Compare the examples below:

- (29) a. Jane told us that Bill lives in the same street as the king of France.
 b. Jane told us that Bill, *the king's neighbor*, often visits the royal palace.

In (29a), the definite description *the king of France* does not presuppose that France has a king, because it appears in the complement of *told*. The proposition of the utterance is true if it correctly reports Jane's message, whether the presuppositions of that message (including that France has a king) are true or not. The utterance in (29b) on the other hand implies that the appositive proposition, that Bill is the king's neighbor, is true, even though the apposition occurs in the complement of *told*.

In the previous section, indirect quotation like in (29b) was used to argue that the appositive content is always speaker-oriented. The information that Bill is the king's neighbor is not part of the reported message from Jane. Rather, it is a comment of the speaker providing extra information about the message he reports. Potts (2005) takes this as evidence that the appositive proposition is not part of 'what is said', the 'at-issue content' in his terms. After all, indirect speech represents what is said by the quoted person.

The speaker-orientedness of the apposition also explains why presupposition plugs do not cancel the appositive content. Note that the existential presupposition of the definite description in (29a) may be cancelled with respect to the speaker's beliefs only because the speaker does not have to commit himself to the truth of the message he reports. Yet, the original message does contain the presupposition with respect to the beliefs of its own speaker, Jane in this case. If (29a) is true, it does presuppose that France has a king in Jane's believe world (unless she deliberately lied). The appositive content, on the other hand, is ascribed to the speaker of the whole utterance himself, which means that the speaker has to commit himself to its truth and its presuppositions are directly related to the speaker's own beliefs rather than to the beliefs of the person he refers to.

Given that the appositive message is indeed not part of what is said, it has to be implied. That raises the question whether it is a conversational implicature. This, too, cannot be the case, however, since the meaning of the appositive proposition follows from the lexical content and not from pragmatic maxims or the cooperative principle. This difference can be shown by changing the context of an utterance. Conversational implicatures can easily be cancelled if we do this. The appositive content, in contrast, is independent of the context. It will always be implied. Compare the following examples:

- (30) a. A I am out of patrol.
 B There is a garage round the corner.
 b. There is a garage, *one that is open*, round the corner.

Since we assume that speaker B in (30a) wants to be cooperative, the utterance implies that he thinks that the garage he is referring to is (or at least might be) open. Otherwise, the information would not be relevant for speaker A, who is out of patrol, and probably wants to get some. In a different context, however, for example if A wonders whether there are any companies in the neighborhood, B's utterance does not imply anything about his beliefs on the garage being open or not. The

apposition in example (30b), on the other hand, always results in an implicature that the garage is open, independently of the context.

Since the appositive content is implied and at the same time does not follow from conversational principles, but from the conventional meaning of words, Potts (2005) concludes that the appositive content is a *conventional implicature*, a term briefly introduced by Grice (1975). Conventional implicatures follow logically from the composition and the meaning of the words in an utterance and in that sense they belong to the class of entailments. Since conventional implicatures are neither presuppositions nor conversational implicatures, the question remains what distinguishes them from normal, at-issue, content.

Potts argues that conventional implicatures have two important properties that separate them from at-issue content: speaker-orientedness and behavior under presupposition holes, such as negation, questioning and modalization. As we saw before, the appositive proposition is always ascribed to the speaker. At-issue content, on the other hand, can be related to the believe world of someone else, by embedding it in an indirect quote. We also saw that appositive content does not change under negation and questioning. Of course, at-issue content changes if it is embedded in such contexts. Amaral et al. (2007) add another difference. They show that conventional implicatures, unlike at-issue content, cannot be straightforwardly denied by the hearer. They give the following example (p. 731):

- (31) A Edna, *a fearless leader*, started the descent.
 B No, that's not true.

Here, B's denial only applies to the at-issue content of A's utterance, that Edna started the descent. It does not mean that Edna is not a fearless leader. In order to deny the appositive content, B has to make clear that he does something special, for example by interrupting the conversation saying something like 'hey, wait a minute!':

- (32) A Edna, *a fearless leader*, started the descent.
 B Hey, wait a minute! - Edna is not a fearless leader. She's a coward!

Note that conventional implicatures share this property with presuppositions, for which the 'hey, wait a minute!'-test originally was designed (see Von Stechow 2004). Note also that denial by the hearer differs from denial by the speaker here. As we saw before, the speaker cannot deny the appositive content (nor at-issue content of a main clause) at all. The hearer, on the other hand, can deny the appositive content, but only indirectly.

In short, the main conclusion remains that the appositional construction has its own, independent proposition, functioning as a secondary message. This proposition is inferred from the utterance and follows from the conventional meaning and the composition of words. Therefore, it is a conventional implicature.

3.4 Appositive information is new to the hearer

Now, remember that one of the reasons to exclude appositions from the class of presuppositions was that the appositive proposition is not taken for granted. The information it conveys is not part of the common ground. Below, it is shown that appositions are indeed used to provide the hearer with new information, or at least in order to refresh his knowledge.

In Potts's (2005: 33) discussion of the pragmatics of appositions, he says that "their primary discourse function is to introduce new, but deemphasized material." Similarly, Meyer (1992: 92) states that "thematically, apposition is a relation in which the second unit of apposition either wholly or partially provides new information about the first unit." Note that this only means that the appositive message is new. It does not imply that the referent of the apposition should be new either to the hearer or to the discourse. In a comment on the pragmatic function of appositions, Berckmans (1994: 504) says that "their use reflects the speaker's desire to introduce an individual (or a class of individuals) he has in mind from more than one perspective. The second term in apposition is used to reintroduce the individual under a different description which will help the hearer identify those referred to in the first appositive." If this is indeed the function of appositional constructions, the referent of the apposition should be given at least in the knowledge of the hearer, possibly, but not necessarily, from the discourse. If the speaker assumes that the hearer is not familiar with the apposition's referent, he would not use the apposition in order to help the hearer to identify the anchor. Consider the following examples, where the apposition indeed could be used in order to help the hearer identify the referent of the anchor:

- (33) a. Frank, *that colleague I told you about*, is very helpful.
 b. Yesterday, I met our former neighbors, *Greg and Ginny*.

In (33a), the speaker might not be sure that the hearer remembers Frank's name, and therefore uses an expression in apposition that probably helps the reader to link the anchor to the right referent. Similarly, in (33b), the hearer might be forgotten who their former neighbors were, but remember them when hearing their names in the apposition.

This is not the only way in which an apposition can be used, however. Hannay and Keizer (2005) point out that appositions can be used to introduce a new label for the referent of the anchor, for example because it is shorter and can be used later on in the discourse. Here are some examples:

- (34) a. Let me introduce you to the leader of our group, *Harriet Jackson*.
 b. The terminal nodes in a tree, *the leaves*, represent words.

Clearly, in (34a), the speaker assumes that the hearer is not yet familiar with Harriet Jackson, but uses this proper name to get an easier reference to the group leader. Similarly, in (34b), the speaker introduces a new term to the hearer. Note that the appositions in these examples are actually not referentially used at all, since they do

not have a referent for the hearer and they are not used to introduce a referent either (cf. Hannay and Keizer 2005). The same is true for all attributive appositions:

- (35) a. That conference, *a really nice event*, is organized every year.
 b. You should read that book, *a fantastic introduction to the field*.

The appositions in (35) are used to express a relevant characteristic of the anchor. Therefore, we cannot speak about its reference being old or new to the hearer or the discourse. These terms do not apply here. What is new to the hearer, however, is the knowledge that the apposition has the characteristic expressed in the apposition (according to the speaker). In this sense, the appositions in (35) clearly provide new information to the hearer, unlike presuppositions, for example, which are assumed to be part of the hearer's knowledge. This is what Potts (2005) meant when he said that appositions always provide new information to the hearer.

It is not clear that this is really always the case, however. In the examples in (34) the speaker probably presumes that the relation between the description in the anchor and the label in the apposition is new to the hearer. For the examples in (33), this is not the case. It seems likely that the speaker in these cases just wants to refresh the relation between the anchor and the apposition for the hearer. If the hearer were not familiar with the reference of the anchor at all, the speaker would probably not have used it to begin with. The following examples, from Potts (2005: 119), are even impossible if the speaker assumes that the hearer does not know the reference of the anchor:

- (36) a. Armstrong, *the cyclist*, is training with his cycling buddies.
 b. Amnesty International, *the human rights group*, claims in a new report that ...

If the reference of the anchors in the examples in (36) is not familiar to the hearer at all, the appositions will not help him. After all, the appositions here do not identify a single referent. At the same time, the relation between the anchor and the apposition cannot be new to the hearer, because in that case the speaker should have used an indefinite, resulting in an attributive apposition. In some cases, it is even possible for the speaker to add explicitly that he assumes the speaker to know the information provided by the appositional content:

- (37) Susan, *a sweet girl*, as you know, helped me to repair the printer.

Probably, then, in cases like (36) and (37), the speaker assumes that the appositional proposition is part of the hearer's knowledge, but that this knowledge needs to be reactivated, because it is not at the top of his mind (36) or because the speaker wants to show that this information is relevant with respect to the main proposition (37). Although this information is not strictly new for the hearer, then, it needs to be renewed. In that sense, the appositional proposition always provides new information.

In this respect, the appositional content is very similar to at-issue content. Both are used to provide the hearer with new information. At-issue content gives more information about the sentence topic. Appositional content gives more

information about the anchor, the topic of the appositive message. Does this mean that these types of meanings do not differ in their pragmatic functions? No, as was stated before, the appositive content gives information on matters that are less important in the conversation. Amaral et al. (2007) argue that the appositive content needs not to be relevant to the question under discussion. It gives an interesting, but inessential comment on the at-issue content. The at-issue content, on the other hand, has to be relevant to the question under discussion in order to be relevant. This can be illustrated by comparing two appositional constructions, where the anchor and the apposition have been swapped:

- (38) a. A Dutch violinist, *André Rieu*, created a revival in waltz music.
 b. *André Rieu*, a *Dutch violinist*, created a revival in waltz music.

Even though both sentences in (38) may convey the same information, they differ in how this information is structured. In (38a), something is said about a certain Dutch violinist, whereas (38b) tells us more about André Rieu. Depending on the question under discussion, either of the sentences may or may not be infelicitous. As an answer to the question ‘who is André Rieu?’, for instance, (38b) is acceptable, but (38a) is not.

In sum, the possibility to create an appositional construction gives the speaker the opportunity to provide some extra information that is probably interesting for the hearer, but not necessarily relevant to the question under discussion. The speaker either assumes that this information is new to the hearer or that the hearer does not immediately activate his knowledge about it and therefore has to be reminded about this information.

3.5 Appositions are nominal predicates

As we saw above, an appositional construction conveys its own proposition, separate from the main proposition. The next question is then how this proposition is built from the underlying structure. The first step in answering this question is to show that appositions have the properties of nominal predicates, not of arguments. This is the purpose of the present section.

Here, I follow Doron (1994), who has shown extensively that appositions behave as nominal predicates. She lists the following arguments. First, quantification over individuals is generally impossible in nominal predicates (cf. Williams 1983). The same is true for appositions:

- (39) a. * Abe, Bonnie, and Chimp are/is every chimpanzee in the zoo.
 b. * Abe, Bonnie, and Chimp are most chimpanzees in the zoo.
- (40) a. * We saw Abe, Bonnie, and Chimp, *every chimpanzee in the zoo*.
 b. * Abe, Bonnie, and Chimp, *most chimpanzees in the zoo*, were out in the sun.

Sometimes, quantification is possible in predication, however (cf. Williams 1983, Partee 1987). Potts (2005) shows that in these cases, the quantification can appear in appositions as well. Compare his examples (p.131) in (42) to the copular clauses in (41):

- (41) a. Hillary is no amateur climber.
 b. Ed's house was at one time every color of the rainbow.
 c. Tanya is everything to everyone around here.
- (42) a. We spoke with Hillary, *no amateur climber*, about the dangers.
 b. Ed's house, *at one time every color of the rainbow*, now has aluminum siding.
 c. We spoke with Tanya, *everything to everyone around here*, about the broken printer.

The following example, slightly adapted from Potts (2005: 132), suggests that not all quantificational expressions that are possible in apposition are also possible in predicate nominals:

- (43) a. Ed saw three paintings, *each a more beautiful portrait than the last*.
 b. * Three paintings were each a more beautiful picture than the last.

In section 3.7, I will come back to examples like these and show how the secondary proposition in (43a) looks different from (43b) by arguing that *each* is in subject position here.

The second argument from Doron (1994) concerns *i*-within-*i* constructions (see Hoeksema & Napoli 1990), constituents that get the same index as one of the elements they contain. Whereas Chomsky (1981) claimed that these constructions cannot be used in argument positions, Williams (1982) noted that they can occur in predicate positions. Doron gives the following example (p. 55) to show that they also show up in appositions:

- (44) a. * [His_i own worst enemy]_i lost the elections again.
 b. John_i is [his_i own worst enemy]_i.
 c. John_i, [his_i own worst enemy]_i, lost the elections again.

Here are similar examples in Dutch:

- (45) a. Frank_i, [zijn_i eigen baas]_i bepaalt zelf hoeveel [Dutch]
 Frank his own boss determines himself how many
 vrije dagen hij heeft.
 free days he has
 'Frank, his own boss, determines himself how often he can take a day off.'
 b. Frank_i is [zijn_i eigen baas]_i.
 Frank is his own boss

- c. * [Zijn_i eigen baas]_i bepaalt zelf hoeveel vrije dagen hij heeft.
his own boss determines himself how many free days he has

Note that the indices in these examples do not indicate coreference. After all, predicates are not referential at all. This might also explain why nominal predicates are different from arguments in this respect. For arguments, the indices do indicate coreference, resulting in referential circularity, which leads to ungrammaticality. In any case, the examples clearly show that appositions are nominal predicates rather than arguments.

Doron's third argument to analyze appositions as nominal predicates is based on the possibility for some nominals to appear without an article in predicate position. Whereas this possibility is rather restricted in English, bare nominals as predicates are quite common in many other Germanic and Romance languages (De Swart et al. 2007). These predicates usually relate to capacities like professions, religions, nationalities and titles. Here are some Dutch examples, illustrating that bare nominals occur in appositions and in predicate positions, but not in argument positions. Note that (46c) and (47c) would be acceptable in newspaper headlines, where determiners are often left out. Such telegram style writing is irrelevant for our purposes, however.

- (46) a. Drs. Mallebrootje, *uitvinder van de automatische* [Dutch]
MA Mallebrootje inventor of the automatic
appositieontleder, doet mee aan de verkiezingen.
apposition.analyser does with at the elections
'Mallebrootje MA, *the inventor of the automatic apposition analyser*,
takes part in the elections.'
b. Drs. Mallebrootje is uitvinder.
MA Mallebrootje is inventor
'Mallebrootje MA is an inventor.'
c. * Uitvinder doet mee aan de verkiezingen.
inventor does with at the elections
Intended: 'An/The inventor takes part in the elections.'
- (47) a. Hadassa, *jood van geboorte*, eet geen varkensvlees.
Hadassa jew of birth eats no pork
'Hadassa, *a jew by birth*, does not eat pork.'
b. Hadassa is jood van geboorte.
Hadassa is jew of birth
'Hadassa is a jew by birth.'
c. * Jood van geboorte eet geen varkensvlees.
jew of birth eats no pork
Intended: 'A/The jew by birth eats no pork.'

Fourth, Doron shows that appositions can be modified by adverbials, which usually modify predicates. The examples are from Quirk et al. (1985: 1314):

- (48) a. Norman Jones, *then a student*, wrote several best-sellers.
 b. Your brother, *obviously an expert on English grammar*, is highly praised in the book I'm reading.
 c. They elected as chairman Edna Jones, *also a Cambridge graduate*.

Interestingly, the adverbs used in appositions may have a quantificational force:

- (49) a. Lions, *usually majestic animals*, are kept in zoos since the eighteenth century.
 b. Terriers, *often good mice hunters*, were used to protect cattle from vermin.

In the next two sections, I will come back to adverbs appearing in appositions and argue that they not only show that appositions are nominal predicates, but also that these predicates project functional projections.

As a related phenomenon to predicate modification by adverbs, Doron points out that floating quantifiers, (pro-)nominal expressions used as modifiers, may appear in appositions as well. The English quantifiers she uses in her examples, *both* and *all*, are not necessarily floating, but can also be used as determiners in argument positions, as the translation of (50c) shows. The Dutch equivalent of 'all', *allemaal*, on the other hand, cannot be used as a determiner in an argument position with this meaning (see Hoeksema 1996). Therefore, I use Dutch examples in order to show that we are indeed dealing with floating quantifiers here. Example (50a) shows the possible occurrence of *allebei* and *allemaal* in appositions. The contrast between (50b) and (50c) shows that they can occur as floating quantifiers but not in argument positions. Note that (50c) is acceptable in a reading where *allemaal* is used as a determiner meaning something like 'a lot'. This use of *allemaal* is not semantically related to its use as a floating quantifier with the meaning of 'all', however. Dutch *allebei*, both, can only occur in argument positions in combination with a definite nominal. Therefore, it would have to be followed by the definite determiner *de* in order for (50c) to be acceptable. As a floating quantifier, *allebei* can occur with nominal predicates, which are typically indefinite (lacking a determiner in the plural), as in (50b). Maybe the best example is the expression *stuk voor stuk*, literally piece by piece, meaning 'all'. This expression cannot appear in argument positions at all, not even with a different meaning or in combination with a determiner. It simply has to float.

- (50) a. Mijn collega's, *allebei/allemaal/{stuk voor stuk} linguïsten*, [Dutch]
 my colleagues both/all/all linguists
 praten de hele tijd over taal
 talk the whole time about language
 'My colleagues, *both/all linguists*, talk about language all the time.'
 b. Mijn collega's zijn *allebei/allemaal/{stuk voor stuk} linguïsten*.
 my colleagues are both/all/all linguists
 'My colleagues are both/all linguists.'

- c. * Allebei/Allemaal/{Stuk voor stuk} linguïsten praten de hele tijd
 both/all/all linguists talk the whole time
 over taal.
 about language
 Intended: 'Both/All linguists talk about language all the time.'

Another issue related to predicate modification is the way of negation. Doron states that appositions are negated like predicates. As was illustrated in (42a), repeated here as (51a), negative quantifiers that can be used in nominal predicates can also be used in appositions. Also, the apposition can describe the lack of a certain property for the referent of the anchor by negation, just as in predication. The example in (52a) is from Quirk et al. (1985: 1312):

- (51) a. We spoke with Hillary, *no amateur climber*, about the dangers.
 b. Hillary is no amateur climber.
 c. * We spoke with no amateur climber about the dangers.
- (52) a. Anna Wilson, *not my best friend*, voted against me.
 b. Anna Wilson is not my best friend.
 c. * Not my best friend voted against me.

Quirk et al. observe that the example in (52a) has two meanings. The appositive meaning conveys a secondary proposition as described in (52b). The other reading, which they call denial sense, can be described as 'It was Anna Wilson who voted against me, not the other person.' This second meaning probably derives from a coordinative structure: *Anna Wilson, and not my best friend*. Though negation as in (52a) usually does not occur in argument positions, as (52c) shows, coordination can license this: *Not my best friend, but Anna Wilson voted against me*.

Furthermore, Doron shows that numerals in appositions get an 'exact' reading, as in predicates, rather than an 'at least' reading, as in arguments. She gives the following examples (p. 57):

- (53) a. Mary invited her guests, *two musicians from New Orleans*, to have supper with her.
 b. Mary's guests were two musicians from New Orleans.
 c. Mary invited two musicians from New Orleans to have supper with her.

Whereas the apposition (53a) and the predicative (53b) imply that that Mary had exactly two guests, putting the numerical expression in argument position leaves the option that she invited actually more than two people (53c).

All in all, Doron's (1994) arguments, expanded on here, make it pretty clear that appositions are nominal predicates, rather than arguments.

3.6 Appositions have a subject

Since we saw in the previous section that appositions behave as nominal predicates, we might expect them to be related to a subject. The anchor of course could be analyzed as the subject, but this functions as an argument in the matrix and it is not immediately clear how it could function as the subject of the apposition at the same time. Also, in this section, I will argue that there is evidence for the idea that the appositive proposition has a covert subject in its underlying structure.

The first argument in favor of this idea is the interesting fact that there are constructions that at least look like appositions with an overt subject, called complex appositions by O'Connor (2008). The a-example is from Potts (2005: 124) and the others are from O'Connor (2008: 205).

- (54) a. The students, *most of them linguists*, missed the bus.
 b. A leaked report compiled by diplomats at the British high commission has blamed India's ruling BJP party for the continuing violence in Gujarat, in which at least 2,000 people, *almost all of them Muslims*, have died. (*Guardian*, 30/04/02, page5, col. 1)
 c. I had season-ticket holders, *many of them my friends*, call me for tickets. (*New York Times*, 02/01/03, page D6, col. 2)

All of these examples contain a partitive expression, including a pronoun that refers to the anchor. These partitive expressions might be analyzed as subjects of the appositive proposition:

- (55) a. Most of them are linguists.
 b. Almost all of them are Muslims.
 c. Many of them are my friends.

Indeed, Potts (2005) treats these constructions as a special case. Syntactically, he analyses complex appositions quite similar to simple ones. Instead of a nominal phrase, a Small Clause is adjoined to the right of the anchor. Semantically, however, they get a rather different analysis. Whereas simple appositions are just predicates that have to be applied to the anchor in order to form a proposition, these complex cases, he argues, are semantically complete and do not have to be applied to the anchor. In semantics, they are only related to the anchor via pronominal reference. In that sense, they would look more like clausal parentheses, complete utterances that somehow interrupt the matrix, but do not have an anchor:

- (56) a. Peter is proud that Kelly - she is his daughter - helps orphans in Ghana.
 b. The orphans - they are all very fond of Kelly - were glad to meet her father.

O'Connor (2008), on the other hand, argues that complex appositions have to be analyzed exactly the same as the other appositions. In her analysis, the partitive expressions are (similar to) floating quantifiers. She notes that the examples in (55)

are not the only option to represent the appositive proposition. The other option is given in (57):

- (57) a. They are most of them linguists.
 b. They are almost all of them Muslims.
 c. They are many of them my friends.

In order to choose between these two options, O'Connor (2008: 210-211) tests the possible positions in complex appositions for adverbs that potentially can occur both left and right from the subject. Here are some of her examples with her judgments:

- (58) a. A leaked report compiled by diplomats at the British high commission has blamed India's ruling BJP party for the continuing violence in Gujarat, in which at least 2,000 people, *almost all of them probably Muslims*, have died.
 a'. * A leaked report compiled by diplomats at the British high commission has blamed India's ruling BJP party for the continuing violence in Gujarat, in which at least 2,000 people, *probably almost all of them Muslims*, have died.
 b. I had season-ticket holders, *many of them perhaps my friends*, call me for tickets.
 b'. * I had season-ticket holders, *perhaps many of them my friends*, call me for tickets.

With these and other examples, O'Connor argues that in complex appositions the adverbs in question can only occur to the right of the partitive expression. The same happens if the quantifiers under discussion are used as floating quantifiers. The examples and judgments are O'Connor's again:

- (59) a. They are almost all of them probably Muslims.
 a'. * They are probably almost all of them Muslims.
 b. They are many of them perhaps my friends.
 b'. * They are perhaps many of them my friends.

If the partitive expression is used as a subject, however, these adverbs can occur to its left as well:

- (60) a. Almost all of them probably are Muslims.
 a'. Probably, almost all of them are Muslims.
 b. Many of them perhaps are my friends.
 b'. Perhaps, many of them are my friends.

Therefore, O'Connor concludes that the partitive expressions in complex appositions are always in a position below the subject, but higher than all adverbs. However, the native speakers I asked did not confirm the sharp contrasts in (58) and (59). Therefore, the conclusion that the partitive in these expressions are always below the subject cannot be drawn on the basis of these data.

There are also other reasons to think that O'Connor's analysis for complex appositions is not correct, or at least not in all cases. First, not all partitive expressions can function as floating quantifiers. Hoeksema (1996) observes that *few of them* is ungrammatical in floating contexts. Also, *n of them*, where n stands for a numeral, seems impossible in these cases. Yet, these quantifiers can occur in appositions:

- (61) a. In the last decades, there were several reforms, *few of them successful changes*, in the educational system.
 b. The men, *one of them a doctor*, started caring for the wounded people.
 c. The judge decided that the robbers, *three of them drug addicts*, would not benefit from imprisonment.
- (62) a. * They were few of them successful changes.
 a'. Few of them were successful changes.
 b. * They were one of them a doctor.
 b'. One of them was a doctor.
 c. * They were three of them drug addicts.
 c'. Three of them were drug addicts.

Note that O'Connor does not agree on these judgments. She only marks an example similar to (62b) with a question mark (p. 207). According to her, the questionability of such sentences is due to the difference in number between the subject and the predicate, since examples like (62c) are grammatical in her view. The judgments of my native informants contradict this, however.

A second objection to O'Connor's analysis is based on Dutch. As Hoeksema (1996) shows, the Dutch equivalent constructions consisting of a partitive quantifier with a personal pronoun cannot be used as floating quantifiers. Some of them can be used in appositions, however:

- (63) a. De studenten, *de meeste van hen taalkundigen*, misten [Dutch]
 the students the most of them linguists missed
 de bus.
 the bus
- b. Een groot aantal abonnees, *veel van hen mijn vrienden*,
 a large number season-ticket.holders many of them my friends
 belden mij voor kaartjes.
 called me for tickets
- c. De mannen, *één van hen een dokter*, begonnen de gewonden te
 the men one of them a doctor started the wounded to
 verzorgen.
 care
 'The men, *one of them a doctor*, started to care for the wounded.'

- (64) a. * Het² zijn de meeste van hen taalkundigen.
 it are the most of them linguists
 a'. De meeste van hen zijn taalkundigen.
 the most of them are linguists
 b. * Het zijn veel van hen mijn vrienden.
 it are many of them my friends
 b'. Veel van hen zijn mijn vrienden.
 many of them are my friends
 c. * De mannen zijn één van hen een dokter.
 the men are one of them a doctor
 c'. Eén van hen is een dokter.
 one of them is a doctor

Note that Dutch also has partitive quantifiers with a second quantifier instead of a personal pronoun. Whereas the Dutch partitives with personal pronouns can only be used in subject position, the partitives with a second quantifier can function both as floating quantifiers and as subjects. The two uses can be disambiguated by the (nominal) predicate's number. If a singular predicate is used, the partitive has to be in the subject position (65a). If a plural predicate is used, on the other hand, the partitive has to be in a floating position (65b):

- (65) a. Geen van allen is een optimist. [Dutch]
 none of all is an optimist
 'None of them is an optimist.'
 a'. * Het is geen van allen een optimist.
 it is none of all an optimist
 b. Het zijn geen van allen optimisten.
 it are none of all optimists
 'They are none of them optimists.'
 b'. * Geen van allen zijn optimisten.
 none of all are optimists

These quantifiers can appear in appositions as well, both with singular and plural nominal predicates, as illustrated in (66) below. Thus, these data immediately show that partitive constructions in Dutch appositions can function both as a subject and as a floating quantifier.

- (66) a. De decanen, *geen van allen optimisten* / {*een optimist*}, [Dutch]
 the deans none of all optimists an optimist
 besloten het geld niet uit te geven.
 decided the money not out to give
 'The deans, *none of them optimists*, decided not to spend the money.'

² In Dutch, a pronominal subject of a nominal predicate is generally neuter singular. See Rullmann & Zwart (1996) and Heringa & De Vries (2008b).

- b. Die twee collega's, *elk van beiden perfectionisten* /
 those two colleagues each of both perfectionists
{een perfectionist}, kunnen niet goed samenwerken.
 a perfectionist can not good cooperate
 'Those two colleagues, *both of them perfectionists*, do not cooperate
 well.'

In sum, in contrast to O'Connor (2008), I conclude that appositions that involve partitive expressions are ambiguous between a reading where the partitive functions as a floating quantifier and one where it functions as a subject.

In Dutch, ambiguities can be resolved by looking at the type of partitive (with personal pronoun or quantifier) or the nominal predicate's number. Both partitives with personal pronouns and partitives that are combined with a singular nominal predicate have to be analyzed as a subject; the other constructions function as a floating quantifier. Also some of the English equivalent constructions, such as *few of them* and *n of them*, have to be analyzed as a subject. The other English partitives are probably ambiguous between the two readings.

Though I do not agree on O'Connor's idea that partitives in appositions are always in a position below the subject, I think that she is right in giving simple and complex appositions the same analysis, unlike Potts (2005). Therefore, I suggest that both simple appositions and complex appositions with a floating partitive involve a covert pronoun, *pro*, that functions as the subject of the nominal predicate. In the next chapter, I will give additional evidence for the presence of such a pronoun in the syntactic structure of appositions and show that this element functions as an E-type pronoun.

Now, let us get back to simple quantifiers in appositions. In section 3.5, we saw already that *both* and *all* can occur in appositions as floating quantifiers. McCawley (1998: 469) gives an interesting example in this respect:

- (67) Sauter is ... living with his lawyer-wife, Kathleen - the daughter of Pat Brown and sister of Jerry Brown, *both former governors of California*. (Parade, May 10, 1987)

As McCawley points out, the apposition in this sentence has a split anchor. It refers to Pat Brown and Jerry Brown, but these names do not form a single constituent together. This is a problem for analyses that take the anchor to be the subject of the apposition, such as Potts (2005). Since the anchor is split, an intermediate step is needed to form a subject. This problem can be solved by assuming that the apposition contains a silent pronoun that is coreferent with the anchor. Of course, one could argue that *both* in this sentence might function as a subject, but the Dutch equivalent in (68) suggests that (67) has a reading in which *both* is floating:

- (68) Sauter woont bij zijn vrouw Kathleen - de dochter van Pat [Dutch]
 Sauter lives at his wife Kathleen the daughter of Pat
 Brown en zus van Jerry Brown, *allebei voormalige gouverneurs*
 Brown and sister of Jerry Brown both former governors
van Californië.
 of California

As we saw before, Dutch *allebei* differs from English *both* in that it cannot function in subject position:

- (69) a. Het zijn allebei voormalige gouverneurs. [Dutch]
 it are both former governors
 ‘They are both former governors.’
 b. * Allebei zijn voormalige gouverneurs.
 both are former governors
 Intended: ‘Both are former governors.’

Note that it is possible in (68) to replace *allebei* by *beide*, which can occur in subject position. Again, (69) does not show that *both* is always to be analyzed as a floating quantifier in (67), but suggests that the sentence has a reading in which this analysis is the only possibility. Whether this reading is really there in English or not, the Dutch (69) itself requires an analysis where *allebei* is a floating quantifier. In that example, another element is needed in order to provide the appositional predicate with a subject. Dutch appositions with split anchors thus provide an argument in favor of the presence of a covert pronoun, *pro*, in their structure.

Whereas *all* and *both* can function both as a subject and as a floating quantifier, there are also simple quantifiers that cannot float. Some examples are *some*, *many*, *most*, *neither*, *few*, and numerals. These quantifiers appear in appositions as well (cf. O’Connor 2008), showing that the subject of the apposition can be overtly present. Example (70a) is from Quirk et al. (1985: 1314). The others are mine:

- (70) a. The two men, *one a Norwegian and the other a Dane*, were awarded medals.
 b. The old singers, *some stars in their days*, criticized the modern artists.
 c. The crowd applauded the soccer players, *most girls*, after the match.
- (71) a. One was a Norwegian and the other (was) a Dane.
 a’. * They were one a Norwegian and the other a Dane.
 b. Some were stars in their days.
 b’. * They were some stars in their days.
 c. Most were girls.
 c’. * They were most girls.

This brings us back to example (42), repeated below as (72a-b), which seemed problematic for an analysis of appositions as nominal predicates, because the apposition contains a quantificational expression that is impossible as a part of the

predicate in the corresponding copular clause (72b). This expression can occur in subject position, however, as in (72c), just like the quantifiers in (70) above:

- (72) a. Ed saw three paintings, *each a more beautiful portrait than the last*.
 b. * Three paintings were each a more beautiful picture than the last.
 c. Each was a more beautiful picture than the last.

Summarizing, appositions may have overt subjects other than (but referring to) their anchors, either partitives or simple quantifiers. Also, there are indications that in appositions without such an overt subject a covert pronoun with the same function is present. In chapter 4, I will discuss the nature of this pronoun in more detail and argue that it is an E-type pronoun. In section 3.8, I will argue that appositions can also project a TP. This supports the idea that appositions have their own subject outside the matrix, because this subject is then able to satisfy TP's EPP-feature, which requires a subject to move to its specifier.

3.7 Semantic classes of appositions correlate with types of copular clauses

Now that I have argued that appositions are nominal predicates and that they also have a subject, the question remains how these two are combined in a predication relation. In order to answer this question, it is important to realize that we are dealing with a copular relation here and that there are several types of copular clauses. In this section, I will show that these types of copular clauses correlate with the semantic classes of apposition I described in chapter 2.

One of the first taxonomies for copular clauses was proposed by Higgins (1979). He distinguished four types, illustrated below with examples from his own work (pp. 211, 215, 237, 262):

- (73) a. predicational: Jemima is a cat.
 b. specificational: The number of planets is nine.
 c. identificational: That is Joe Smith.
 d. identity: The evening star is the morning star. } equative

In most of the later works on this topic, the fourth type, *identity*, has been called 'equative'. Furthermore, most people follow Higgins's suggestion that the third and the fourth type are very close and could be taken together as one type. This leaves us with three classes: predicational, specificational and equative, as indicated in (73) above.

In predicational copular clauses, the predicate has a function similar to the VP in non-copular sentences. It expresses a property that is ascribed to the referent of the subject. Thus, these clauses say something *about* the entity denoted by the subject. In specificational clauses, on the other hand, the post-copular expression provides a value for a variable that is introduced by the pre-copular expression. Thus, these clauses do not really say something *about* the referent of the pre-copular expression, but rather tell the hearer *who* or *what* this referent is (cf. Mikkelsen 2005: 1, Akmajian 1979: 162-165). If the pre-copular expression of a copular clause

would be used as a prompt on a form, the post-copular expression in a specificational clause would correspond to a conventional answer (Place of birth: Amsterdam), whereas a predicational predicate would be odd (Place of birth: nice city). Finally, equative clauses indicate that two referential expressions refer to the same entity.

In the description of specificational clauses above, I used the terms pre-copular and post-copular expression instead of subject and predicate. The reason is that authors who write on predication do not agree on which of the expressions in a specificational clause functions as the subject and which one as the predicate. One group of scholars (Williams 1983, Heggie 1988, Moro 1997, Mikkelsen 2005, Den Dikken 2006, among others) argues that specificational clauses are inverted predicational clauses, which means that the subject and the predicate are swapped around. Note that in some of these analyses the pre-copular expression is analyzed as a predicate semantically and also originates in a predicate position in an underlying small clause, but later on raises to the subject position and therefore functions as the subject of the sentence syntactically. Another group (Partee 1998, Heycock and Kroch 1999, Rothstein 2001, among others) argues that specificational clauses are not inverted. This group of authors takes specificational and equative clauses to form one group, arguing that also in specificational clauses both expressions are referential. In terms of semantic type theory, where referential expressions are basically of type $\langle e \rangle$ and predicates of type $\langle e, t \rangle$, the two groups can schematically be represented as in the table below. Here, NP₁ stands for the pre-copular expression and NP₂ for the post-copular expression.

Clause Type	Inversion		No inversion	
	NP ₁	NP ₂	NP ₁	NP ₂
Predicational	$\langle e \rangle$	$\langle e, t \rangle$	$\langle e \rangle$	$\langle e, t \rangle$
Specificational	$\langle e, t \rangle$	$\langle e \rangle$	$\langle e \rangle$	$\langle e \rangle$
Equative	$\langle e \rangle$	$\langle e \rangle$		$(\neg \langle e, t \rangle)$ ³

In this thesis, I basically follow the non-inversion approach and assume that specificational and equative clauses form one type. I use the term equative clause to refer to this whole group, stressing that this type of clauses equates the referents of the two expressions. This means that there are only two types of copular clauses left: predicational and equative. To distinguish the two, the following test can be used. Whereas the two NPs in a predicational copular clause can be used in the same order in a small clause complement without *be* for the verb *consider*, this is impossible for the two NPs in an equative copular clause. Compare the following examples from Rothstein (1995: 27):

- (74) a. The winner is a good runner.
 b. The winner is Mary.

³ Rothstein (2001) argues that NP₂ in specificational and equative clauses starts out as a referential expression, but is type-shifted later on to type $\langle e, t \rangle$, using Partee's (1987) Ident operator.

- (75) a. I consider the winner (to be) a good runner.
 b. I consider the winner *(to be) Mary.

Besides taking specificational and equative clauses together, I will also refer to the post-copular expression in these clauses as the predicate.

Now, if we compare the two main types of copular clauses with the two main classes of appositions described in chapter 2, it is immediately clear that there is a correlation between these two classifications. Attributive appositions put the anchor in the class described by the anchor, in other words they ascribe a property to the anchor's referent, just like the predicate in a predicational copular clause ascribes a property to the subject's referent. Identificational appositions, on the other hand, give an alternative description for the entity described by the anchor. This is exactly the same as what happens in equative copular clauses: the copula equates the referents of the subject and the predicate. Here are some examples to illustrate this correlation. The examples in (76) are attributive/predicational and those in (77) are identificational/equative:

- (76) a. Christine, *a genius*, applied for a patent on several of her inventions.
 a'. Christine is a genius.
 b. Richard asked Susan, *the best student in her class*, to help her class mates.
 b'. Susan is the best student in her class.
- (77) a. The police thinks that the man on this picture, *John Dillinger*, robbed a bank.
 a'. The man on this picture is John Dillinger.
 b. Jack misses the woman he loves, *his wife*.
 c'. The woman Jack loves is his wife.

To sum up, we have seen that the secondary proposition conveyed by appositional constructions involves a predication relation similar to the one in a copular clause. There are basically two types of copular clauses: predicational and equative. These types of copular clauses correlate with the two main semantic classes of appositions: attribution and identification, respectively. Therefore, I conclude that attributive appositions underlyingly have the structure of a predicational copular clause, which means that they are based on a small clause consisting of a subject of type <e> and a predicate of type <e,t>. Identificational appositions, on the other hand, have an underlying structure of an equative copular clause, based on a small clause consisting of two referential expressions, both of type <e>.

3.8 Appositions project tense

Concluding that appositions are nominal predicates and have a subject, either overt or covert, means that appositional constructions look like clauses. After all, a clause basically consists of a subject and a predicate. The question remains how big these clauses are and what they look like. Is it sufficient for this relation that the anchor

and the apposition are sisters and in that way can form a Small Clause, or is the structure bigger and does it have positions for (functional) projections such as tense? In this section, I will argue that appositions underlyingly have a clausal structure that can at least include their own tense.

Doron (1992) follows Jackendoff (1977) in the idea that an appositional construction simply has the structure of a complex nominal phrase, consisting of two other nominal phrases, representing the anchor and the apposition. Similarly, Potts (2005) argues that appositions should be analyzed as nominal phrases that are right adjoined to another nominal phrase, the anchor. Since the apposition denotes a property and the anchor an individual, they can be combined in semantics, resulting in a proposition. In Potts's (2005: 132) words: "The parallel between predicative copular constructions and NAs (nominal appositives, HH) is grounded in the logic itself. [...] we have an instance in which the predicate applies to the subject. In NAs, the appositive applies to the anchor." Note that in such an analysis the anchor has to be used twice in the interpretation. It is both interpreted as the subject of the apposition and as an argument in the matrix. In chapter 4, I will come back to Potts's analysis in more detail. Here, I want to provide empirical evidence showing that the underlying structure for the appositive proposition needs to be more complex than he suggests.

The first extension I want to argue for is the presence of a tense projection. Of course, it is clear that appositions do not contain any (overt) finite verb. Therefore, it is hard to argue that tense should be present. After all, the presence of a functional head or an operator for tense is usually taken to be reflected in the morphology of the finite verb. The only way to argue for tense in appositions on the basis of verb morphology would be to use an analogy with a closely related construction that does involve this kind of morphology. Free *being*-adjuncts seem to provide a promising case in this line of reasoning, if we could show that the -ing suffix is related to tense. Unfortunately, this turns out not to be the case, as I will show below. Yet, I will also show that there is evidence for the presence of tense in appositions even in the absence of verbal morphology. This evidence is based on tests that were developed to detect tense in infinitives.

First, let us see why the argument cannot be based on verb morphology in the closely related construction of *being*-adjuncts (see Stump 1985, Kortmann 1991). In chapter 1, we saw that these constructions look very similar to appositional constructions and indeed might be their inverse, the first element corresponding to an apposition and the second to its anchor. Although these constructions can be verbless as well (which strengthens the analogy), they often contain the present participle *being*. Here are some examples, slightly adapted from Quirk et al. (1985: 1314-1315):

- (78) a. (Being) an even-tempered man, Paul nevertheless became extremely angry when he heard what had happened.
 b. (Being) the heir to a fortune, her friend did not care about passing examinations.

If we want to use these constructions to argue for the presence of tense in appositions on the basis of their verb morphology, it should be clear that the -ing suffix represents tense somehow.

An indication that the present participle is indeed related to tense in these cases might be the possibility of using a past participle instead (preceded by *having*):

- (79) a. Having been a landlubber for decades, captain Claypole knows exactly how the junior seamen feel.
 b. Having been a cancer patient when she was young, Mary is glad to be a pediatric oncologist now.

These variants seem to locate the free adjunct in the past, whereas the matrix can be in the present. However, the present participle in examples like (78) does not locate the free adjunct in the present, irrespective of the matrix tense. *Being* adjuncts are usually interpreted as events that happen at the same time as (or immediately before or after) the matrix event. In (78), for example the free adjuncts are located in the past, because the matrix is in the past as well, even though a present participle is used. In other words, the -ing suffix in adjuncts is not inherently related to a particular tense.

This does not necessarily mean that *being* adjuncts lack tense. After all, it could be that the tense is there, but that it is not expressed in the morphology of the verb, or even that the suffix does express the presence of tense, but not one tense in particular. It has indeed been argued that so-called clausal gerunds in English do project a TP (see Pires 2006:17-20, for instance), but this is clearly not the case for all constructions involving a present participle. Consider the examples from Pires (2006: 18) below, which show some differences between clausal gerunds and *poss*-ing constructions with respect to TP related properties: the presence of sentential adverbs (80a), the possibility of wh-extraction (80b), and the presence of expletive *it* (80c) as a subject:

- (80) a. Mary(*'s) probably being responsible for the accident was considered by the DA.
 b. What did everyone imagine Fred(*'s) singing?
 c. You may count on it(*'s) raining tonight.

Again, the fact that *poss*-ing and clausal gerunds differ in this respect means that the participle suffix is not inherently related to tense. There are other ways to reveal the presence of tense, however.

First, it should be noted that tense is not inherently related to the morphology of the verb. As Landau (2004: 839) states, ‘the criterion for [+T] is semantic, not morphological: A clause may be tensed without carrying any tense morphology [...] or untensed *despite* its tense morphology [...]’ (See also Stowell 1982, 2007, Wiklund 2005, Zwart 2007, and the references there.) Note that tense expresses temporal shifting with respect to a reference time (in main clauses, this reference time is the utterance time, see Stowell 2007). This means that clauses with their own reference in time, independent of the matrix, have their own tense, whether this time reference comes from verb morphology or not.

Indeed, several linguists have argued that it is possible to determine the presence of tense in contexts without a finite verb. Ter Beek (2008: 75-94), for example, gives several diagnostics for the presence of tense in infinitival complements. The given diagnostics are all used to show that the matrix predicate and the infinitival complement have distinct event times. Most of these tests do not depend on the morphology or even the presence of a verb, which means that they can also be applied to verbless constructions such as appositions. The first test is the possibility to modify the tense of the complement with a temporal adverb, showing that the embedded sentence is situated in time independently from the matrix predicate⁴. If we apply this test to appositional constructions, we get a positive result for the presence of tense:

- (81) a. Keith, *once a drug addict*, now leads a rehabilitation centre.
 b. I never realized that appositions, *currently my subject*, could be so interesting.
- (82) a. Mijn broertje, *vanaf volgend jaar promovendus*, studeert [Dutch]
 my brother from next year PhD.student studies
 nu nog.
 now still
 ‘My brother, *from next year on a PhD student*, is now still a master student.’
 b. Mieke, *nu moeder van drie kinderen*, zag altijd op tegen
 Mieke now mother of three children saw always up against
 het ouderschap.
 the parenthood
 ‘Mieke, *now a mother of three children*, always shrunk from becoming a parent.’

In the examples in (81) and (82), the appositions contain modifiers resulting in a distinct tense for the appositive content. In (81a) the matrix is in the present, whereas the appositive message is in the past. In (81b) and (82b) it is exactly the other way around. In (82a), the apposition is located in the future, whereas the matrix is in the present.

One could object that it is possible to use temporal adverbs with DPs anyway. Consider, for instance, the examples in (83):

- (83) a. Charlotte was the eldest daughter of the then king of Naples.
 b. Last year, the now president elect tried to shoot holes in Clinton’s claims.

⁴ Alexiadou (2000) even argues that the interpretation of temporal distinctions is specified by temporal adverbs, rather than by tense morphology on the verb. In her view, tense morphology is a reflection of agreement of the T-head with a (possibly covert) temporal adverb. This idea particularly builds on the semantic insights on tense from Vlach (1993).

This option is very restricted, however. It is impossible to use examples like *the yesterday newspaper*, *this once drug addict*, or *my currently subject*. Also, comparison with Dutch suggests that *then* and *now* are used adjectivally in the sentences in (83). Dutch uses the adjectives *toenmalig* and *huidig* instead of the adverbs *toen* and *nu* in such cases. This is also confirmed by the fact that the adverbs in these cases are preceded by the determiner.⁵

- (84) a. Charlotte was de oudste dochter van de toenmalige/*toen [Dutch]
 Charlotte was the eldest daughter of the then:ADI/then:ADV
 koning van Napels
 king of Napels
 b. Afgelopen jaar probeerde de huidige/*nu president gaten te
 last year tried the present/now president holes to
 schieten in Clintons claims.
 shoot in Clinton's claims

In section 3.8, I will come back to the presence of adverbs in appositions and show more extensively that they can be used in arguing for the idea that appositions involve functional structure.

The second test was originally designed to disambiguate between perfect aspect and past tense in Dutch infinitives. This diagnostic, from Zwart (2007), uses an adverbial clause to introduce a reference point in time. Tense expresses temporal shifting with respect to a reference time (in main clauses, this reference time is the utterance time, see Stowell 2007). This means that clauses with their own reference in time, independent of the matrix, have their own tense. Thus, tensed clauses can show cotemporaneity with a reference point in time. Indeed, such a reference point in the past is compatible with past tense, but not with the present perfect. Zwart (2007: 4) illustrates this contrast with the following example:

- (85) Jan beweert [dat hij **sliep/** ***ge-slap-en heeft** toen de [Dutch]
 Jan claims that he sleep:PAST GE-sleep-N have:3SG when the
telefoon ging.]
 phone go:PAST.SG
 'Jan claims that he was asleep when the phone rang.'

Here, the combination of the prefix *ge-* and the suffix *-n* indicates that *geslapen* is a perfect participle. Together with the present auxiliary *heeft*, it forms the present perfect. This form cannot be used to express cotemporaneity between the sleeping

⁵ One might wonder why adverbial temporal modification would be related to the presence of tense, whereas adjectival temporal modification would not. It is hard to answer this question. Yet, I think it is important to distinguish between temporal modification within and outside DPs. See for instance Alexiadou (2008) for arguments that temporal modification in the nominal domain, as in (77), is not related to tense. What matters here is that DP-internal modification concerns the interpretation of the noun more directly, whereas adverbial temporal modification in appositional constructions concerns the relation between the anchor and the apposition, providing this relation with a reference point in time.

event and the moment in the past that the phone rang⁶. Thus, the possibility to use a reference point in the past indicates past tense. Interestingly, this test can also be applied to appositional constructions. Here is an example:

- (86) Keith, *een drugsverslaafde* toen ik hem voor het eerst ontmoette [Dutch]
 Keith a drug.addict when I him for the first met
 leidt nu een afkickkliniek.
 leads now a kick.the.habit.clinic
 ‘Keith, a drug addict when I first met him, now leads a rehabilitation clinic’.

The reference time introduced by the adverbial clause in (86a) is in the past and it coincides with the event time of the secondary message. The time of the secondary message and the reference point both precede the matrix event time, the present. Therefore, this test provides positive evidence for the presence of tense in appositional constructions. Note that the objection that high modifiers can also occur in DPs does not hold in this case. The adverbial clauses are impossible in DPs, as (87) shows.

- (87) a. * This drug addict when I first met him leads a rehabilitation centre.
 b. * This when I first met him drug addict leads a rehabilitation centre.

Finally, it is a fairly common assumption that nominative case is assigned by the Tense-head. Therefore, if appositions would be marked with nominative case, this would indicate the presence of TP. There are indeed examples of appositions that get a nominative case, independent of the case of the anchor. This may happen in German, for instance, particularly if the apposition is preceded by a high adverbial, as illustrated below (cf. Bergenholtz 1985, Schindler 1990):

- (88) a. Der Dokumentarfilm über Peter, *einmal ein/ *einen Junkie*, zeigte
 the documentary about Peter once a:NOM a:ACC junkie showed
 die Veränderung in seinem Leben als er mit den Drogen aufhörte.
 the change in his life when he with the drugs quit
 ‘The documentary about Peter, *once a junkie*, showed the change in his
 life after he quit drugs.’
 b. Für meinen Freund, *glücklicherweise {ein guter} / *{einen guten}*
 for my:ACC friend fortunately a:NOM good a:ACC good
Schüler, war die Prüfung einfach.
 pupil was the test easy
 ‘For my friend, *fortunately a good pupil*, the test was easy.’

⁶ If the past form of the auxiliary, *had*, is used, the sentence becomes grammatical again. In that case, it does not indicate co-temporaneity with the reference point. Instead, it indicates that the sleeping event preceded the point in time at which the phone rang: relative tense with respect to a reference point in the past.

These data suggest that TP is indeed present in appositional constructions, where the appositional T assigns nominative case to the apposition. In chapter 6, I will come back to case marking on appositional constructions in several languages and sketch a theory of how these cases are assigned.

Even though appositions do not contain any verb morphology, I conclude that appositions are nominal predicates that can project a TP on the basis of the positive results from the tests described above.

3.9 Adverbs reveal functional structure in appositions

Up to now, I used particular characteristics of tense, such as independence from the matrix with respect to temporal reference and the presence of a subject, in order to argue for its presence in appositions. There is, however, a more general way in which we can argue for the presence of functional structure, namely by looking at the possibility for certain classes of adverbs to occur. In this section, I show that all types of adverbs, including sentential ones, can be present in appositions. From that, I conclude that appositions may involve functional projections, at least IP or TP.

In order to use this type of argumentation, we have to keep in mind that there are basically two different views on adverbs among linguists. Some (eg. Ernst 2002) analyze them as adjuncts to maximal projections, either lexical or functional. Others (eg. Cinque 1999) consider them to be specifiers of particular functional projections. These two types of analyses focus on different aspects of adverbial behavior. An adjunction analysis easily accounts for the fact that adverbs often have a flexible position with respect to arguments in the linear order of a sentence, since adjunction basically does not have any constraints on the adjoinee. An analysis in terms of functional projections, on the other hand, straightforwardly explains why several semantic classes of adverbs have different distributions and roughly appear in the same order cross-linguistically, since they are related to specific functional projections and these projections appear in a strict order, following a rigid hierarchy. Of course, both types of accounts need extra rules in order to arrive at the strong point of the other. An adjunction type of analysis needs extra semantic rules that can only interpret certain classes of adverbs when they are in the right domain in the sentence, which renders any syntactic structures with the wrong distribution of adverbs uninterpretable and therefore ungrammatical. An analysis that relates adverbs to functional projections needs movement of both the adverbs themselves and other elements in order to explain the variation in their distribution. Note that both types of accounts necessarily involve adverb movement anyway in order to explain intervention effects, where the presence of one adverb restricts the distribution of another one such that the blocked adverb cannot appear higher up in the sentence than the blocking one.

Either way, the presence of certain semantic classes of adverbs in a sentence can reveal the presence of functional structure. In an adjunction analysis, the semantic rules refer to particular projections in order to determine the adverb's application domain. The presence of an adverb from a certain semantic class implies that a corresponding rule could be applied and therefore that a certain projection has to be present. In the functional specifier approach, the link is more straightforward.

There, classes of adverbs are positioned in the specifier of particular functional projections, which immediately implies that the corresponding functional projection has to be present if the adverb of a certain class shows up.

Of course, every single approach has a different number of functional projections with different labels, but the general picture will be the same. We should also bear in mind that, even within the more cartographic approaches, there are different views with respect to the necessary presence of several projections (cf. Starke 2001). Some would even go so far as to say that all projections are always present. Others follow a ‘peeling’ or ‘truncation’ approach, which means that projections can be left out only from the top of the hierarchy downwards. In this approach, the presence of a higher projection is evidence for the presence of any projection below it. Still others think that every projection can independently be left out. The only thing the hierarchy indicates in this view is the order of the projections that are present. If we want to follow the most flexible approach, we should check for every projection whether it can be present in appositions.

A famous classification of adverbs based on extensive cross-linguistic research is the universal hierarchy of functional projections described by Cinque (1999). Cinque distinguishes two major groups of adverbs: lower pre-VP adverbs, which only modify the predicate, and higher sentence adverbs, which modify the proposition as a whole. The boundary is between the subject-oriented adverbs and the middle aspect adverbs as represented below. This classification suggests that the presence of sentence adverbs in appositions would already show that there is more to the appositional structure than just a predicate.

Tenny (2000) argues that Cinque’s hierarchy is so fine-grained that it suggests a somewhat arbitrary inventory of functional projections. She proposes to regroup all his classes in six zones based on semantic features. Each zone is related to one functional projection. Here is her classification (p. 318), following the hierarchy top-down:

- (89) a. Point of view (speaker deixis): *frankly* Mood_{speech act} > *fortunately* Mood_{evaluative} > *allegedly* Mood_{evidential} > *probably* Mod_{epistemic} >
- b. Deictic time (temporal deixis): *once* T(Past) > *then* T(Future) >
- c. Truth value: *perhaps* Mood_{irrealis} > *necessarily* Mod_{necessity} > *possibly* Mod_{possibility} >
- d. Subject-oriented: *willingly* Mod_{volitional} > *inevitably* Mod_{obligation} > *cleverly* Mod_{ability/permission} >
- e. Middle aspect: *usually* Asp_{habitual} > *again* Asp_{repetitive(I)} > *often* Asp_{frequentative(I)} > *quickly* Asp_{celerative(I)} > *already* T(Anterior) > *no longer* Asp_{terminative} > *still* Asp_{continuative} > *always* Asp_{perfect} > *just* Asp_{retrospective} > *soon* Asp_{proximative} > *briefly* Asp_{durative} > *characteristically* Asp_{generic/progressive} > *almost* Asp_{prospective} >
- f. Core event: *completely* Asp_{SgCompletive(I)} > *tutto* Asp_{PlCompletive} > *well* Voice > *fast/early* Asp_{celerative(II)} > *again* Asp_{repetitive(II)} > *often* Asp_{frequentative(II)} > *completely* Asp_{SgCompletive(II)}

O’Connor (2008) extensively investigated the potential presence of adverbs from these six classes and all subclasses in appositions. She concludes that the adverbs all

can be present in appositions, except for those from the highest subclass of the point of view adverbs: speech act adverbs. Here are some relevant examples (p. 93-97), following the hierarchy bottom-up (the e-example is mine):

- (90) a. Mr. Bartelli, *often the navigator on the boat his team races*, has sailed competitively since his 20s. (*New York Times* online, ‘Billionaires’ yacht rivalry spills into courtroom’, 30/08/08)
- b. By that test the former Young Liberal, *briefly MP for Neath and 52 next month*, will make it into the cabinet sooner rather than later.
- c. Within a week of his arrival Mr Morton, *always an interventionist in his economics*, was gone.
- d. He has had a terrible couple of weeks in Scotland, *now no longer his fiefdom*.
- e. Right now, I’m in the last year of my PhD project, *inevitably a busy period*.
- f. It is by far the longest short in the book, *possibly a novella to some*, and in my opinion it should have ended much sooner than it did. (<http://www.legendsmagazine.net/138/orbit.htm>)
- g. This year the world’s population will reach six billion, reports a Swedish newspaper correspondent from Geneva. Somewhere, a child, *perhaps a girl*, will be born to mark this threshold event. (http://www.rotarydoctorbank.org/99i/db_99_3b.htm)
- h. His father, *once a businessman himself*, helps to keep things running smoothly and interacts with individuals who would otherwise act differently towards Blaustein because of his comparative youth. (<http://www.gradyhightschool.org/southerner/southerner1103/pizza.htm>)
- i. His death, *probably a suicide*, is glossed over and there is no actual diagnosis to back up the pop psychology.
- j. Racial profiling, *unfortunately a frequent occurrence in American society*, must be stopped.

Below are some examples from other languages than English illustrating the possibility for sentential adverbs to occur in appositions:

- (91) a. John, *silloin tunnettu professori*, piti puheen [Finnish]
John, then well-known professor, gave speech
hämähäkeistä.
from.spiders
‘John, *back then a well-known professor*, gave a talk on spiders.’
- b. V konkurse Petra pobedila Masha, *ochevidno* [Russian]
in quiz Peter:ACC beat:PST Masha:NOM obviously
umnaja devushka.
smart girl
‘In the quiz, Peter was beaten by Masha, *obviously a smart girl*.’

- c. Moje žena, naštěstí solidní plavkyně, úspěšně [Czech]
 my wife fortunately good swimmer successfully
 složila zkoušku.
 passed exam
 ‘My wife, *fortunately a good swimmer*, successfully passed the exam.’

As I mentioned above, O’Connor claims that the highest subclass of adverbs, which say something about the speech act, such as *frankly*, *honestly*, and *sincerely*, cannot be present in appositions. Consider the example below with her judgment (p. 97):

- (92) * Mr. Minghella, frankly not particularly excited by the prospect of the book, was hooked by the time he finished it.

O’Connor notes that *frankly* is not only used as a speech act adverb, but also, for example, as a degree adverb before adjectives and as a sentential intensifier. In these other senses, she shows, *frankly* does appear in appositions. The examples are from O’Connor (2007: (9)):

- (93) a. Mapplethorpe courted commercial success by concentrating more on flower images: *elegant, cold and often frankly sexual depictions of orchids and lilies in single blooms or arrangements.* (*New York Times* online edition, ‘Fallen angel’, 25/06/95)
 b. During my time in Oakhurst, my brother, frankly a racist (he openly admits it), was telling me about the catastrophe called Southern California.

What we are looking after, however, are occurrences of *frankly* where the speaker uses it to indicate that he is being frank in uttering the proposition. Example (92) is thus intended to mean that the speaker is being frank in saying that Mr. Minghella was not particularly excited by the prospect of the book. Native speakers I asked didn’t think (92) to be really ungrammatical in that sense, however. The sentence might seem problematic because people somehow relate frankness to the subject, Mr. Minghella, instead of the speaker. Consider the following examples, where the subject is non-human and therefore cannot be frank (94a), or the context makes it less probable that frankness is ascribed to the subject of the apposition rather than to the speaker (94b). The b-example comes from Potts (2005: 146):

- (94) a. This book, frankly not my favorite, won a prize.
 b. We interviewed Lance, quite frankly the best cyclist in the world right now, about his plans for the future.

In these examples, it is hard to give *frankly* an interpretation other than that the speaker is being frank about the appositive message he conveys. Also, the Dutch expression equivalent for *frankly*, *eerlijk gezegd*, which cannot easily be ascribed to someone else than the speaker, is acceptable in the translation of (92):

- (95) Meneer Minghella, *eerlijk gezegd* niet bijzonder [Dutch]
 Mr. Minghella frankly said not particularly
opgewonden door zijn verwachtingen van het boek, was verslaafd
 excited by his prospects of the book was hooked
 tegen de tijd dat hij het uit had.
 against the time that he it over had
 ‘Mr. Minghella, *frankly* not particularly excited by the prospect of the
 book, was hooked by the time he finished it.’

Notice that it would also be unexpected if exactly this type of adverbs were impossible in appositions, since we saw earlier that appositions are always speaker-oriented and speech act adverbs are typically related to the speaker as well.

In sum, I conclude that all semantic classes of adverbs, including speech act adverbs, can be present in appositions.

The presence of sentential adverbs in (90e-j) and (94) already suggests that there is more structure in appositions than just a nominal predicate. This is confirmed by the fact that these adverbs cannot occur in secondary predicates, such as the complement of the verb *consider*⁷. Compare the examples below to those in (90i-j):

- (96) a. * They considered [his death probably a suicide].
 b. * Bill considers [racial profiling unfortunately a frequent occurrence in American society].

Thus, the presence of these high adverbs reveals that appositions contain functional structure higher than the VP, such as TP or IP.

Here, one might object that these adverbs, like the temporal adverbs discussed in section 3.6, occur even within DPs, where clausal projections like TP are not expected. This argument was raised by Klein (1977: 50), who gives the examples in (97). The glosses are mine:

- (97) a. De *vermoedelijk* blonde daders zijn nog niet gevonden. [Dutch]
 the supposedly blond offenders are yet not found

⁷ Some of these adverbs may appear in *with*-absolutes, which are generally analysed as small clause constructions (cf. Beukema & Hoekstra 1983, 1984). An anonymous reviewer of a paper of mine gives the following example:

- (i) With [John’s death probably a suicide], the life insurance company will probably decide not to pay.

It is not clear to me why this is possible. It seems to me that this option is rather restricted. A really high adverb like *frankly* seems impossible in these contexts:

- (ii) * With [this professor frankly not a good teacher], the course is doomed to fail.

I leave this issue for future research.

- b. De helaas nog te jonge vader mag voorlopig niet trouwen.
the unfortunately yet too young father can temporarily not marry

Although these examples look very similar to the appositional constructions given in (90) above, there are two important differences⁸. First, in the appositional constructions in (90), the modifiers precede the determiner and are thus outside of the DP. In argument positions, such as in (97), however, the modifiers in question cannot precede the determiner. They have to be positioned within the DP:

- (98) a. * Vermoedelijk de blonde daders zijn nog niet gevonden. [Dutch]
supposedly the blond offenders are yet not found
b. * Helaas de nog te jonge vader mag voorlopig niet trouwen.
unfortunately the yet too young father can temporarily not marry

Second, unlike in appositions, the adverbs in the argumental DPs have to be followed by an adjective:

- (99) a. * De vermoedelijk daders zijn nog niet gevonden.
b. * De helaas vader mag voorlopig niet trouwen.

Clearly then, the adverbs in (99) modify the adjective, not the noun: they are a modifier within AP within DP. It seems clear to me that in the context of normal predication sentential adverbs are in a position higher than the tense head. Since I argued that DPs in appositions are predicate DPs, I conclude that the adverbs in appositions are in such a high position in the structure as well.

Although the examples in (97) differ indeed from the appositional constructions, it might be possible to relate the two after all and to argue for a clausal structure, and in particular the presence of higher functional projections, in both cases. For the examples in (97), this may not be very likely at first sight, but there are reasons to think that tense can be there, suggested in particular by the obligatory presence of an adjective. Smith (1964) already proposed to derive adjectives from copular relative clauses. This idea was revived by Kayne (1994). Later, Alexiadou and Wilder (1998) and Alexiadou (2001) used this analysis for a group of adjectives to explain, among other things, determiner spreading in Greek. Larson and Takahashi (2007) and Larson & Yamakido (2008) propose the same analysis for semantic reasons. A clausal source for adjectives makes the presence of sentential projections more likely. It is important to note in this respect that the later works use the clausal source only for a group of adjectives, namely the intersective ones. Inherently non-intersective adjectives, such as *former*, *electrical* and *mere*, which Bolinger (1967) already showed to be impossible in a copular relative (100a'/b'), are excluded. These adjectives cannot be modified by an adverb either (100a/b):

⁸ It is worth noting that appositions and the adjectives in the examples in (97) have also something in common. Just like appositions, these adjectives get a non-restrictive reading.

- (100) a. * The unfortunately former king is a good man.
 a'. * The king who is former is a good man.
 b. * A probably electrical worker fixed the problem with the lights.
 b'. * A worker who was electrical fixed the problem with the lights.

If a relative clause analysis is correct for (a group of) attributive adjectives, the presence of sentential adverbs always indicates the presence of functional projections higher than VP. An analysis along those lines would also explain why sentential adverbs in this case have to appear within the DP and preceding an adjective. After all, they would be generated above the adjective in the relative clause and move along with it to the position in front of the NP. Thus, the presence of high adverbs within DP projections could be explained. Whether such an analysis would be right or not, my conclusion remains that the sentential adverbs that occur in appositions have to be in a functional projection.

To sum up, in this section I showed that all semantic classes of adverbs can be present in appositions. The potential presence of sentential adverbs in particular suggests that appositions can contain functional projections higher than the VP, at least TP or IP.

3.10 Appositions involve elaborate CPs

In the previous two sections, I argued that appositions involve functional projections, in particular TP or IP. In this section, I will argue that the structure is even more elaborate and that CP is present as well.

As we saw in the previous section, appositions can contain all adverbs from the universal hierarchy from Cinque (1999), even the highest class of speech act adverbs, such as *frankly*, *honestly*, and *sincerely*. Cinque relates this class of adverbs to the illocutionary force of a sentence, which distinguishes declarative from interrogative and imperative mood, equating them to suffixes with this function in languages like Korean.⁹ Yet, he argues that this does not mean that these adverbs belong to the Force projection Rizzi (1997) argued to be part of the CP ‘space’, as represented in his hierarchy below:

⁹ In the literature, there is a lot of confusion between the terms *clause type* and *illocutionary force*. Following a strict definition, *declarative*, *interrogative* and *imperative* are clause types rather than illocutionary forces. Though these types are closely related to illocutionary forces like *assertion*, *question* and *order*, they are not the same. Whereas each clause is of a certain type, illocutionary force is related to a speech act, which may involve several clauses. Subordinate clauses do not have illocutionary force in this sense. Yet, Rizzi’s (1997) ForceP, for example, is present both in subordinate and non-subordinate clauses. Here, I will not use such a strict definition, but simply follow the termination of the literature I cite. See Kluck (2011, section 3.1.3) and the references there for a more detailed description of the strict view. Note that she uses the presence of speech act adverbs as an indication that the clause in question has illocutionary force and therefore is non-subordinate.

(101) ForceP > TopP > FocP > FinP > IP

Cinque's argument is that the Force projection precedes projections for topic and focus in Rizzi's system, whereas speech act adverbs follow topicalized elements. He illustrates this with the following example (p. 84). The glossing is mine:

(102) Di questo, A NESSUNO francamente potrei parlare. [Italian]
 of this to nobody:FOC frankly could:1SG talk
 'Frankly, I could not talk about this to anybody.'

Therefore, Cinque concludes that all functional projections where adverbs are generated are in the IP 'space'.

Haegeman (2006 and previous work), however, argued that Rizzi's (1997) ForceP should be divided in two separate projections: SubP, where subordinators are merged, and ForceP, which determines the clause type. In her system, ForceP is positioned below FocP, as follows:

(103) SubP > TopP > FocP > ForceP > FinP > IP

Furthermore, Haegeman, following a suggestion from Tenny (2000), does relate a group of adverbs to ForceP, namely those Tenny called point of view adverbs, thus including speech act adverbs. Later, Haegeman concluded that the projection at hand was characterized by speaker anchoring rather than by choice of speech act and therefore named this projection S(peaker)D(eixis). Given the low position of this projection in Haegeman's system, relating it to point of view adverbs is consistent with Cinque's observation in (102).

Following Haegeman's ideas, then, we may conclude that the presence of the highest types of adverbs in appositions indicates that they may not only project functional structure related to IP, but even to CP.

Since we have seen that coding illocutionary force is a property often attributed to the CP space, we might check whether it is possible for the appositive message to have its own, independent, force. It turns out that this is indeed the case. Example (104a) is from Corazza (2005: 13).

(104) a. Is Jane, the best doctor in town, already married?
 b. Please, say hello to Jane's friend, Mike, when you visit her.

Clearly, if a matrix sentence expresses a question or a request, the apposition is not included in the question or the request. The secondary message in that case is usually assertive. Potts (2005) notes that appositions and appositive relatives have even more freedom than coordinated full clauses in this respect. In coordination, different illocutionary forces can only be combined if the content of the first clause is known or uncontroversial (cf. Ross, 1967). The examples are from Huddleston and Pullum (2002:1332):

(105) a. It'll be very hot, so take plenty to drink.
 b. They've finished the job, but why did they take so long?

Potts gives the following examples (p. 198), comparing an appositive relative construction and coordinated clauses to show that appositive relatives have fewer restrictions in this respect. The argument can easily be extended to appositions by leaving out *who was* in (106a):

- (106) a. Did the officer arrest Clyde, who was the subject of a long manhunt, before he could strike again?
 b. * Did the officer arrest Clyde before he could strike again, and {Clyde/he} was the subject of a long manhunt.
 c. * Clyde was the subject of a long manhunt, and did the officer arrest {Clyde/him} before he could strike again?

The possibility for appositions to code their own illocutionary force suggests that functional structure related to CP is indeed present.

A more prominent feature of CP is of course that it can contain subordinators (for instance in a dedicated head Sub, as in Haegeman 2006). Therefore, it is important to know whether subordinators can be present in appositions. O'Connor (2008: 154-156) shows that this is the case, implying that CP is indeed projected:

- (107) a. The road, *though no longer an officially designated route*, has been celebrated in books ('The Grapes of Wrath'), song ('Get Your Kicks on Route 66') and a TV series ('Route 66'). (*Los Angeles Times*, 26/12/02, p. B2, col. 1)
 b. In allowing that 11th-hour add-on to a \$397 billion spending bill, Republican Congressional leaders handed the nation's real estate brokers an important symbolic victory - *if perhaps a temporary one* - in their concerted push to keep banks at bay. (*New York Times* online, 'Business; Brokers to bankers: "No trespassing"', 02/03/03)

Following Haegeman (2006 and previous work), O'Connor (2008) makes a distinction between subordinators that occur in central adverbial clauses and those that occur in peripheral adverbial clauses, the latter of which are more independent of the matrix clause. These types of subordinators are related to the presence of a reduced and a full-fledged CP, respectively. Among the central subordinators are temporal *while*, causal *if*, *after*, *when*, and *since*. Among the peripheral subordinators are contrastive *while*, assumptive *if*, *because*, and *(al)though*. As shown in (107), appositions allow the peripheral type, related to a full, main clause like, CP. This is not surprising, since Haegeman (2006) shows that the presence of this type of subordinators is also related to the presence of speaker-oriented adverbs, as illustrated by the contrast between the peripheral adverbials in (108) and the central adverbials in (109) from Haegeman (2006: 1655):

- (108) a. [A referendum on a united Ireland] . . . will be a 'good thing', because frankly they need to be taken down a peg and come down to earth and be a little bit more sober in their approach to things. (*Guardian*, 22.7.2, page 4, col 4)

- b. Why doesn't she adore me, if apparently everyone else does? (Guardian, Sport, 6.3.4, page 3, col 2).
- (109) a. * I didn't drop the class because frankly I didn't like it, I dropped it because it was too expensive.
- b. * If apparently you cannot reach her later this week, you will have to give me a call.

As we saw in the previous section, appositions can contain all types of adverbs, including speaker-oriented ones, just like peripheral adverbial clauses. Haegeman relates this property to a more elaborate CP, which includes speaker deixis. This correlates with the fact that appositions are always speaker-oriented, as we saw in section 3.1.

Above, it was shown that appositions can contain subordinators and that they can have their own, independent, illocutionary force. The following example combines both of these properties in the presence of one element: the subordinator *whether*, which indicates that the clause at hand expresses a question:

- (110) The victim, *whether a nice person or not*, has to be helped.

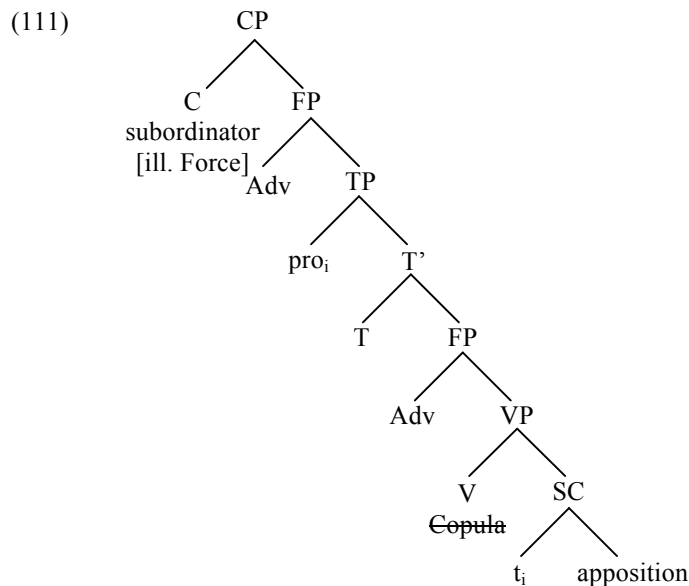
Thus, this example illustrates the arguments given in favor of the presence of a CP space in the appositive structure. First, the apposition and the matrix can differ in their illocutionary force and are even less restricted in this option than coordinated clauses. Second, appositions can contain subordinators, in particular those that can also occur in peripheral adverbial clauses. This suggests that they have a more elaborate CP including speaker deixis, which is confirmed by the potential presence of speaker-oriented adverbs discussed in the previous section.

3.11 Conclusion

In this chapter, I argued that sentences with an apposition involve two propositions: one from the matrix and one from the apposition. These propositions can enter into discourse relations and thus influence each other. The appositive proposition is used by the speaker to provide the hearer with some new information about the anchor, or at least to refresh his knowledge about such information. This secondary message has the meaning of BE([anchor], [apposition]). Thus, it is similar to a copular clause with the copula *be*. I argued that such a clause is indeed present in the underlying structure of the apposition. This is confirmed by the fact that the apposition behaves as a nominal predicate. Also, the semantic classes of appositions correspond to the types of copular clauses: attributive appositions are related to predicational copular clauses and identificational appositions are related to equative copular clauses. In so-called complex appositions, the subject of the appositive clause is overt. In the more familiar type of appositions the copular clause has a covert, pronominal subject, referring to the anchor. Furthermore, these underlying clauses in the appositional structure represent more than just a predication relation. They also can have functional projections, such as TP and CP. Evidence for the projection of tense

comes from the potential presence of temporal adverbs and the fact that the appositive clause can have its own temporal reference, independent from the matrix. The idea of a CP projection is supported by the possibility for the appositive clause to have its own illocutionary force. This also follows from the presence of point of view adverbs, which are related to speaker deixis. Furthermore, they can contain subordinators, particularly those that also occur in peripheral adverbial clauses, which suggests a more elaborate CP structure.

Taking all these ideas together, I arrive at the following schematic structure for the appositive clause:



Since the copula in appositive clauses is not overtly present, one might wonder whether these structures contain a verb at all. Instead, the small clause itself might have functional projections. There is, however, a clear argument in favor of the presence of a covert copula, namely the occurrence of lower adverbs, such as *often*, which are usually taken to modify the VP and cannot go together with bare small clause configurations like the complement of *consider*. Compare the examples below:

- (112) a. Tom, *often the object of derision*, knows how to deal with nasty people.
 b. * Ann considers [_{sc}Tom *often the object of derision*].
 c. Tom is *often the object of derision*.

These facts suggest that low adverbs are in projections related to the VP rather than to a small clause and therefore that the appositive clause probably includes a VP containing an empty copula with the meaning of *be*. It is not surprising that the

copula *be* is silent here. An empty verb is always interpreted as a form of *be* and many languages have an empty copula in normal copular sentences as well (cf. Stassen, 2008).

Therefore, I conclude that the appositive clause basically has a structure as illustrated in the representation above, with a small clause as its basis, a *pro* subject, an empty copula *be*, and functional projections in the IP and CP domain which can contain adverbs as well as a subordinator and provide the clause with its own tense, illocutionary force and speaker deixis.

4. Parenthesis

This chapter deals with the relation between an apposition and the matrix it appears in. As we saw in the previous chapter, this relation is rather loose, basically similar to the discourse relation between two separate sentences. On the other hand, there is a rather close relation between the apposition and the anchor, as becomes clear from adjacency requirements, for example. These two characteristics seem to contradict each other. In this chapter, I will explain this paradox. I argue that appositions are a type of parentheses, which are related to the anchor with a special kind of syntactic construal: supplementation. This type of relation is formed by a special type of Merge that does not lead to dominance relations. Thus, appositions are integrated with the host via Merge and yet are more independent than subordinated material, because they are not dominated by elements in the matrix.

4.1 Appositions are parentheses

In the preceding chapters, we already encountered several phenomena supporting the idea that an apposition, or rather an appositive proposition, does not depend on the matrix sentence in which it appears. In the course of this section, new arguments for this independence will be added. Furthermore, I will show that appositional constructions share these characteristics with a whole class of constructions: parentheses. In particular, appositions are shown to meet the criteria for this class listed by Espinal (1991). Let me start by listing the independency phenomena for appositions we saw so far.

First, appositions are separated from the matrix by prosodic cues. The apposition has its own intonation contour, often replicating the tonal pattern of the anchor. Also, the transitions from the matrix to the apposition and in particular those from the apposition to the matrix are marked by pauses or changes in voice level or pitch range, among other things. See section 1.1 and the references there for a more detailed description of this prosodic separation of the matrix and the apposition.

Second, if an element in the matrix agrees with the appositional construction, it only agrees with the part of the construction that is in the matrix, the anchor. This gives the impression that grammatical processes in the matrix ignore the apposition. The example below comes from Acuña-Fariña (1999: 68):

- (1) Su velero, *la goleta* *que* [Spanish]
 his/her sailing.boat:MASC the little.schooner:FEM that
ves ahora en el dique seco de Nogueira, está siendo
 see:2SG now in the dock dry of Nogueira is being
 modificado/*modificada para hacerlo capaz de resistir ese
 modified:MASC/FEM to make.it able to resist that
 tipo de travesía.
 kind of crossing
 ‘His/her sailing boat - *the little schooner you can see now in Nogueira’s dry dock* - is being completely modified to make it able to go through that kind of crossing.’

Here, the past participle in the matrix agrees in gender with the masculine anchor, rather than with the feminine apposition. For similar examples of agreement with an appositional construction, see sections 1.3 and 3.1.

Third, if an appositional construction is part of a VP and this VP is either elided in a parallel structure or referred to by a pronoun, the apposition is not involved in the interpretation of elided part or the pronoun (see also McCawley 1982, who made the same observation concerning appositive relative clauses, and Peterson 1999). Consider the example below:

- (2) a. Eddie bought a book on archeology, *his passion*, but his brother would never do that.
 b. (i) => ... his brother would never buy a book on archeology
 (ii) ≠> ... his brother would never buy a book on archeology, *his passion*.

For more examples, see sections 1.3 and 3.1. Again, processes in the matrix behave as if the apposition is not there.

Fourth, the previous chapter showed that the apposition conveys its own proposition. In section 3.2, we saw that this appositive proposition can enter into discourse relations with the main proposition. The following examples illustrate this point:

- (3) a. Bedřich, *ačkoliv žádný velký sportovní fanda*, si velmi [Czech]
 Bedřich though no big sports fan REFL very
 užil ten zápas.
 enjoyed that match
 ‘Bedřich, *though not a big sports fan*, enjoyed the match.’
 b. De joodse heilige boeken vormden voor de vroegste [Dutch]
 the jewish holy books formed for the earliest
 christenen - *zelf immers in overgrote meerderheid joden* - de
 christians self after.all in vast majority jews the
 enige Schrift.
 only Scripture
 ‘The jewish holy books formed the only Scripture for the earliest christians - after all, the vast majority of them were jews themselves.’
 (J. Blokker, J. Blokker jr. & B. Blokker, *Er was eens een God*, p. 11)

In the a-example, the subordinator *ačkoliv*, ‘though’, contrasts the appositive proposition, that Bedřich is not a big sports fan, with the main proposition, that he enjoyed the match. Similarly, in the b-example, the conjunctive adverb *immers*, ‘after all’, shows that the appositive proposition functions as an explanation for the main proposition. Such relations typically occur between clauses rather than within one clause. In other words, the apposition behaves as if it is related to the matrix on the discourse level, rather than on the syntactic or semantic level.

Fifth, section 3.10 showed that an appositive proposition is not dependent on the matrix with respect to its illocutionary force. Usually, the appositive message is assertive, also if the matrix is interrogative or imperative:

- (4) a. Did someone introduce you to Tom, *our boss*, yesterday?
 b. Ask Ruth, *your class mate*, to help you.

Finally, it was shown that appositions can contain subordinators, such as *ačkoliv*, ‘though’, in example (3a) above. Section 3.10 argued that the subordinators that can occur in appositions are the same as those that can be used in so-called peripheral adverbial clauses. According to Haegeman (2006), such clauses do not only have a more elaborate internal structure, including speaker deixis for instance, but they also have a lower degree of integration with the associated clause. Thus, the potential presence of these subordinators in appositions supports the idea that appositions are independent of their host.

Above, I listed some characteristics of appositions that we saw before, which indicate that appositions function independently from the matrix clause they occur in. Appositions are prosodically separated from their hosts. Also, they are ignored in grammatical processes in the matrix, such as agreement and pronoun interpretation. Furthermore, the appositive proposition can have relations with the main proposition on the discourse level. Finally, the underlying appositive clause can have its own, independent, illocutionary force and can contain subordinators that are typical for adverbial clauses that are less integrated with the clause they are associated with. These properties show that the relation between the apposition and the matrix is rather loose.

As stated before, appositions are not the only constructions that have a loose connection with the sentence that functions as their host. In this section, I will argue that appositions have this characteristic because they belong to the class of parentheses (see Dehé & Kavalova 2007 for an overview). Parentheses are expressions that are linearly integrated with a host sentence and yet are also structurally independent to a certain extent. The structural relation with the host does not show the properties of subordination, or hypotaxis. Therefore, this kind of relation is called non-subordination or parataxis (see De Vries 2007). Among those constructions that have been characterized as parentheses are appositive relative clauses (5a), interjections (5b), amalgams (5c), vocatives (5d), parentheticals (5e), reporting clauses (5f), and comment clauses (5g), for instance:

- (5) a. Jane, who plays the clarinet very well, loves klezmer music.
 b. I thought Jane played well, but wow! you are way better.
 c. Paul went to I think it was Amsterdam for a concert.

- d. Today, ladies and gentlemen, you will hear an intriguing story.
- e. John - every linguist knows that - kissed Mary.
- f. “Next year”, John announced, “I will marry Mary.”
- g. John, I think, was bluffing.

Espinal (1991), who used the term *disjunct constituents*, lists a number of properties most of these constructions have in common (pp. 729-734). In a footnote, Espinal (1991: 746, fn. 13) herself claims that appositions show a different type of behavior. I disagree with this conclusion, however. Not all the properties Espinal describes are applicable to appositions, but for those properties that can be tested, appositions do behave as parentheses.

First, in contrast to what Espinal suggests, appositions cannot be the focus of a cleft sentence. In this respect, appositions (6a) behave like peripheral (6b), rather than central (6c) adverbial clauses, as we saw before. Examples (6b-c') are from Haegeman (2009: 331-332):

- (6) a. Joe asked Bill, a famous trumpet player, to teach him.
- a'. * It is a famous trumpet player that Joe asked Bill to teach him.
- b. John studied mathematics in Cambridge, while his sun is studying physics in Oxford.
- b'. * It is while his sun is studying physics in Oxford that John studied mathematics in Cambridge.
- c. John always works best while his children are asleep.
- c'. It is while his children are asleep that John works best.

Second, as shown in section 3.8 and 3.9, the appositive clause can have its own, independent, temporal reference. Here are some additional examples. The b-example is from Klein (1977: 54); the glossing is mine¹.

- (7) a. Dokumental'nyj fil'm o Kite, v *proshlom narkomane*, [Russian]
documentary film about Keith in past junky
rasskazyvaet ob izmenenijax, proizoshedshix v ego zhizni posle
tells about changes happened in his life after
togo, kak on brosil narkotiki.
DET how he stopped drugs
'The documentary about Keith, *once a junky*, shows the changes in his
life after he quit drugs.'
- b. Willem, *volgend jaar vermoedelijk mijn collega*, is [Dutch]
Willem next year presumably my colleague is
gisteren getrouwd.
yesterday married.
'Willem, *next year presumably my colleague*, married yesterday.'

¹ Note that I give only examples of appositional constructions in the remainder of this section, without comparing them to other parentheticals, as in (6). For relevant examples of other parentheses, I refer the reader to Espinal (1991: 729-734).

Whereas the host is in present tense in (7a), the appositive message relates to the past, due to the presence of the temporal adverbial expression *v proshlom*, ‘in the past’. Similarly, in (7b), the appositive message relates to the future, whereas the host relates to the past.

Third, appositions are not selected as arguments by the predicate of the host clause. In section 3.5, we saw that appositions are predicates rather than arguments. Of course, the anchor often does fill the position of an argument. In some cases, in particular in identificational constructions, it is possible to leave out the anchor without the resulting sentence becoming ungrammatical:

- (8) a. Captain Cook loved his ship, *the Endeavour*.
 b. Captain Cook loved the Endeavour.

This does not imply that the apposition functions as an argument, however. Especially if an attributive construction is used, it becomes clear that the nominal at hand has a different function in an appositional construction (9a) than in the corresponding sentence where the anchor is left out (9b):

- (9) a. Captain Cook loved the Endeavour, *a Royal Navy research vessel*.
 b. Captain Cook loved a Royal Navy research vessel.

Whereas in (9b), *a Royal Navy research vessel* functions as the direct object of *love* and is therefore interpreted as a referential expression, in (9a) it functions as a predicate and is therefore interpreted as a property.

Furthermore, whereas a sentence can only contain one realization for every argument of the predicate, it can contain more than one apposition. Even one anchor can be related to several appositions:

- (10) a. John, *Mary’s boyfriend, a syntactician*, is a linguistic celebrity.
 b. Captain Cook’s ship, *the Endeavour, a Royal Navy research vessel*, reached the east coast of Australia.

In section 4.7.3 below, I will come back to this issue and show that multiple appositions can be structured in several ways. I conclude, then, that appositions are not selected by elements from the host, such as the predicate.

Fourth, in verb second languages, such as Dutch and German, where the finite verb always appears as the second constituent in declarative main clauses, the verb can be preceded by the whole appositional construction:

- (11) a. Piet, *Ria’s vriend*, heeft met Lia gedanst. [Dutch]
 Piet Ria’s boy.friend has with Lia danced
 ‘Piet, *Ria’s boyfriend*, danced with Lia.’
 b. *Piet heeft, *Ria’s vriend*, met Lia gedanst.
 Piet has Ria’s boy.friend with Lia danced

This either means that the anchor and the apposition form one constituent together, or that the apposition is ignored in determining the second constituent.

Fifth, appositions are outside the scope of quantifiers in the matrix, both in the anchor and elsewhere. Potts (2005: 82, 122) gives the following examples:

- (12) a. * No reporter_i believes that Ames, *often the subject of his_i columns*, is a spy.
 b. * Every/No climber, *an/the experienced adventurer*, was found sipping hot cocoa in the lodge.

Similarly, appositions are outside the scope of other operators, such as negation and mood, as illustrated in the examples below:

- (13) a. John did not kiss Mary, *his girl friend*.
 b. (i) => Mary is his girl friend
 (ii) ≠> Mary is not his girl friend
- (14) a. You should be a linguist, someone who studies language.
 b. (i) => a linguist is someone who studies language
 (ii) ≠> a linguist should be someone who studies language

These are important points, since scope is usually thought of as a dependency relation, based on c-command. Therefore, data like these can help us to understand the structural relationship between an apposition and its host. The lack of quantifier scope indicates a lack of c-command and thus suggests that an apposition is not subordinated to the matrix.

The same argument can be made using condition C of the binding theory (Chomsky 1981). Basically, this condition says that referring expressions, such as proper names, cannot be coreferential with an element in an argument position that c-commands them. Appositions, however, can contain elements that are coreferential with an argument in the host. Compare the following examples:

- (15) a. * John_i first met John_i's wife in the linguistic cafe.
 b. John_i first met Mary, *now John_i's wife*, in the linguistic cafe.

The example in (15a) is ungrammatical, because the second occurrence of *John* is coreferential with the first, which is in a c-commanding subject position. In (15b), however, the second occurrence of *John* does not lead to ungrammaticality, even though it is coreferential with the first occurrence, which is again in a subject position. This leads to the conclusion that arguments in the host do not c-command elements inside an apposition. In other words, an apposition is invisible for elements in the matrix.

In sum, these properties of parentheses all apply to appositions. Taken together with the additional arguments for independence we saw in the previous section, these properties strongly suggest that appositions belong to the class of parentheses. Therefore, I conclude that appositions indeed are parentheses. They do not take part in syntactic processes in their host and are structurally invisible for elements in that host. They are not integrated in the meaning of the matrix either, but

rather give the speaker the opportunity to give some related side information. Finally, they are also prosodically separated from their host.

This is only one side of the character of parentheses, however. As stated before, parentheses are not only structurally independent from their host. They are also integrated into the linear word order of their host. In appositional constructions, this is expressed particularly by a requirement that they have to be adjacent to the element in the host they are related to, the anchor (see also section 1.4). This can be illustrated with the example below, where @ indicates the only position where the apposition can appear and * positions where apposition cannot appear:

- (16) * Pete @ has * won * several * quizzes * today *.
Apposition: a clever boy

Furthermore, if the anchor is moved, the apposition cannot stay behind, but has to move along, as illustrated below for topicalization (17) and wh-movement (18):

- (17) a. Peter met George, *his best friend*, in primary school.
b. George, *his best friend*, Peter met in primary school.
b'. * George Peter met, *his best friend*, in primary school.
- (18) a. You know these linguists, *people who study language*.
b. Which linguists, *people who study language*, do you know?
b'. * Which linguists do you know, *people who study language*?

The only exception to the adjacency requirement is the possibility to extrapose the apposition to the right periphery of the sentence, as Klein (1977) extensively shows. Here are some of his examples (pp. 86, 90); the glosses are mine:

- (19) a. Wij hebben Pollini gisteren horen spelen, *de beste pianist* [Dutch]
we have Pollini yesterday hear play the best pianist
ter wereld.
in.the world
'We heard Pollini play yesterday, *the best pianist in the world*.'
- b. We hebben Carter zien lopen, *de nieuwe president van de VS*.
we have Carter see walk the new president of the US
'We saw Carter walk by, *the new president of the US*.'

The restrictions on extraposition for appositions, that the anchor has to be in a focus position, for instance, are exactly the same as in other extraposition contexts, which shows that this is not some special property of appositions in particular. In other words, it is a normal exception to the adjacency requirement.

As we saw in section 1.1, the prosody of appositions also shows that they are not only independent from the host, but also integrated in it. There are indeed prosodic changes at the boundaries of the apposition, but the intonation contour of the apposition also often reduplicates that of its anchor, showing a close relation between the two. Furthermore, appositions often have a lower voice level than the matrix and a reduced pitch range, which indicates tonal subordination. This

ambivalent character of appositions is central in the rest of this chapter. The question we ask ourselves is how the parenthetical relation is construed and in particular how structural independence can be combined with integration in the linear order and even adjacency requirements. First, however, I will discuss some phenomena that seem to contradict the independence of appositions. The next two sections deal with two discourse mechanisms that at first sight undermine constraints related to sentence boundaries, in particular with respect to the scope of operators: E-type reference and modal subordination. I will show that these mechanisms are also at work in appositions, but that they do not contradict the independence of appositions with respect to their host.

4.2 Appositions involve an E-type pronoun

It is well known that there are pronouns that have a quantificational antecedent and yet are not structurally bound by this element: E-type pronouns (Evans 1980, Heim 1990). These pronouns may refer to quantificational elements even across sentence boundaries. Thus, they give the impression that these sentences are not independent. In section 3.6, I argued that the underlying structure for the appositive message contains a pronoun that functions as the subject. The antecedent of this pronoun is the anchor. In this section, I will argue that this pronoun is in fact an E-type pronoun and therefore may give the impression that appositions are not always independent of their host.

An interesting property of E-type pronouns is that they do not simply refer to their antecedent, but also take into account the context in which it appears. Here are some examples from Evans (1980: 339, 341):

- (20) a. Few congressmen admire Kennedy, and they are very junior.
 b. After Harry bought some sheep, Harry vaccinated them.
 c. If many men come to the ball, Mary will dance with them.

In (20a), *they* does not just refer to a few congressmen, but to those few congressmen that admire Kennedy. Similarly, in (20b) Harry does not just vaccinate some sheep, but those that he bought, and in (20c) Mary dances with those men that come to the ball.

Several linguists, for instance Sells (1985), Demirdache (1991), and Del Gobbo (2003, 2007), have argued that the relative pronoun in appositive relatives behaves as an E-type pronoun as well. Indeed, these pronouns take the context of their antecedent into account as well. The examples are from Del Gobbo (2007: 174, 177):

- (21) a. They invited a student from UCLA, who arrived late.
 b. Ieri ho ricevuto pochi studenti, i quali erano [Italian]
 yesterday have received few students the which were
 preoccupati per l'esame di linguistica.
 worried for the exam of linguistics
 'Yesterday I received few students, which were worried because of the
 linguistics exam.'

As the examples in (21) show, the main predicate is part of the antecedent for the appositive pronoun. The relatives concern only the student that was invited (21a) and those students that were received (21b).

Related to this property, Del Gobbo (2007) notes that the grammaticality of an utterance involving an appositive relative with a quantificational element in its antecedent depends on the position of the relative clause in the linear order. She illustrates this with the following contrast (p. 187):

- (22) a. They invited few students, who arrived very late.
 b. * Few students, who were late, came to the party with their parents.

Del Gobbo argues that this contrast follows from the idea that the matrix predicate is part of the antecedent for the appositive pronoun. A bound pronoun has to follow its antecedent, which renders utterances like (22b), where the predicative part of the antecedent follows the relative clause, ungrammatical. Only if the pronoun gets a generic interpretation, and therefore does not include the quantifier or the predicate in its denotation, it is possible for the relative clause to precede the matrix predicate. Consider the example in (23a), from Del Gobbo (2007: 186), which can be paraphrased as in (23b):

- (23) a. Few students, who generally like to go to parties, showed up.
 b. Few students showed up. Students generally like to go to parties.

In contrast to (22b), the example in (23a) is grammatical, even though the appositive relative precedes the matrix predicate. The reason is that the appositive relative in this example expresses a general statement about the objects described by the nominal element in the quantified antecedent, *students*, rather than a specific statement about only those objects described by the quantified antecedent as a whole, those *few students* to which the matrix predicate applies, as in (22b).

Note also that the contrast described in (22) only applies to quantifiers that cannot be used referentially. Pronouns referring to quantifiers that do have a referential reading, such as *a*, *some*, *several* and numerals, can be followed by the predicate:

- (24) a. A visitor, who was late, entered the room.
 b. Two musicians, who didn't know each other, played a song together.

Another property of E-type pronouns is that they get a maximal interpretation if their antecedent is under the scope of a quantifier: all relevant objects have to satisfy

the predicate of the clause in which the antecedent appears, as illustrated with appositive relatives in the examples below from Sells (1985), cited by Demirdache (1991: 148):

- (25) a. Each farmer owns some sheep, which the state buys in the Spring.
 b. Each car comes with two doors, which open from the outside.

Thus, in (25a) the state buys all sheep that each farmer owns and in (25b) the two doors that open from the outside are all doors that each car has. This interpretation equals that of a pronoun in a separate sentence (26a) and contrasts with that of a restrictive relative pronoun (26b). The examples are Demirdache's (1991: 150):

- (26) a. Each farmer owns some sheep_i. The state buys them_i in the Spring.
 b. Each farmer owns some sheep that the State buys in the Spring.

Another property of E-type pronouns is that they cannot have an antecedent under the scope of a negative quantifier. Again, Demirdache (1991: 149) shows that the relative pronoun in appositives has this property, in contrast to its restrictive counterpart:

- (27) a. * No car comes with two doors, which open from the outside.
 b. No car comes with two doors that open from the outside.

Finally, Evans (1980: 341) notes that the grammaticality of sentences involving a pronoun with a universal quantifier antecedent that does not c-command clearly improves if a plural pronoun is used:

- (28) a. * Every congressman came to the party, and he had a marvelous time.
 b. ? Every congressman came to the party, and they had a marvelous time.

Whereas bound pronouns are singular, E-type pronouns refer to the objects that are satisfied by the restrictor and scope of the antecedent and therefore to a plurality in the case of a universal quantifier.

Now, let us get back to appositional constructions and see whether the properties of E-type pronouns are present there as well. Indeed, this turns out to be the case (see also Doron 1994 and Nouwen 2007, who gives an account in terms of dynamic predicate logic).

First, if an indefinite anchor is used, the main predicate is part of the interpretation of the appositive message's subject:

- (29) a. Maaïke las een boek, *een thriller*. [Dutch]
 Maaïke read a book a thriller
 b. Een paar wielrenners, *eerlijk gezegd hele slechte*, werden
 a pair racing.cyclists honestly said very bad were
 ingehaald.
 overtaken
 'Some racing cyclists, *to be honest very bad ones*, were overtaken.'

Thus, in (29a), the appositive message is not that a book is a thriller, but that the book Maaïke read was a thriller. Similarly, (29b) does not simply attribute the property of bad cycling to some racing cyclists, but more specifically to those that were overtaken.

The grammaticality differences with respect to different positions for appositive relatives, as in (22), are much harder to test for appositions. Note that the appositive message usually describes a state rather than an event. Therefore, appositive messages tend to be generic, as in the exceptional cases for appositive relatives in (23). Consider the following examples:

- (30) a. Few students, *hard workers*, worried about the exam.
 b. They invited few students, *hard workers*.

It is hard to determine whether the property given by the appositions in these example are applied to students in general or only to those few that worried about the exam or had been invited. Nouwen (2007: 100) uses the more complex quantifier *less than half* to test this. He gives the following examples for appositive relatives:

- (31) a. Less than half the climbers, who (by the way) were (all) French nationals, made it to the summit.
 b. They interviewed less than half the climbers, who (by the way) were (all) French nationals.

He observes that (31a) only has a reading where all climbers are French nationals, whereas (31b) has an additional reading, where only the interviewed climbers are French nationals. In contrast, he says, appositions have both readings in both orders:

- (32) a. Less than half the climbers, (*all*) *French nationals*, made it to the summit.
 b. They interviewed less than half the climbers, (*all*) *French nationals*.

Thus, there seems to be a difference between appositions and appositive relatives here. The contrast is not very clear, however, and I will leave it for further research.

The maximality effect on the interpretation of the E-type pronoun does show up in appositions. The a-example is from Doron (1994: 53):

- (33) a. Mary has many friends, *leftists no doubt*.
 b. Every solution has some problems, *challenges for future research*.

In these examples, the speaker supposes all of Mary's friends to be leftists and all problems to be challenges.

Finally, using a plural apposition seems to improve the use of a universal quantifier as an anchor, just like a plural pronoun may refer to a universal quantifier that does not c-command it. Consider the following examples from Potts (2005: 122, 124) with his judgments:

- (34) a. * Every climber, {*an/the*} *experienced adventurer*, was found sipping hot cocoa in the lodge.
 b. Every climber, *all experienced adventurers*, made it to the summit.
 c. Every climber, *experienced adventurers all*, made it to the summit.
 d. * Every climber, *experienced adventurers*, made it to the summit.

Potts focuses on the difference between (34b-c) and (34d). He analyses *all* in (34b) as the subject of the appositive message *all are experienced adventurers* and takes this to explain that a quantified anchor can take an apposition. In this case, he argues, the appositive message is complete (an isolated conventional implicature, in his terms) and does not apply to the anchor. I do not agree on his analysis, however, exactly because (34c) is equally good as (34b). It seems to me that the appositive message in (34b) is *they are experienced adventurers all* rather than *experienced adventurers all are*. Therefore, I think that *all* is a floating quantifier here (see also the discussion on floating quantifiers in section 3.6). Though the presence of *all* indeed seems to improve the example a bit, I do not think the contrast between (34b-c) and (34d) is as sharp as Potts presents it. Interestingly, the plurality in (34bcd) seems to help as well. Note that *made* in these examples is ambiguous for number. An unambiguously singular verb seems to make the grammaticality worse:

- (35) * Every climber, *all experienced adventurers*, was rewarded a medal.

This plurality effect may be due to the E-type reference, as illustrated in (28).

I conclude, then, that appositions contain a covert E-type pronoun as the subject of the appositive message. Because of this pronoun, an appositive predicate does not just apply to the anchor, but includes the predicate of the matrix. The presence of this pronoun results in a maximal interpretation for quantifiers. It may improve the grammaticality of sentences with a universal quantifier anchor and a plural apposition. Thus, the E-type pronoun explains why some relations may exist between quantificational matrix elements and the apposition, even though there is no c-command relation between them. In the next section, I will turn to some other phenomena that at first sight suggest a scope relation between elements from the matrix and the apposition. I will argue that these phenomena all reduce to modal subordination.

4.3 Appositions involve modal subordination

In the previous section, we saw that appositions can refer to quantificational elements in the matrix, even though there is no c-command relation between the two. This property was attributed to the presence of a pronoun with an E-type character that functions as the subject for the appositive message. This section discusses more data that at first sight suggest a scopal relation between matrix elements and the apposition. These data are attributed to a special discourse phenomenon: modal subordination, a term from Roberts (1987, 1996).

The term modal subordination refers to a phenomenon that seems to violate the otherwise robust sentential scope constraint, which says that the maximal scope

of a quantificational element is the sentence in which it occurs. Roberts (1996: 216) illustrates this constraint with the anaphoric relations in the following examples:

- (36) a. **Every** frog that saw an insect ate it.
 # It was a fly.
 b. **Usually** Fred buys a muffin every morning and eats it at the office.
 # It's being baked.
 c. You **should** buy a lottery ticket and put it in a safe place.
 # It's worth a million dollars.

These examples all involve an indefinite nominal constituent under the scope of a quantificational element (in boldface): a quantificational determiner (36a), a quantificational adverb (36b), and a modal (36c). Anaphoric relations are indicated by underlining. As these examples show, pronouns within the same sentence can establish an anaphoric relation with the indefinite nominal, but pronouns outside the sentence, and therefore outside the scope of the quantificational element, cannot. The following examples from Roberts (1996: 216) illustrate the phenomenon of modal subordination, which seems to violate the sentential scope constraint:

- (37) a. **Every** frog that saw an insect ate it.
It disappeared forever.
 b. **Usually** Fred buys a muffin every morning and eats it at the office.
It's **always** oat bran.
 c. You **should** buy a lottery ticket and put it in a safe place.
It **might** be worth a million dollars (if you were lucky).

Despite the sentence boundary in these examples, an anaphorical link is established. It is important to note that in two of these examples (37b-c) the second sentence contains a quantificational sentence as well. Thus, the material under the scope of the quantificational element in the second sentence is semantically subordinate to the intensional context of the previous discourse. The term modal subordination is based on examples like (37c), where a modal is involved, but is used for the other contexts as well, since it is commonly assumed that intensional phenomena in language involve modality at some level. One other important context showing this phenomenon involves propositional attitude verbs and other world-creating predicates. The examples are again from Roberts (1996: 217):

- (38) a. Jan **expected** to get a new puppy soon.
 She **intended** to keep it in her back yard.
 b. John **wants** to catch a fish.
 He **plans** to eat it for supper.
 c. Alice **fears** there's a squirrel in her kitchen cabinets.
 She **hopes** to trap it alive and turn it loose outside.

The indefinite nominals in these sentences have a non-specific reading. Yet, it is possible to refer to them with a pronoun in a following sentence in the discourse, due to the presence of another intensional predicate. Finally, note that modal

subordination does not only occur with anaphoric relations, but also with elements that carry a presupposition. Here are some examples from Roberts (1996: 219):

- (39) a. **Usually** Fred buys a muffin every morning and eats it at the office.
He buys a cup of coffee, too.
- b. Maxine **should** become carpenter.
Her friends **would** discover she could build things, and she'd be very popular on weekends.
- c. Mary is **considering** getting her Ph.D. in linguistics.
She **wouldn't** regret attending graduate school.

In these discourses, the underlined elements in the second sentence lead to a presupposition that is satisfied only by content under the scope of the quantificational element or predicate in the first sentence. *Too* in (39a) presupposes that Fred buys something else, which only follows from the proposition under the scope of *usually*. *Discover* in (39b) presupposes that its complement, in this case that Maxine could build things, is true. However, this is probably only true in case the proposition in the scope of *should*, that Maxine becomes a carpenter, holds. *Regret* in (39c) also presupposes the truth of its complement, that Mary attends a graduate school. Again, this presupposition is only satisfied if Mary's considerations are realized. Thus, the interlocutors in these discourses locally (that is only under the scope of the intensional operator) accommodate to a world in which the premises for a given intensional element in a given context are met. This is done on the basis of contextual clues and knowledge of the world. I am not concerned with the technical detail of an account for this phenomenon here. What is important is that certain contexts may lead to apparent violations of the sentential scope constraint. Below, I will show that this also happens in appositional constructions.

First, consider the example in (40a) from Doron (1994: 60), who adapted it from Sells (1985). This example might be paraphrased by the two sentences in (40b):

- (40) a. Every rice farmer in Korea owns a wooden cart, *usually a rickety old thing*.
- b. Every rice farmer in Korea owns a wooden cart. Usually, it is a rickety old thing.

In these examples, the quantificational adverb *usually* functions as an intensional operator, facilitating an anaphoric link between the indefinite nominal *a wooden cart*, which is under the scope of the quantifier *every*, and the (covert) pronoun in the appositive message or the second sentence. Thus, the boundary between the anchor and the apposition is similar to the boundary between two sentences.

Now consider the following examples from Wang et al. (2004: section 3.4):

- (41) a. If a professor, *a famous one (that is)*, publishes a book, he will make a lot of money.
- b. Mary wants to marry an Italian, *a rich one*.

Wang et al. discuss these examples, because they consider them a problem for the hypothesis that appositions are independent of the matrix. Indeed, it seems that the apposition in (41a) is under the scope of the conditional in the matrix. Being famous is an additional condition for a professor to make a lot of money by publishing a book. Similarly, if *an Italian* gets a non-specific interpretation in (41b), the apposition seems to be in the scope of the intensional predicate. The property of being rich is part of what Mary wants. Now note that the anchors here are indefinite nominals in the scope of an intensional operator, just as in the contexts of modal subordination we saw before. Indeed, these constructions can be paraphrased by two sentences if we use a modal in the second:

- (42) a. If a professor publishes a book, he will make a lot of money. (Note that it should be a famous one.)
 b. Mary wants to marry an Italian. It should be a rich one.

Thus, independent sentences give the impression that the predicate of the second sentence is in the scope of an intensional operator, on the basis of modal subordination. Therefore, I assume that the same is happening in the appositional constructions in (41), where the apposition is independent of the matrix. Of course, the appositions do not contain a modal. Therefore, the modal subordination has to be implicit in these cases. But this is also possible with separate sentences, as was illustrated in (37a) and (39a). I do not know how this works in detail, but I think it is clear that modal subordination can explain that some appositions seem less independent to the matrix than others, especially if the matrix contains an intensional operator.

There is one final type of modal subordination in appositions I want to bring up here: supplementary *any* (originally described by Jennings 1994). Consider the following examples from Dayal (2004: 18)

- (43) a. Take an apple, *any apple*.
 b. You may choose an apple, *any apple*.

The appositions in these examples involve free choice *any*: the hearer is permitted to take whichever apple he wants. Interestingly, supplementary *any* may show up in contexts where free choice *any* is usually not allowed. The following examples from Dayal (2004: 19-20) illustrate this point:

- (44) a. John must choose an apple, *any apple*.
 a'. * John must choose any apple.
 b. She was waiting for a policeman, *any policeman*, to show up.
 b'. * She was waiting for any policeman to show up.

In (44a), the anchor is again an indefinite nominal in the scope of an intensional operator. Therefore, this might be a case of modal subordination. Indeed, paraphrasing these examples in two separate sentences leads to the use of modals:

- (45) a. John must choose an apple. It could be any apple.
 b. She was waiting for a policeman to show up. It might be any policeman.

Dayal (2004) also argues that the apposition with *any* brings in a modal. She points out that “this second modal [...] is not postulated as part of the meaning of *any* but is rather motivated by the presence of an overt modal in the full supplementary clause.” Therefore, supplementary *any* seems to me a subtype of implicit modal subordination in appositions. Note that a predicate like *wait for* in (44b/45b) is not an intensional operator. Yet, Dayal argues that it has “a purpose argument that the supplementary modal can draw on.” The data concerning supplementary *any* are rather complex and I cannot go into all the details here, but I think it serves well as another illustration of implicit modal subordination in appositions.

I conclude, then, that appositions may involve modal subordination, either explicit or implicit. This explains that there are data that at first sight suggest a scopal relation between an apposition and the matrix it appears in. My conclusion remains, however, that appositions are not structurally in the scope of any operator in their host. In the next sections, I will propose a syntactic mechanism to implement this independence and at the same time maintain the close relation between the anchor and the apposition.

4.4 Parenthetical construal: previous accounts

Before developing my own account of the parenthetical status of appositions, I first present an overview of the various analyses for parenthesis that have been proposed in the literature. A great deal of this overview will be spent on appositive relatives, partly because they are closely related to appositions and partly because, within the class of parentheses, they have received most attention. They probably gained more interest from researchers than other parentheses because appositive relatives can easily be contrasted to their restrictive counterparts. For a more extensive overview of the approaches to appositive relatives, I refer to De Vries (2002: 203-210, 2006: 231-234).

Basically, there are two main approaches to parenthetical constructions in general and appositive relatives in particular. I will call them the orphanage approach and the integration approach. The term orphanage originates from Safir (1986) and was later on adopted by Haegeman (1991), republished as Haegeman (2009). This term very well illustrates their view on parentheses, which focuses on syntactic independence. In their approach, parentheses do not have any syntactic relation to their host at all. They are independent constituents without parental relations and yet, they are not fully-developed sentences. They are only related to a host sentence on a late syntactic level (beyond LF) or on a postsyntactic level (such as PF).

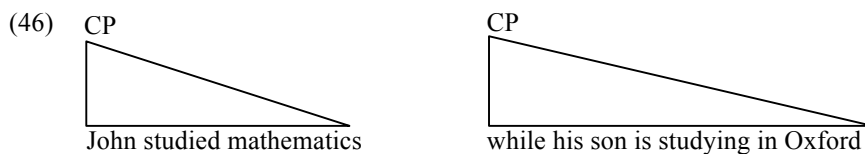
Integration approaches, on the other hand, focus on the restrictions parentheses have with respect to their position in the linear order of the whole sentence. A clear example of such an approach, applied to appositive relatives, is given in Arnold (2007). He argues that appositive relatives have exactly the same syntactic structure as restrictive ones. The only difference is in the interpretation and

therefore on the semantic and pragmatic level. Below, I first discuss the orphanage approach in more detail and give some examples of proposals within this line of reasoning. After that, I will deal with the integration approach in the same way. Finally, I will show that it is possible to combine the advantages of both sides and propose my own analysis, basically following De Vries (to appear).

Within the orphanage approach, there are again two types of analyses: they can be either radical or non-radical. In the radical analyses, there is no syntactic relation between a parenthesis and its host at all. In non-radical analyses, the two structures are related, but only at a late point in the derivation. In those cases, a parenthesis is attached to the root node, for example. Thus, the parenthesis is part of the hierarchy of the whole sentence, but can never be dominated by any element in the matrix.

Examples of proposals that follow the radical orphanage approach are Safir (1986), Fabb (1990), Canac Marquis and Tremblay (1998), and Cinque (2008) on appositive relatives, Haegeman (1991/2009) on peripheral adverbial clauses, and Peterson (1999) on parenthesis in general.

Here, I discuss Haegeman's account in more detail. She proposes that the grammatical structure of a sentence involving parenthesis consists of several separate hierarchies, each with their own root, which are completely in syntax. She gives the following representation for sentences with a peripheral adverbial clause (figure 4):



The matrix and all possible parentheses in a sentence each have their own hierarchical structure. Since they do not share any syntactic structure, elements from the matrix and the parentheses cannot be involved in the same syntactic processes, such as binding or agreement. The interaction between the structures is basically the same as the interaction between two separate sentences. They are only related at a conceptual level of utterance interpretation via co-indexation between a parenthesis and the element in the matrix it modifies.

This proposal straightforwardly explains the independent character of parentheses as described in section 4.1. It does not, however, explain syntactic requirements on the linear order. For example, parentheses usually have to respect constituency boundaries; they cannot appear just anywhere in a sentence. Furthermore, both appositions and appositive relatives have to be adjacent to their antecedent. As far as I can see, there is no way to deal with these requirements if parentheses are structurally unrelated to their hosts. This argument can be extended to argue against radical orphanage approaches in general. Since parentheses are related to their host both in interpretation (LF) and in pronunciation (PF), this relation has to be established in the syntactic structure before spell-out, when it is sent off to the interfaces. Therefore, I conclude that radical orphanage approaches cannot explain the linear integration of appositions in their matrix clause.

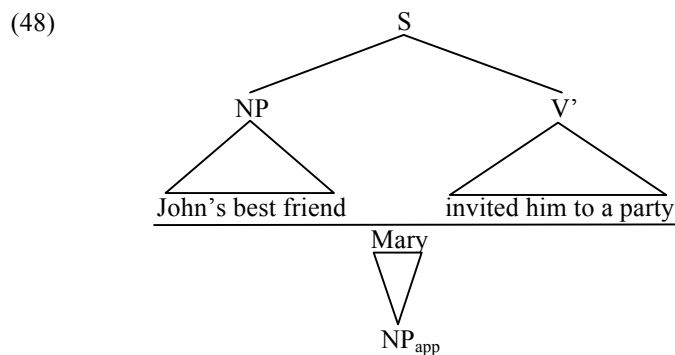
Furthermore, since there is no structural relation between the structures in these approaches, it is unclear which of them should be interpreted as the host and which as a parenthesis, side information. Finally, note that parenthesis is recursive: a parenthesis can easily function as a host for another parenthesis. Here is an example from De Vries (to appear: 15):

- (47) I still owe Anna – and Anna, who hit Joop, an unpleasant guy, as you know, disappeared last night – 250 dollars.

Since recursion is taken to be a core property of syntax, this characteristic suggests that parenthesis should be accounted for in syntax. Thus, though radical orphanage immediately explains the independency of parentheses, it also meets some crucial problems.

Important analyses in the non-radical orphanage approach are Ross (1967), Emonds (1979) and McCawley (1998: 445-454) on appositive relatives, and McCawley (1982) and Espinal (1991) on parenthesis in general. Here, I discuss the accounts of Espinal (1991) and McCawley (1998) in more detail.

Just like Haegeman (1991/2009), Espinal proposes that the grammatical structure of a sentence involving parenthesis consists of several separate phrase markers, each with their own root. In her account, they are not completely unrelated, however. She positions the separate phrase markers on different ‘planes’ in a three-dimensional space. These planes intersect at the level of the terminal string. This idea, applied to appositions, can be represented as follows:

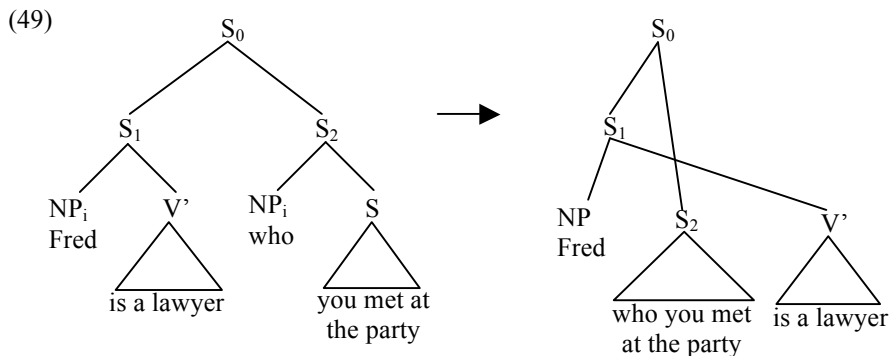


The matrix and all possible parentheses in a sentence each are in their own plane. Since these planes do not share any syntactic structure, elements from separate planes cannot be involved in the same syntactic processes, such as binding or agreement. All phrase structures are derived separately, but they are related within syntax via special phrase structure rules. Thus, they form one complex, multi-rooted, syntactic structure together. Espinal acknowledges that there are restrictions on the insertion of parentheses in the matrix and she formulates some ‘syntactic conditions’ to deal with them. These conditions take into account the structure of both phrase markers at hand. The *condition on interruption* (p. 752), for example, states that “disjunct constituents must be in peripheral positions of syntactic projections”,

which means that parentheses may not interrupt constituents. Since the structures are only related at the terminal level, however, it is not clear to me how this works exactly. Furthermore, since parentheses do not have to be complete sentences, well-formedness conditions on sentences cannot be used in this system. Finally, it is not clear how PF could deal with multi-rooted structures. To start with, it is unclear how to decide which root should be spelled out first.

To conclude, Espinal's account straightforwardly explains the independency of parentheses. With respect to linearization, the proposal seems to fair better than the radical orphanage approaches. Yet, several problems remain to be solved.

McCawley (1998) argues that an appositive relative and its host are generated as separate sentences. These sentences are then combined into one sentence, as in sentence coordination (though he does not use this term). Thus, the appositive relative and its host are in one syntactic structure, but one does not dominate the other. Note that this implies that the appositive relative does not interrupt the host when it is generated. Therefore, McCawley proposes a special type of movement, which he calls adposition. Adposition changes the position of the adposited element in terms of precedence, but not in terms of dominance. In a tree representation, this results in crossing branches, as illustrated with an example from McCawley (1998: 449):



In the case of appositive relatives, coreference of the relative pronoun and the antecedent triggers adposition of the relative clause to a position that immediately follows its antecedent. This approach also straightforwardly captures the independency facts. The adposition is used to solve the linearization problem. It is not clear what properties and restrictions this new type of movement would have, however. It is at least incompatible with theories where precedence is claimed to follow from dominance, such as Kayne (1994). Furthermore, this account gives the wrong predictions for the linear position of parentheses in verb second languages. The verb in these languages is only preceded by one constituent. Since a parenthesis is a separate constituent in the syntactic structure in these accounts and does not form a single constituent with any other element, it is predicted that an appositive relative, for example, cannot precede the verb together with its antecedent. This prediction is not borne out, however (see also the previous section for similar data concerning appositions):

- (50) a. Fred, die je op het feest ontmoet hebt, is advocaat. [Dutch]
 Fred who you on the party met have is lawyer
 ‘Fred, who you met on the party, is a lawyer.’
 b. * Fred is, die je op het feest ontmoet hebt, advocaat.

Also, the proposed structure suggests that the matrix and the appositive are related via sentence coordination (in Emonds’ 1979 proposal, this is more explicit). As we saw in section 3.10, however, the combination of different illocutionary forces is less constrained in appositive relatives than in sentence coordination, which implies that they cannot have the same underlying structure:

- (51) a. Give my friend, who lives near to you, this present.
 b. * Give my friend this present and he lives near to you.

Finally, McCawley (1998: 450) states that “this sketch is neutral with regard to whether the two Ss even make up a constituent. While I will give diagrams [...] that represent them as comprising a constituent, nothing in what follows requires that they do. I in fact regard the connection between a non-restrictive clause and its host to be in the realm of the structure of complex action; that connection is relevant to syntax, but it is not itself within syntax proper.” This suggests that McCawley’s orphanage approach may be more radical than it seems at first sight and again raises the question how syntax can be influenced by other grammatical components.

I conclude that orphanage approaches, whether radical or not, can explain the parentheses’ independence of their host, but not the integration in the linear word order, in particular the adjacency requirement of appositive relatives and appositions.

Authors following the integration approach on appositive relatives, on the other hand, start out from the close relation with the antecedent expressed in adjacency requirements and other resemblances with restrictive relatives. In particular, they argue that an appositive relative and its antecedent form a constituent together. There are basically three options to generate this constituency. First, the appositive relative can be the complement of (an element of) the antecedent. Second, the appositive relative can be adjoined to the antecedent. Third, the appositive relative can be coordinated with its antecedent.

The first option, complementation, needs something extra in order to make a distinction with restrictive relative clauses. For most researchers, the most important difference is that appositive relatives are outside of the scope of the antecedent’s determiner. Different strategies have been proposed for the appositive to escape this scope. A good example is Platzack (2000), who generates an appositive relative as the complement of an empty N head, which has the antecedent DP in its specifier: ...[_{NP} DP_{ant} [_N Ø CP_{app}]]. Since the antecedent’s determiner is embedded within the antecedent DP, it does not take scope over the relative clause.

The second option, right adjunction to the antecedent, is the most common one. Over time, the level to which the appositive relative was attached changed from N” (Jackendoff 1977) via NP (Smits 1989) to DP (Toribio 1992). The general idea, however, remains the same: an appositive relative is attached at a higher level than a restrictive one and thus escapes the scope of the antecedent’s determiner. Whereas

this approach explains some differences between restrictive and non-restrictive relatives, such as the fact that elements within an appositive relative cannot be bound by a quantifier in the antecedent, it leaves other differences unexplained. For example, we saw in the previous section that appositions and appositive relatives are not only outside the scope of the antecedent's determiner, but also of quantifiers higher up in the clause and other operators with high scope such as negation and modals. Here is another example from Safir (1986: 672):

- (52) a. * Every Christian_i forgives John, who harms him_i.
 b. Every Christian_i forgives a man who harms him_i.

These facts do not follow from an adjunction analysis. Also, if appositive relatives are adjoined to their antecedents, one might wonder why they have to be right-adjoined and cannot be left-adjoined. I will come back to these issues in the discussion of Potts' (2005) analysis below.

The third option, coordination, is argued for by Sturm (1986), Koster (2000), and, most extensively, De Vries (2002, 2006). De Vries argues that appositions and appositive relatives are related to their anchor via a special semantic type of coordination, different from conjunction and disjunction. He calls this specifying coordination. Since coordination is restricted to constituents of equal semantic categories, it cannot apply to appositive relatives and their anchor immediately, because the relative represents a proposition, whereas the anchor generally represents an entity. Therefore, De Vries analyses appositive relatives as false free relatives: restrictive relatives related to an empty pronominal head (see also Canac Marquis and Tremblay 1998). Thus, appositive relatives as in (53a) are structurally equivalent to appositions as in (53b)²:

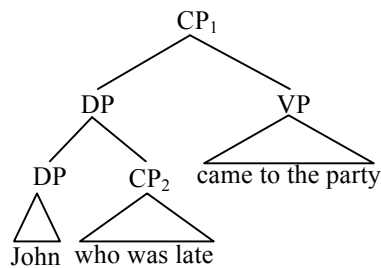
- (53) a. John, who wrote that book, told me it is autobiographical.
 b. John, he who wrote that book, told me it is autobiographical.

De Vries argues that appositive relatives share their behavior with respect to scope from the matrix with second conjuncts. Thus, he claims that this and other properties follow immediately from his analysis. He derives this effect in coordination by merging the coordination head in a special way, resulting in a three-dimensional structure. In section 4.8, I will come back to resemblances between coordination and apposition. In section 4.6, I will discuss the parenthetical type of merge introduced by De Vries. Note that without this special treatment of the structure for coordination, a constituent coordination approach to appositive relatives does not explain the independent status of appositive relatives better than the other integration approaches, since nothing in the structures that are generally assumed for coordination prevents the first conjunct or any other element higher up in the clause from c-commanding the second conjunct.

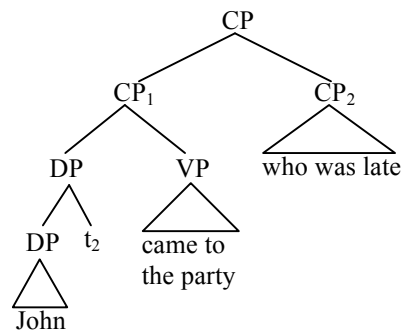
² For a more recent account relating appositions and appositive relatives, see Cardoso and De Vries (2010). Actually, they argue that the empty pronominal head under discussion needs a specific indefinite semantics and is equivalent to *someone* or *a certain person* rather than *he*.

Finally, some authors argue for analyses of appositive relatives that combine ideas from both orphanage and integration approaches, such as Demirdache (1991) and Del Gobbo (2003, 2007). These analyses start out from right-adjunction to the antecedent XP, and therefore integration, in the initial syntactic structure. After that, they move the relative clause at LF, where it is right adjoined to CP, giving it the status of an orphan. Del Gobbo (2007: 190-191) gives the following representation:

(54) Narrow syntax and PF



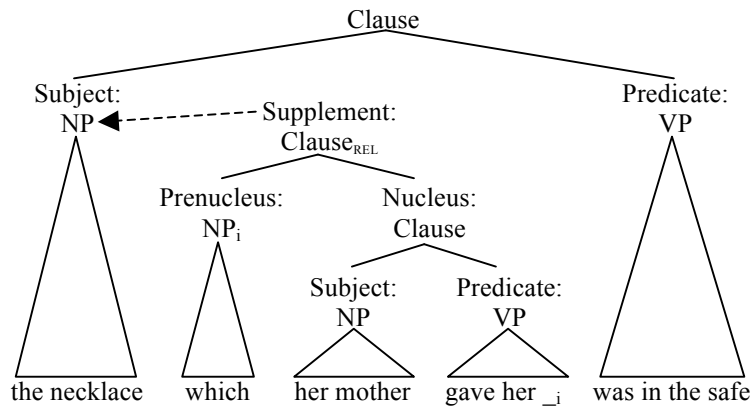
LF and discourse



Thus, these approaches explain the integration in the linear word order by the syntactic surface structure. Also, they explain their independence with respect to the matrix, such as syntactic invisibility, because the appositive relative is interpreted as a separate sentence at LF and therefore has no dependency relations with any element from the matrix at this level anymore. In sum, these mixed approaches can explain the ambivalent nature of appositions and appositive relatives by attributing properties of dependence and independence to different components of the grammatical system. Yet, they also face some problems. First, there seems to be no trigger for the proposed LF movement of the relative clause. Furthermore, it is not clear how LF should distinguish between restrictive and appositive relatives in this respect. Also, this movement does not respect cyclicity or locality, whereas normal movement does. Finally, we saw in sections 1.1 and 4.3 that both dependence and independence of appositions on their host are expressed in phonological features. Taking the Y-model of grammar seriously, we would not expect independency of parentheses to have any influence on the pronunciation, that is on PF, if this is only realized at LF.

Another interesting proposal that combines properties from orphanage and integration comes from Huddleston and Pullum (2002: 1351-1354). They state that parenthetical elements, *supplements* in their terms, are not integrated in syntax and are only semantically related to their anchors. Thus, it seems they follow an orphanage approach. On the other hand, they also claim that a supplement and its anchor form a construction, though not a syntactic constituent, together. They propose that in the syntactic representation, supplements are kept separate from the tree and yet are related to their anchors by a different notational device: a broken line. Consider their representation of a non-restrictive relative (p. 1354):

(55)



Since Huddleston and Pullum explicitly state that the relation between the supplement and its anchor is not syntactic, it is not clear what kind of relation the broken line represents. Yet, in essence this paradoxical relation is very similar to what I will propose below: there is a syntactic relation between parenthetical elements and their anchors, but it is not a genuine syntactic relation of a kind that we are familiar with.

In sum, both orphanage and integration approaches have their advantages in explaining the properties of parenthesis in general and appositions and appositive relatives in particular. Whereas orphanage approaches straightforwardly explain the structural independency, such as scope effects, integration approaches immediately explain dependency on (elements in) the host, such as adjacency requirements. Mixed approaches seem to fair best by combining the advantages of both orphanage and integration and thus explaining the ambivalent nature of parentheses. Their main problem is, however, that they distribute the relevant properties over several components of the grammar, both before and after spell-out, whereas for example intonation shows both dependency and independency at the same time. Therefore, I conclude that an analysis of parentheses should explain both dependency and independency in the syntactic structure before spell-out. Before proposing such an analysis, however, I will first discuss one more existing account, namely Potts's (2005) semantic analysis of parenthetical constructions, in some more detail.

4.5 A semantic alternative: Potts's CI logic

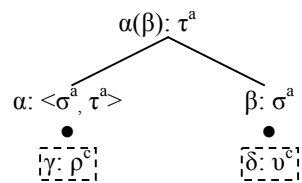
In order to account for the independency of parenthetical elements, supplements in his terms, Potts (2005) developed a multidimensional semantics (inspired by Karttunen and Peters 1979). In his system, parenthetical messages are interpreted in a different dimension than the main message in the matrix. He uses an integration approach, namely right adjunction, syntactically, and takes the parenthetical independency to be a semantic phenomenon.

Before discussing Potts's proposal in more detail, I want to remind the reader of an argument in favor of a syntactic account from section 4.3. As discussed before, parenthetical constructions are not only interpreted in a special way, they also have a

special intonation pattern. If we assume a Y-model of grammar, which does not allow interaction between the components for interpretation and pronunciation, there are only two ways to account for this correspondence between semantics and phonology. Either these two components coincidentally treat parenthetical elements both in a special way, or both components have access to a common source for this special treatment syntactic structure. Clearly, the latter option is more explanatory. Therefore, I think that parenthetical elements have a special syntactic structure, which is reflected both in the semantic and in the phonological component.

Now, I will provide a more detailed discussion of Potts's (2005) proposal. As discussed in section 3.4, Potts's main idea is that appositions convey their own message, a proposition separate from the matrix's proposition. This proposition is a conventional implicature (CI): it follows from the conventional meaning and composition of words, but it is not uttered explicitly. CI content has a different status than the normal, at-issue, content in the matrix. It is interpreted as an aside: secondary information. Therefore, Potts argues that it is on a different plane in the interpretation. Thus, he introduces an additional dimension to semantics, dedicated to CI content. Potts formulates his account in a type-theoretic framework. By distinguishing at-issue types and CI types, one sentence can lead to two or more propositions with their own truth value, each in a different dimension. In order to get a better idea of his system, let us first have a look at his way of representation. Consider the scheme Potts (2005: 62) uses to illustrate how normal, at-issue, types are combined:

(56) at-issue application



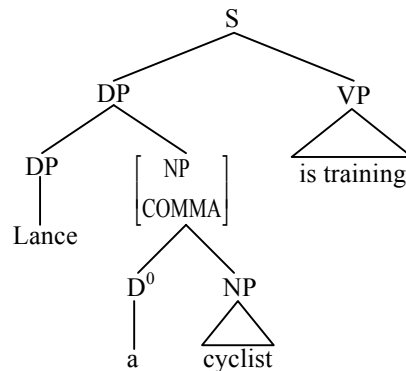
Here, the Greek letters α , β , γ and δ are variables ranging over terms. The Greek letters ρ , σ , τ and υ represent variables ranging over (basic or complex) types. The basic types used in this system are e (entity), t (truth value), and s (world). The subscripts a and c indicate whether a certain type is at-issue or CI, respectively³. The bullets are used to separate independent lambda terms, in other words they separate semantic dimensions. The dashed squares are used to indicate that the material within them is optional. Optional material is always CI content. Thus, this scheme shows that terms used in at-issue computation can always be related to some CI content. This CI content will be part of the overall interpretation, but is not involved

³ Potts (2005: 55) notes that “the only basic CI type employed in this work is t^c . This might reflect something important about CIs, namely, that they are always saturated, or propositional, meanings. But it seems premature to impose this limitation at the level of the type definition. With three basic CI types, we retain a degree of flexibility that might prove useful.” Note also that Potts - and I will follow him in that respect - almost exclusively works with extensional types.

in the at-issue computation. If we ignore the optional CI material, the scheme simply represents the basic step in combining terms in type theory. If α of type $\langle \sigma, \tau \rangle$ is applied to β of type σ , the result is $\alpha(\beta)$ of type τ .

Before continuing to explain Potts's CI logic and the way he applies it to appositional constructions, I want to add something about the syntactic structure he assumes for these constructions. Potts (2005: 103) wants to have "a clean analysis of the semantics for these expressions without resorting to complex syntactic manipulations to get the right structure for interpretation." The "conservative" syntax he has in mind can be exemplified as follows (p. 97):

(57) Lance, *a cyclist*, is training⁴.



As noted in section 4.5, Potts basically follows the right adjunction approach for appositional constructions. Also, in his description of the difference between appositive and restrictive (supplementary vs. integrated in his terms) relatives, he adopts an analysis (going back to Jackendoff 1977) where these two types are distinguished by the projection level they are adjoined to (p. 96). Whereas integrated relatives are adjoined "below the determiner" (at the NP level), supplementary relatives are adjoined to "the full nominal" (DP)⁵. Similarly, (non-restrictive) appositions are right adjoined to the DP projection of the anchor.

So far, the syntax Potts assumes may indeed be called conservative. Yet, he does introduce something special. As he himself states (p. 98), "the analysis centers

⁴ Potts consistently labels appositions as NPs rather than DPs, even when they involve a D head. The reason is probably that appositions are translated to properties in his semantics, and not to entities.

⁵ Usually, restrictive and appositive relatives are adjoined to different projection levels to account for the fact that the appositive variant is out of the scope of the determiner. For Potts, however, this effect follows from his CI logic. He probably keeps the distinction in syntax because of the semantic composition. He intersects the meaning of a restrictive relative with the meaning of the antecedent noun before taking it as an argument to the antecedent determiner. For the non-restrictive case, the anchor noun and its determiner form an entity together before the CI property denoted by the relative clause is applied to them.

around the syntactic feature COMMA". This feature is attached to the apposition as a whole. Though Potts explicitly states that it is syntactic in nature, its presence does not seem to have (morpho)syntactic consequences⁶. Rather, as the name already suggests, it is primarily used to send a signal to the phonological component, resulting in the special intonation for appositions discussed in section 1.1, also known as *comma intonation*. Furthermore, this feature has a semantic reflex shifting at-issue content to CI content, as will be explained below. Thus, Potts admits that something special is to be done in syntax in order to account for the fact that both phonology and semantics reflect the presence of parenthetical material, as I argued in the beginning of this section. The question is whether a feature that does not influence syntax itself, and therefore merely functions as a trigger for the other components, suffices. Before I answer this question, let me first explain the semantics Potts relates to the feature COMMA in more detail.

Basically, the feature COMMA is translated to a type shifter in semantics. It switches expressions from at-issue to CI content. In order to make this work, Potts (2005: 66) introduces the following rule:

(58) feature semantics

$$\begin{array}{c} \beta(\alpha): \tau \text{ (where } \beta \text{ is a designated feature term of type } \langle \sigma, \tau \rangle) \\ | \\ \alpha: \sigma \\ \bullet \\ \boxed{\gamma: \nu} \end{array}$$

Again, the CI content within the dashed square is optional and therefore irrelevant here. What the rule says, then, is that if a term α of type σ has a feature β of type $\langle \sigma, \tau \rangle$, the feature is applied to the term, which means that the complex term including its feature is taken to be $\beta(\alpha)$ of type τ . Here is an example from Potts (2005: 98), providing a partial parsetree for the apposition in (57):

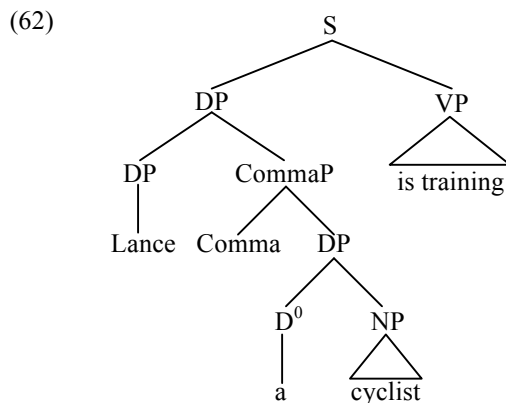
$$\begin{array}{c} (59) \quad \text{comma}(cyclist): \langle e^a, t^c \rangle \\ | \\ cyclist: \langle e^a, t^a \rangle \end{array}$$

Here, the apposition *a cyclist* is taken to be a property of type $\langle e^a, t^a \rangle$. The feature COMMA attached to it represents a type shifter of type $\langle \langle e^a, t^a \rangle, \langle e^a, t^c \rangle \rangle$ in this case (and in most other appositional constructions). Thus, the apposition combined with its feature is a CI property of type $\langle e^a, t^c \rangle$. A further assumption is that types of the form $\langle \sigma^a, \tau^c \rangle$ are CI types by definition.

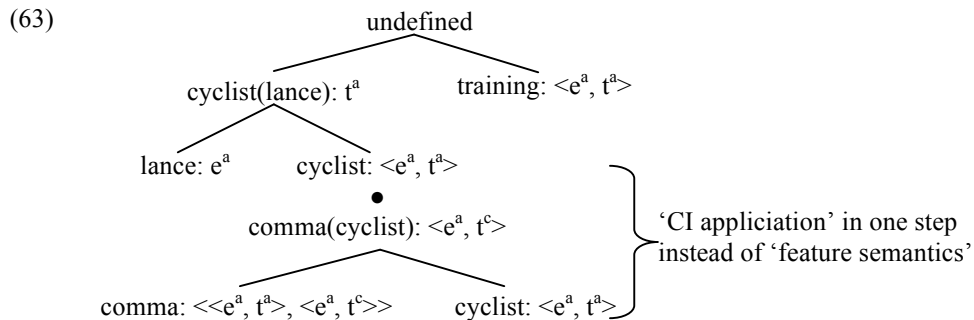
⁶ One exception is Potts's (2005: 110) stipulated rule for case marking on appositions, which takes the presence of COMMA as a condition for case agreement with the anchor. See chapter 5 for a discussion of case marking on appositions.

feature requires the special rule for feature semantics in (58), the question arises whether there are more syntactic features that are translated in semantics as an operator. As far as I know, Potts does not explicitly mention other instances of the feature semantics rule. Yet, he uses a similar treatment for other type shifters, such as Chierchia's (1998) kind and de-kind operators and Partee's (1987) lift and lower operators (see Potts 2005: 102-103, 172, 221). He does not represent these operators as features in syntax, however (though he does mention this as a possibility, p. 103). Also, these other type shifters do not trigger any special reflex in phonology (see also Amaral et al. 2007: 720), which makes their presence in syntax more questionable. Finally, linguists typically assume all kinds of syntactic features that do not correspond to type shifters or other operators in semantics and therefore should not be subjected to rule (58).

Furthermore, one might wonder why Potts did not use a corresponding syntactic head for his semantic operator. I think the reason is internal to his own system: such an analysis would lead to unwanted results and uninterpretability (cf. Amaral et al. 2007: 720). Suppose that Potts would adjoin a CommaP to the anchor as follows:



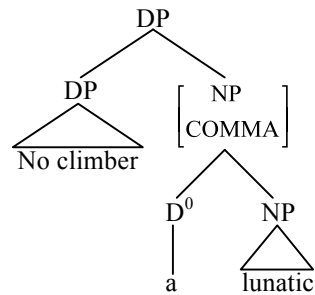
As illustrated below, the CI logic cannot derive meanings for structures like (62):



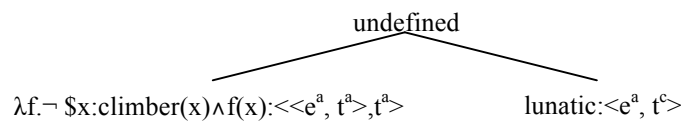
Since the COMMA operator is of a CI type, the CI application rule forces it to combine with the at-issue property of being a cyclist. Therefore, the composition in the CI dimension results in the denotation of a property rather than a truth-value and consequently cannot be interpreted. Furthermore, the cyclist property is passed on to the at-issue dimension and therefore is incorrectly used in the composition of the matrix. In the end, this leads to a type mismatch, which makes the at-issue content uninterpretable as well. By introducing the COMMA operator as a feature in syntax in combination with the special rule for feature semantics, Potts prevents these problems. Yet, as I argued above, this solution is itself questionable too. In my own analysis, described in the next section, I will introduce the syntactic head Par rather than a feature. This head also triggers a parenthetical semantics and a special intonation and can be lexically filled by parenthetical markers.

The next question that arises is how Potts accounts for the independency of the apposition. Of course, the core property of his logic is that it results in an independent appositive proposition, but how does he account for the scope effects, for example? The best way to understand this is to look at an ungrammatical example where the anchor is a quantifier. Potts (2005: 123) uses the sentence *No climber, a lunatic, survived*. The appositional construction in this example gets the following representations in syntax (64) and semantics (65):

(64)



(65)



These representations immediately show why the anchor cannot be quantified: given that quantifiers are of type $\langle \langle e^a, t^a \rangle, t^a \rangle$, a quantified anchor would take input of type $\langle e^a, t^a \rangle$, but the apposition is of type $\langle e^a, t^c \rangle$, leading to a type mismatch. Note that the CI logic is defined in such a way that it prevents a solution for the mismatch at hand by type shifting the apposition. In order to make such a solution work, the apposition would have to be shifted to type $\langle \langle \langle e^a, t^a \rangle, t^a \rangle, t^c \rangle$. This would require a type shifter of type $\langle \langle e^a, t^c \rangle, \langle \langle \langle e^a, t^a \rangle, t^a \rangle, t^c \rangle \rangle$. In this type, both members are of a CI type and such types are not defined in the CI logic. According to Potts (2005: 57-61), the reason is that CIs always comment on at-issue material, and not on other

account based on a lack of c-command between parentheses and their hosts would be more straightforward, as I will show in the next section.

Furthermore, Potts's account also has an empirical problem. There's another phenomenon related to c-command, which, as far as I can see, cannot be explained in Potts's system, because it is purely syntactic: condition C effects⁸ (Schlenker 2009 also uses this argument in favor of a syntactic account for non-restrictive relatives). In section 4.1, I argued that such effects are found in appositions, thus providing evidence for a lack of c-command. There are two types of examples that suggest condition C effects. Only one of these types is evidential, however. First, consider the following example:

(68) She_i told us that she_i, Mary_i, would never kiss John.

Here, the apposition consists of an R-expression that seems to be coreferential with its anchor. Condition C predicts this to be impossible if the anchor c-commands the apposition. It should be noted, however, that copula constructions form an exception to this rule. An utterance like *she is Mary* is perfectly grammatical, even though the R-expression *Mary* is c-commanded by the 'coreferent' pronoun *she*. Thus, if there exists a copular relation between an apposition and its anchor, the grammaticality of (68) might have the same explanation as the grammaticality of (69):

(69) She_i told us that she_i was Mary_i.

The reason that (69) is grammatical is probably that *Mary* is not really referential here, but denotes a property. This also explains the grammaticality of (68). Now, consider example (15), repeated here as (70):

(70) a. * John_i first met John_i's wife in the linguistic cafe.
b. John_i first met Mary, *now John_i's wife*, in the linguistic cafe.

Here, an R-expression within an apposition is coreferent with an expression higher up in the matrix in (70b), whereas this would be impossible if the matrix element would c-command the R-expression (70a). Here, a copular relation between the anchor and the apposition cannot explain the effect, since John has to be referential in this case. Compare (69) to (71):

(71) * John_i told us that Mary was John_i's wife.

⁸ Heycock (1995) argues that binding conditions, and condition C in particular, ultimately apply at LF, rather than at narrow syntax. Yet, also at LF the condition is defined on the basis of c-command. Since Potts does not assume special structural changes for supplements at LF, this does not help him. Note that approaches that do involve raising of parenthetical elements at LF, such as Demirdache's (1991) and Del Gobbo's (2003, 2007) (see section 4.5), may explain the condition C effects in this way.

The ungrammaticality of (71) shows that the grammaticality of (70b) cannot be explained by a copular relation in the apposition. Therefore, (70b) provides evidence for the lack of c-command between the matrix and the apposition.

Similar effects have been shown for other parenthetical elements, such as ordinary parentheticals (72a), reporting clauses (72b), peripheral adverbial clauses (72c-c'), and non-restrictive relative clauses (72d-d'). The examples in (72a-b) are from De Vries (2007: 214-215), (72c-c') are from Haegeman (2009: 333), and (72d-d') are from Schlenker (to appear: (8)); I adapted the glosses for (72d-d'):

- (72) a. Hij_i zei - dat is typisch iets voor Joop_i - dat hij_i nog [Dutch]
 he said that is typically something for Joop that he yet
 liever op zijn kop ging staan.
 rather on his head went stand
 'He said - this is typical for Joop - that he would rather stand on his head (fig.)'
- b. Hij_i had, zei Joop_i, geen behoefte aan gezelschap. [Dutch]
 he had said Joop no need to company
 'He had, said Joop, no need for company.'
- c. John_i studies mathematics in Cambridge, while John_i's wife is [English]
 studying physics in Oxford.
- c'. ?*John_i always works best while John_i's children are asleep. [English]
- d. [Le President]_i est si compliqué qu'il_i n'a envoyé [French]
 the president is so complicated that.he not.has sent
 qu'à un seul journaliste, qui adore Sarkozy_i, son_i dernier livre.
 than.to a single journalist who loves Sarkozy his latest book
 'The president is so complicated that he sent his latest book to only one journalist, who loves Sarkozy.'
- d'. *[Le President]_i est si compliqué qu'il_i n'a envoyé qu'à [French]
 the president is so complicated that.he not.has sent than.to
 un seul journaliste qui adore Sarkozy_i, son_i dernier livre.
 a single journalist who loves Sarkozy his latest book

All the parenthetical examples given are grammatical and yet contain an R-expression that is coreferential with an element in a non-embedded position higher up in the clause. This can only be explained if c-command is blocked between the host and the parentheses. Peripheral adverbial clauses (72c) and non-restrictive relatives (72d) are very useful to illustrate this point, because they can be contrasted with their non-parenthetical counterparts: central adverbial clauses (72c') and restrictive relatives (72d'), respectively. These non-parenthetical constructions do show ungrammaticality in these cases, due to condition C.

Since condition C is purely syntactic, Potts's semantic account fails here. I conclude, then, that a syntactic account for the special nature of parenthetical elements fares better. Not only is it conceptually more attractive, it also explains the empirical facts regarding condition C effects. In the following sections, and also in the next chapter, I will regularly come back to Potts's proposal and show more facts that are problematic for his account, such as appositions with the appositive message

of a previous appositional construction as their anchor, case marking, and apposition markers.

After presenting his semantic proposal, Potts also discusses a syntactic alternative, based on Huddleston & Pullum (2002). Interestingly, this alternative involves a multidimensional representation as well, where parenthetical elements are in a different dimension of the syntactic structure than the matrix. In that respect, it is similar to the account presented in the next section. Though Potts (2005: 210) rejects his hypothetical syntactic alternative as “a clumsy restatement of the CI logic’s guiding ideas (i.e. the ideas behind Potts’s own proposal, HH)”, in the end he reaches the following conclusion: “Descriptively, there is no doubt that supplementations have special characteristics. The question is what the nature of these characteristics is. Here is a slogan: we require multidimensionality. But at which level of grammatical analysis? The syntax or the semantics? This is not merely a border dispute. The answers have diverse and apparent consequences.”

In the next section, I will argue that the special characteristics Potts mentions originate in syntax. Following De Vries (2007, to appear), I will present an account that combines independence and integration both within narrow syntax.

4.6 Parenthetical construal: supplementation

In sections 4.1-4.3, we saw that the independence of parentheses with respect to their hosts follows from the syntactic structure if parentheses are not c-commanded by any element in the host. Integration phenomena, on the other hand, follow if parentheses form a constituent with an element in the host. In particular, adjacency requirements for appositions and appositive relatives can be derived if they form a constituent with their anchors. Therefore, if we want to explain both dependency and independency of parentheses from their syntactic structure, the question is how two elements can form a constituent together and be included in a bigger structure if one of the elements may not be c-commanded by elements from the bigger structure.

In order to answer this question, we first have to know what constituency and c-command are exactly and how they are related. Basically, constituency and c-command both follow immediately from the most basic operation in generating syntactic structures: Merge (Chomsky 1995). When two syntactic elements (either simple or complex) are combined via Merge, they form a constituent together. C-command is a dependency relation based on the dominance hierarchy that results from Merge. When a new element is merged to a derived structure, this element c-commands exactly the structure it is merged to, that is its sister and everything that is included in that sister via dominance (cf. Epstein 1999)⁹.

Now, it is clear that constituency and c-command are inherently related to each other via the operation of Merge. Therefore, if we want to build structures with

⁹ I take Merge to be an asymmetric operation (see Zwart 2011). Merge does not combine two equal elements, but adds one element to another one. Therefore, c-command is also an asymmetric relation, where the added element c-commands the structure it is added to, but not the other way around. This asymmetry straightforwardly maps to precedence. This assumption is not crucial for my account, however.

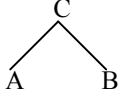
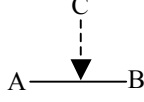
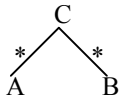
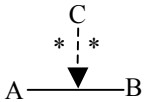
a constituent that is not c-commanded by elements higher up in the structure, we need an operation different from Merge, or at least a different type of Merge, which does result in constituency, but not in dominance and therefore c-command relations. De Vries (to appear and earlier work) proposes such an operation, which I will call supplementation Merge, or sup-Merge, here¹⁰. The result of the usual Merge, now called dominance Merge, or dom-Merge, is that the two input elements are dominated by their mother: the newly created supernode. The result of sup-Merge, on the other hand, is that the two input elements function as a supplement to their mother. Supplementation is then an inclusion relation that contrasts with dominance. Thus, the two types of Merge can be described as follows (adapted from De Vries to appear: 16):

- (73) a. dom-Merge (A,B) yields C such that
- (i) C directly dominates A
 - (ii) C directly dominates B
 - (iii) A is a sister of B
- b. sup-Merge (A,B) yields C such that
- (i) A is directly supplemented to C
 - (ii) B is directly supplemented to C
 - (iii) A is a sister of B

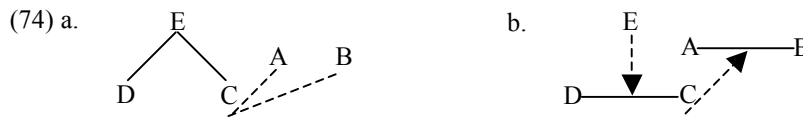
There are several ways to mark supplementation different from dominance in the visual tree representation of structural hierarchies. A possible way is to use an asterisk that relates to the lines representing inclusion. De Vries (to appear) suggests an alternative representation, where sisterhood relations are represented separately from inclusion relations. Also in this representation, supplementation could be marked by asterisks related to the arrow that stands for the inclusion relation. Similarly, in bracketing structure, the mother node may be marked by an asterisk to indicate supplementation. As the alternative representation shows most clearly, the sisterhood relation is exactly the same for both types of Merge. Another advantage of this representation is the single link between a mother node and its two daughter nodes. This immediately shows that two sisters cannot differ in the relation they have with their mother. See the table below:

¹⁰ De Vries (2007) used the term b(ehindance) Merge, but this terminology is immediately related to a particular type of representation. Later, De Vries (2008) renamed this operation to par(enthetical) Merge. This term is neutral with respect to representation, but there is no clear term for the new inclusion relation in this case. The obvious candidate *parenthesis* relates to a construction, rather than to a syntactic relation. The term *supplementation* is based on Huddleston & Pullum (2002) (and used by Potts 2005: 206 for a relation that is very similar to the one described here). This is a purely terminological issue. The sup-Merge operation proposed here is completely equivalent to De Vries's par-Merge.

Table 2. Representing dom-Merge and sup-Merge

	regular notation	alternative notation	bracketed structure
dom-Merge(A, B) → C			[c A B]
sup-Merge(A,B) → C			[c* A B]

Metaphorically speaking, elements are visible via dominance and not via supplementation. In other words, if an element looks down the tree structure, elements that are in a different ‘dimension’ are invisible. In order to visualize this idea of separate dimensions, supplementation may alternatively be represented by dashed lines, suggesting a three-dimensional space in which sup-merged nodes are behind their mother:



Here, A and B are supplements to C, positioned ‘behind’ the host structure. Bosveld-de Smet & De Vries (2008) show that 3D-representations like this turn out to be not the optimal type of representation from a usability perspective, however. Therefore, I will use the alternative notation from table 1 instead.

Now, next to the precedence relation, there are two types of inclusion relations in syntactic structures: dominance and supplementation. Since c-command is related to dominance, supplementation blocks this dependency relation. C-command can then be defined as follows (cf. De Vries to appear: 17):

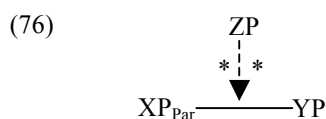
- (75) a. A c-commands B iff there is an X such that
- (i) A and X are sisters, and
 - (ii) B=X, or B is dominated by X
- b. B is dominated by X iff there is a sequence (‘path’) (Y_1, \dots, Y_n) , where $n \geq 2$, $Y_1 = B$, $Y_n = X$, such that for all i , $2 \leq i \leq n$: Y_i directly dominates Y_{i-1} .

Here, (75b) spells out the transitivity of dominance. Supplementation Merge breaks this transitive line of dominance and thus blocks c-command.

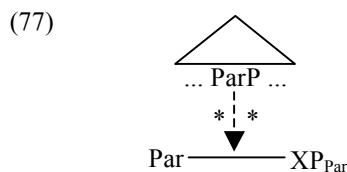
The idea of sup-Merge combines orphanage and integration within narrow syntax. Via sup-Merge, an apposition can form a constituent with its anchor, which

results in adjacency. At the same time, neither the anchor nor any other element in the matrix c-commands the apposition, because supplementation blocks this relation.

This leaves us with the question how an actual parenthesis is related to the matrix with sup-Merge. In order to answer this question, it is important to realize that it is impossible to sup-merge a parenthesis to a constituent from the matrix directly. If we would do that, not only the parenthesis, but also the element it is added to, would be supplemented to the newly created mother node and therefore invisible for all other elements in the matrix. This is illustrated in (76), where XP_{par} is a parenthesis and YP is some projection of the host.

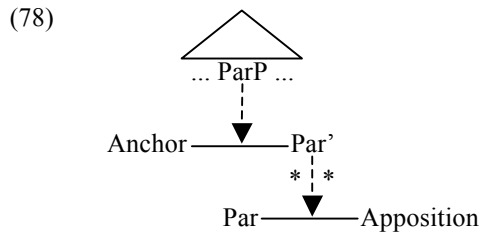


To solve this problem, De Vries introduces a special head for parenthesis, Par, which is always added to a parenthesis via sup-Merge. This results in a parenthetical phrase, ParP, with two daughters supplemented to it: the Par head and the parenthesis. This ParP can then be integrated in the structure of the matrix via dom-Merge:



Since the Par head is always added to a parenthesis via sup-Merge, it may be taken as the trigger for sup-Merge as well. Thus, the Par head enables a connection between a parenthesis and the matrix. In semantics, the Par head will lead to the interpretation of its complement as a parenthesis: secondary information. Furthermore, it will lead to comma intonation at PF. In that sense, the Par head is similar to Potts's comma feature.

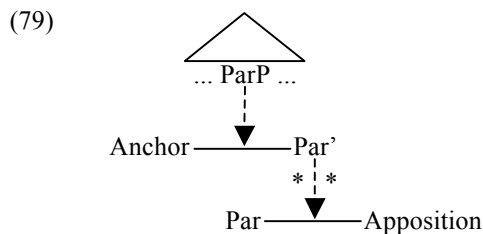
In appositional constructions, it is the apposition that is parenthetically related to the matrix. Therefore, it will be merged as the complement of the Par head. The next question then is where the anchor is in the structure. Since the anchor always immediately precedes the apposition, I will assume that it is located in the specifier of the ParP. Thus, the appositional construction as a whole has one function in the matrix. The apposition has to be adjacent to the anchor because of the configuration of the ParP. At the same time, there is no c-command relation between the anchor or any other element in the matrix and the apposition:



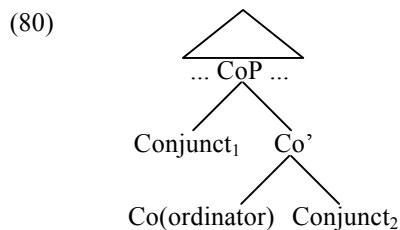
This syntactic structure explains the paradoxical nature of appositional constructions, being both integrated and independent with respect to the matrix. In the next section, I will argue that the introduction of the Par head has more advantages for the structure of appositional constructions. It provides a position for apposition markers and it explains the resemblance between apposition and coordination. In section 4.8, I will show how parenthetical structure argued for here relates to the predicational structure I proposed in chapter 3.

4.7 Parenthetical construal resembles coordination

Consider again the schematic structure I proposed for appositional constructions in (78), repeated here as (79):



If we ignore the special supplementation relation, this structure is reminiscent of the CoP many syntacticians assume for coordination (see Munn 1987, Kayne 1994, Johannessen 1998), where the coordinator is in the Co head and the first and second conjunct function as its specifier and complement, respectively:



This resemblance brings us back to a question raised in chapter 1, namely whether the relation between an apposition and its anchor could be characterized as

coordination or subordination. Note that I argued for a relation of predication, and therefore subordination, in attributive and identificational appositions. Yet, I argued that this relation does not exist between an apposition and its anchor directly, but between an apposition and a pronoun referring to the anchor. Thus, one might wonder whether the Par head that relates an apposition to its anchor is a special type of coordinator relating the anchor and the apposition as its two conjuncts. As stated in chapter 1, there are indeed arguments in favor of this idea.

4.7.1 The Par head resembles a coordinate head

The first argument comes from apposition markers (see also section 2.8): lexical elements that explicitly express the relation between an apposition and its anchor. Huddleston and Pullum (2002: 1355) note that these markers (they use the term indicators, also for similar elements in other parenthetical constructions) are to some extent analogous to coordinators in that they link together the elements in a construction. They therefore generalize the distinction between syndetic and asyndetic coordination to parenthetical constructions with and without indicators. Furthermore, Quirk et al. (1985: 1311-1312) show that the two main coordinators in English, *and* and *or*, can both appear as apposition markers.

- (81) a. The United States of America, *or America for short...*
 b. You could cut the atmosphere with a knife, *and a blunt knife at that.*

Note that the third coordinator, *but*, often occurs in inclusive appositional constructions. As argued in section 3.1, however, I think that this is because these constructions underlyingly consist of two coordinated sentences.

Interestingly, coordinators appear in other parenthetical constructions as well. Clear examples are so called *and*-parentheticals. Here are some example sentences from Blakemore (2005: 1166) (see also Kavalova 2007):

- (82) a. I had to take the whole class – and I’m talking about a hundred students – all around the campus until I found an empty lecture theatre.
 b. Her account – and I must say I’m attracted to it – suggests that we have to re-think the relationship between meaning and truth.
 c. If she asks – and she probably will – tell her that you were at my place.

Thus, it seems that coordinators can be used to indicate parenthesis in general. Also, the use of coordinators to express the relation between the anchor and the apposition is not some accidental property of English alone. Other languages show a similar pattern. Here are some examples. The c-example is from Schindler (1990: 246); the glosses are mine:

- (83) a. Piet gaat een auto, *en wel een Porsche*, kopen. [Dutch]
 Piet goes a car and PRT a Porsche buy
 ‘Piet will buy a car, *namely a Porsche.*’

- b. Marie leest een boek over lexicalesemantiek,*of(te)(-wel)*¹¹ [Dutch]
 Marie reads a book on lexical semantics or-PRT
woordbetekenis.
 word.meaning
 ‘Marie reads a book on lexical semantics, *or the meaning of words.*’
- c. Die Singvögel, *und zwar Amsel, Drossel, Fink und Star,* [German]
 the songbirds and PRT blackbird thrush finch and starling
 sangen eifrig.
 sang zealously
 ‘The songbirds, *namely the blackbird, the thrush, the finch and the starling,* sang zealously.’
- d. Ivan živi u Sjedinjenim Drzavama *ili(-ti) Americi.* [Croatian]
 Ivan lives in United States or-PRT America
 ‘Ivan lives in the United States, or America.’
- e. Spojené Státu Americké, *nebo-li Amerika,* ... [Czech]
 United States American or-PRT America
- f. Viděl jsem něco krásného, *a to zlat* [Czech]
 saw AUX-1SG-PAST something beautiful and PRT golden
dům.
 house
 ‘I saw something beautiful, *namely a golden house.*’

It is worth noting that in all these non-English examples the apposition marker may, or even must, involve some particle in addition to the coordinator. These particles do not have a clear meaning, but are simply used to mark the coordinators for their use in a parenthetical construction. Therefore, we may assume that the ParP represents a special kind of coordination and that the Par head may be lexically filled by special coordinators, just like the main semantic types of coordination, conjunction and disjunction, have their own coordinators, *and* and *or*, with their own characteristics (with respect to agreement, for instance). Indeed, De Vries (2009a) proposed that the relation between appositions and their anchor is a special semantic type of coordination next to conjunction and disjunction, namely specification. Though I think this approach is in the right direction, I will argue here that the appositional relation, represented by ParP, and coordination are two types of a bigger group, namely parallel construal (cf. Koster 2000).

One might wonder whether the distinctive coordinators used in appositional constructions differ in their semantics. This is indeed the case. In chapter 2, I argued already that apposition markers correlate with the semantic classes of apposition. Both types of coordinators are used in identificational constructions, however. Yet, within this class, they have a different meaning. It is impossible to exchange the markers in (84a) and (84b), for instance. The difference is again related to specificity, though it is more subtle than the difference between the semantic classes. If the disjunctive coordinator is used, the anchor and the apposition refer in

¹¹ Dutch *ofte* is an old form for the coordinator *of*, or. It only occurs in the apposition marker *oftewel* used here and in other idiomatic expressions, such as *nooit ofte nimmer* (lit. never or never), ‘never ever’, and *ja ofte nee*, ‘yes or no’.

a similar way to the same entity. If the conjunctive coordinator is used, on the other hand, the apposition gives a more informative description of the entity referred to by the anchor. Yet, the apposition does not refer to a part or group member of the anchor's referent and therefore does not result in inclusion.

The given meaning for the constructions that allow a conjunctive coordinator may lead to confusion: these appositions do not seem to be non-restrictive in the strict sense. Since the description of the referent by the apposition is more informative, it seems to restrict the description given by the anchor in these cases. This observation becomes clearer in constructions with an apposition that involves an adjective and the dummy *one* referring to the head noun in the anchor, or even an empty element, as in the Dutch correlate of this construction. Consider the following examples:

- (84) a. We came across an alligator, (*and*) *a big one (too)*¹².
 b. Jonathan wil een fiets, (*en wel*) *een mooie*, voor zijn [Dutch]
 Jonathan wants a bike and PRT a nice for his
 verjaardag.
 birthday
 'Jonathan wants a bike, *a nice one*, for his birthday.'

In these examples, the adjective in the apposition seems to restrict the meaning of the anchor, just like the adjectives in the examples without an appositional construction below restrict the meaning of the noun they belong to:

- (85) a. We came across a big alligator.
 b. Jonathan wil een mooie fiets voor zijn verjaardag. [Dutch]
 Jonathan wants a nice bike for his birthday

There is an essential difference between these examples, however. In order to see this, it is important to distinguish between the knowledge of the hearer and the speaker. In section 2.6, we saw that this distinction is central to the notion of specificity. This was illustrated by the following scheme from Vangsnes (2000: 35):

Table 2. *Specificity*

	Speaker	Hearer
Unique	+	+
Specific	+	-
Non-specific	-	-

Here, +/- indicates whether the concept is identifiable or not. Thus, in (84a), *an alligator* has a specific interpretation, because the speaker is able to identify one specific alligator, whereas the hearer does not know this concept yet. Therefore, since the speaker has one specific alligator in mind already, the apposition in (84a)

¹² For some reason, the English constructions with *and* get better if *too* or *at that* is added at the end of the apposition.

does not restrict the meaning for him. He adds the property of being big for the hearer, who has been introduced to the alligator just before, to get a better idea of the concept. For the hearer, then, the apposition does restrict the meaning. In (85a), on the other hand, the speaker uses the adjective *big* to restrict the meaning for himself as well. He might have come across a lot of alligators, but the one he wants to introduce to the speaker now is big. Thus, I conclude that the term non-restrictive, as it is applied to appositions, concerns the conceptual world of the speaker. For the hearer, the apposition may restrict the concept referred to by the anchor. This, I think, is the most important property of the meaning of appositions. They provide the hearer with extra information that is less important than the message from the matrix.

Coming back to the semantics of coordinators as apposition markers, it is important to see that these coordinators do not occur in attributive constructions. Why is this the case? As noted before, different coordinators can have different syntactic or semantic properties. I would like to argue that these properties are related to different structures for appositional constructions, as discussed in chapter 3. Whereas coordinators may only combine two constituents of the same category or a DP and a small clause, as in most cases of identification, an empty Par head may combine a DP anchor to a clausal appositive message, for instance. Assuming that only attributive appositions always involve the elaborate clausal structure argued for in the previous chapter, this would explain why attributive appositions can never be related to their anchor with a coordinator. Below, I will present more data supporting the idea from chapter 3 that appositional constructions can have different syntactic structures.

Another important question is whether all words and expressions that were listed as apposition markers in section 2.8 fill the same position in the structure. After all, the coordinators form only a small subset of the whole list. A marker like *namely*, for example, is used in other contexts as a conjunctive adverb. Also *in other words* and similar markers (*in simpler/ plain terms, simply/ technically speaking, to put it more simply/plainly, in more technical words*) seem to be adverbial rather than coordinating. Complex expressions like *that is (to say)* and *to wit* suggest an origin in more elaborate paraphrases of appositional constructions.

If we assume that all these markers are located in the same head, this would predict that combinations of markers are impossible. To a large extent, this prediction seems to be borne out. There are two exceptions, however. First, constructions from the class of inclusion can involve both a coordinator and a more specific marker. As noted before, inclusion often contains the coordinator *but*. This element combines with markers like *especially, mainly, or particularly*. Note that the coordinator cannot function without the other marker in these cases. This might indicate that the coordinator and the other marker form one element together. Schindler (1990: 250-251) provides interesting data. He observes that the German marker *und zwar*, containing the coordinator *und*, 'and', can occur in combination with markers of inclusion. Here are some of his examples; the glosses are mine:

- (86) a. Manche Haie, und zwar beispielsweise/ z.B./ etwa/ [German]
 many sharks and PRT for.example e.g./ for.instance
konkret/ namentlich die Hammer- und Blauhaie, werden dort
 concretely particularly the hammer and blue.sharks are there
 gefürchtet.
 feared
 ‘Many sharks, *for example/ in particular the hammerheads and the blue sharks*, are feared there.’
- b. Viele Vogelarten, und zwar besonders/ hauptsächlich/ in der
 Many bird.species and PRT particularly mainly in the
Hauptsache/ in erster Linie/ insbesondere/ (zu)meist/ überwiegend/
 main.thing in first line in.particular mostly prevalently
vor allem/ vornehmlich Milane und Bussarde, wurden gejagt.
 before all especially kites and buzzards, were hunted
 ‘Many species of birds, *particularly/ mainly kites and buzzards*, were hunted.’

Given that inclusive appositions are analyzed as sentence coordination, as I argued in the previous chapter, the markers in these constructions are probably adverbs, located high in the second conjunct.

A second exception to the rule that markers do not combine is found with *in other words* and markers with a similar meaning (see above (86)). These markers sometimes follow the coordinator *or* (cf. Del Saz Rubio 2003: 293). Here are some examples:

- (87) a. What is asphalt, or in other words *blacktop*, made out of?
 (http://www.answerbag.com/q_view/876927)
- b. Spring water refers to water collected from a spring, or in other words “*an underground formation from which water flows naturally to the surface of the earth*”. (<http://www.opposingviews.com/asks/bottled-water-or-tap-which-is-better-for-you/answers>)

Since either the coordinator or the other marker or both can be left out in these cases, it seems that they each have their own position in the structure. This leads to two possibilities: either the coordinator is in the Par head and markers like *in other words* are in an (adverbial) position within the structure for the apposition, or the structure for appositional constructions involves both a CoP and a ParP, where the coordinator is in the Co head and *in other words* is in the Par head. Here, I will assume the first option; in the alternative analysis given in section 6.9, I will explore the second one.

One other puzzling fact with respect to the position of apposition markers remains: some of these markers, such as *that is (to say)* and *in other words* optionally follow the rest of the apposition instead of preceding it. Quirk et al. (1985: 1307) give the following example:

- (88) Dickens's most productive period, $\left\{ \begin{array}{l} \textit{that is (to say) the 1840s} \\ \textit{the 1840s, that is (to say)} \end{array} \right\}$, was a
time when public demand for fiction was growing at a tremendous rate.

If markers like *that is (to say)* are located in the Par head, this fact cannot be explained. It is not clear to me how this fact can be explained, but again, it speaks against an account in which all markers are located in a fixed position between the anchor and the apposition. Thus, these markers differ from coordinators, which always have to appear in front of the second conjunct (see also Huddleston and Pullum 2002: 1355).

I conclude that both coordination and (anchored) parenthetical construal are types of parallel construal. This explains that both types of construal use the same connectors. Also, in both cases this connector forms a constituent with the second element, rather than with the first. In appositional constructions, this is clear from the intonation pattern, but it can also be shown by extraposition, for example. If the second conjunct or the apposition is extraposed, the connector has to be extraposed as well, showing that they indeed belong to the same constituent (see Ross 1967 for more facts with respect to constituency in coordination). Compare the appositional examples in (89a-a') to the coordinate ones in (89b-b'):

- (89) a. Bill saw a nice butterfly yesterday, namely a red admiral.
a'. * Bill saw a nice butterfly namely yesterday, a red admiral.
b. Bill saw John yesterday, and Mary.
b'. * Bill saw John and yesterday, Mary.

4.7.2 Apposition and coordination have similar case marking patterns

Another property suggesting a relationship between appositional constructions and coordination comes from case marking. It is fairly well-known that appositions are often marked with the same case as their anchor. Here are some examples from German:

- (90) a. Der Flüchtling redet nicht über sein Vaterland, [German]
the refugee talks not about his:ACC country.of.origin
den Iran.
the:ACC Iran
'The refugee doesn't talk about his country of origin, *Iran*.'
b. Christine hat das Auto des Jahres, *den VW Polo V*,
Christine has the:ACC car the:GEN year the:ACC VW Polo V
gekauft.
bought
'Christine bought the car of the year, *the VW Polo V*.'

Similarly, the second conjunct gets marked with the same case as the first:

- (91) a. Der Flüchtling redet über den Irak und den Iran. [German]
 the refugee talks about the:ACC Iraq and the:ACC Iran
 ‘The refugee talks about Irak and Iran.’
- b. Christine wollte einen VW Polo V oder einen Toyota iQ kaufen.
 Christine wanted a:ACC VW Polo V or a:ACC Toyota iQ buy
 ‘Christine wanted to buy a VW Polo V or a Toyota iQ.’

Thus, the case marking of the apposition in these cases can be explained if the relation between the anchor and the apposition is one of coordination. Note that Potts (2005: 107) takes case marking data like those in (91) to “provide a compelling argument for treating NAs (Nominal Appositives, HH) as nominals containing a modifier structure”, that is for his adjunction analysis. According to him (p. 110) “we simply need to say something equivalent to the following: if an NP with the feature COMMA is adjoined to a DP, then the case-marking features of DP appear on NP.” Such a rule would be completely ad hoc, however. Therefore, I would rather argue that there is a head that relates an apposition to its anchor and that belongs to the same class of elements as coordinators. The distribution of case over the two elements that are related is then simply a shared property for two closely related constructions: coordination and apposition. Both a CoP and a ParP function as a single element in the argument structure. Thus, they get assigned case for the phrase as a whole. The heads of these phrases have the property that they distribute this case over the specifier and the complement.

Again, the picture is not the same for all appositions. A well-known exception to the rule that anchor and apposition agree in case is formed by appositions that receive nominative case, independent of the anchor. Potts (2005: 108, 110) gives the following examples:

- (92) a. “Sie steigen wieder in den Wagen, *ein grosser* [German]
 they climb again in the:ACC car a:NOM big:NOM
schwarzer, [...]”
 black:NOM
 ‘They climbed back into the car, *a big black one, ...*’
 (E. Leonard, *Schnappt Chili*, p. 126)
- b. Sie sprachen mit Jan- *immerhin ein mehrfacher Tour*
 they spoke with Jan after.all a:NOM many-time:NOM Tour
Sieger!
 winner
 ‘They spoke with Jan, *after all a many-time Tour winner!*’

Potts argues that these constructions are reduced relatives rather than appositions (see Burton-Roberts 1975, McCawley 1998 for a similar view). Thus, he claims that the structure for the construction in (92a) is equivalent to that for the non-restrictive relative in (93):

- (93) “Sie steigen wieder in den Wagen, der ein
 they climb again in the:ACC car which:NOM a:NOM
 grosser schwarzer ist, [...]”
 big:NOM black:NOM is
 ‘They climb back into the car, which is a big black one, ...’

Note that this means that the ‘apposition’ in these cases does not apply to the anchor directly. Rather, it involves an (elided) pronoun as a subject for the appositive clause, as in my analysis. Potts calls this an isolated CI: the clause is interpreted as a proposition on the CI level that is related to the anchor, but does not apply to it. I agree with Potts that the constructions at hand have a more elaborate structure than other appositions. Observe that the examples in (92) are clearly attributive. Thus, these constructions again suggest that attributive appositions differ from (part of) the other classes. An obvious candidate element to be present in these constructions and not in others is the T head. Since this head is often taken to assign nominative case, its absence or presence in appositions could very well be part of an explanation for the difference in case marking among these constructions. Note that different constructions in my account do not differ in their relation to the anchor. For me, all appositional constructions are ‘isolated CIs’. This makes the examples in (92) less exceptional than in Potts’s analysis.

In chapter 6, I will come back to case marking on appositions across languages in more detail and propose an account on the basis of more and less elaborate appositional structures.

4.7.3 Multiplicity

So far, we saw two arguments in favor of the idea that the connection between the two elements in an appositional construction is similar to that between the elements in coordination: the use of coordinators as apposition markers and case agreement between the two elements in both constructions. One final argument is the possibility of multiplicity. Clearly, it is possible in principle to connect an infinite number of conjuncts via coordination. There are two ways to do this: stacking and recursion. Consider the following examples:

- (94) a. [John and Mary and Pete] went to the store.
 b. [John and [Mary and Pete]] went to the store.
 c. [[John and Mary] and Pete] went to the store.

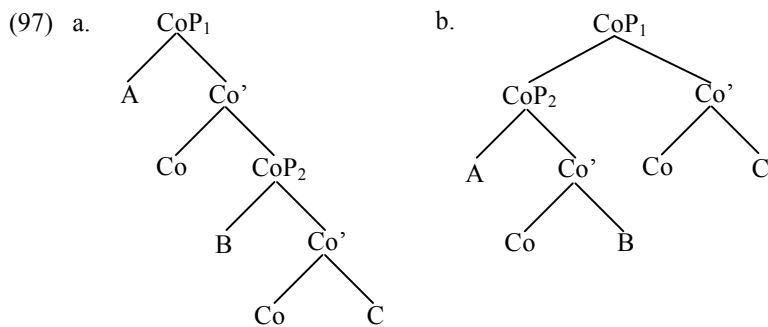
In (94a), all three conjuncts form one group, whereas in (94b-c) the conjuncts are divided in subgroups. These different groupings can result in a different meaning by using distributive or collective readings. Consider the examples in (95):

- (95) a. [John and Mary and Pete] own a wooden house.
 b. [John and [Mary and Pete]] own a wooden house.
 c. [[John and Mary] and Pete] own a wooden house.

Example (95a) has two readings: a distributive one, where John, Mary and Pete each own their own wooden house and a collective one, where the three of them own one and the same wooden house together. Though these readings in principle are both available for (95bc) as well, these latter examples tend to get an interpretation where two of the people share a house together and the third person owns a second house on his own. Thus, the group as a whole gets a distributive reading, but a subgroup is interpreted as a collection. Such groupings can be forced by using different coordinators:

- (96) a. [John and [Mary or Pete]] will go to the store.
 b. [[John and Mary] or Pete] will go to the store.

For the sentence in (96), where the coordinators *and* and *or* are combined, a non-grouped interpretation as in (94a) and (95a) is not available. Note that non-grouped coordination cannot directly follow from syntactic structure that is built with binary Merge. Binary branching immediately leads to grouping, as illustrated here using a CoP structure as before:



These are the only two possible structures for three conjuncts with a binary CoP structure where the conjuncts are in the specifier and the complement. In (97a), conjuncts B and C are grouped together (as in (94/95b)) and in (97b) A and B form a subgroup (as in (94/95c)). See De Vries (2005) for a solution to this problem using an additional Dist(ributive)P to indicate groups as distributive or collective and interpreting structures without an internal DistP corresponding to (97a) as non-grouped.

Multiple appositional constructions exist as well. At first sight, it may seem that these can be stacked as well. After all, appositions usually express a BE-relation and for such relations grouping seems irrelevant: $(a=b=c)$, $((a=b)=c)$ and $(a=(b=c))$ all convey the same meaning. Yet, unlike the logical '=', apposition is an asymmetric relation, where one of the elements serves as the anchor and the other as the apposition. Swapping the anchor and the apposition, for instance, at least changes the information structure. Due to this asymmetric character, multiple appositional constructions have to be grouped. Furthermore, the ParP-structure proposed above forces grouping, just like the CoP-structure in (97). Thus, multiple

appositions with three elements have to be grouped in one of the following two ways:

- (98) a. $[[a + b] + c]$
 b. $[a + [b + c]]$

Yet, it is often hard to tell which of the two structures an appositional construction has. Consider the examples below. The b- and c-examples are from Potts (2005: 100), the d-example from Koktová (1986: 21), and the e- and f-examples from Molitor (1979: 211); the glosses are mine:

- (99) a. Maries vriendje, *Jan, een gewone man*, is een beroemdheid [Dutch]
 Mary's boyfriend Jan an ordinary man is a celebrity
 in de taalkundige wereld.
 in the linguistic world
 'Mary's boyfriend, *Jan, an ordinary man*, is a celebrity in the linguistic world.'
- b. "Colin Powell's son, Michael, Bush's choice to chair the [English]
 FCC, is an unabashed free-marketeer convinced that Clinton/Gore's
 procorporate policies on the media were somehow bad for business."
 (M.C. Miller, *The Bush Dyslexicon*, 2001, p. 155)
- c. The reporter interviewed Lance Armstrong, *a rider for the* [English]
U. S. Postal team, a cancer survivor.
- d. They returned to their birthplace, their place of residence, the [English]
 country of which they were citizens.
- e. In der Halle trafen wir Mr. Freeman, *den Hoteldirektor*, [German]
 in the hall met we Mr. Freeman the hotel.manager
einen breitschultrigen Mann, der kein Haar mehr auf dem
 a broad-shouldered man, who no hair anymore on the
Kopfe hatte. (Tchibo-Magazin 279:4)
 head had
 'In the hall, we met Mr. Freeman, *the hotel manager, a broad-shouldered man, who didn't have any hair left on his head.*'
- f. Lokomotivführer Jacques Lantier, *Sohn einer* [German]
 locomotive.driver Jacques Lantier sun an:GEN
alkoholikerin, ein triebhafter Mann, wird zum Mörder.
 alcoholic:FEM an uncontrolled man becomes to.the murderer
 (*Fernsehwoche* 2/76: 19)
 'The locomotive driver Jacques Lantier, *the sun of an alcoholic woman, an uncontrolled man*, becomes a murderer.'

In the appositional constructions in these examples, it is not immediately clear whether the third element is an apposition to the first and the second together as appositional construction (98a), or as the second part of an appositional construction that functions as an apposition with respect to the first element (98b).

Now, consider the examples in (100) from Potts (2005: 102); the glosses are mine:

- (100) [Leo, [*a lion, a mighty species*,]] swallowed the trainer whole. [English]
(Helen Majewski, 2003)

Here, the second apposition seems to apply to the first apposition, rather than to the first appositional construction as a whole. Therefore, it is probably structured according to (98b), as indicated with brackets. Thus, in some cases it is possible to determine how a multiple appositional construction is structured. In most cases, however, this is impossible.

Another way to get multiplicity for appositional constructions is of course to add an apposition to a part of another apposition. Here are some examples:

- (101) a. [John, *the boyfriend of [Mary, a nice girl]*,] is a linguistic celebrity.
b. Clevers is [directeur van het Utrechtse Hubrecht Instituut, [Dutch] Clevers is director of the Utrecht:ADJ Hubrecht Instituut *een positie die hij van 2002 tot 2007 deelde met [Ronald Plasterk, a position that he from 2002 to 2007 shared with Ronald Plasterk nu minister van Onderwijs, Cultuur en Wetenschap.]*] now minister of education culture and science (De Academische Boekengids 77, 11-2009, p. 31)
'Clevers is the director of the Utrecht Hubrecht Instituut, *a position he shared from 2002 to 2007 with Ronald Plasterk, now the minister of education, culture and science.*'

There is one final interesting possibility with respect to multiple appositions, namely to use the appositive message as an anchor for an additional apposition:

- (102) Piets BMW, *sinds kort een wrak, het gevolg van* [Dutch] Piets BMW since short a wreck the result of *een vreselijk ongeluk, moet naar de sloop.* a terrible accident must to the demolition.firm
'Piet's BMW, *recently a wreck, the result of a terrible accident*, has to be brought to a demolition firm.'

Here, the property described by the second apposition, being the result of a terrible accident, is not applied to the anchor in the first construction, Piet's BMW, nor to the property given by the second apposition alone, being a wreck, but to the appositive proposition as a whole: that Piet's BMW is a wreck. This is interesting, because this message is only covertly there. The reason this is possible, I think, is that the clause representing the appositive message of the second appositional construction involves a pronoun (see sections 3.6 and 4.2). Such a pronoun is able to refer to the appositive message, as it is there in the underlying structure. Note that other parenthetical constructions are able to refer to this message as well, maybe even in a more natural way. Consider the following examples. The examples a and b are from Gutzmann (2009):

- (103) a. Ames, *a successful spy*, as the press reported, is now behind bars.
 b. Chuck, *a confirmed psychopath*, as Sheila believes, is fit to watch the kids.
 c. By the mercy of God I fell among a set of young men (*none of them, by the way, Christians*) who were sufficiently close to me in intellect and imagination to secure immediate intimacy, but who knew, and tried to obey, the moral law. (C.S. Lewis, *The Problem of Pain*, HarperCollins edition, 2001, p. 29)

Clearly, the press's report, Sheila's believes and what is said *by the way* concern the appositive message in these examples, whereas they themselves represent secondary information as well. Note that examples like these are problematic for Potts's (2005) account, because they contain CI content that applies to other CI content. This is impossible in Potts's logic by definition (cf. Gutzmann 2009). In my account, on the other hand, the appositive message functions as any other proposition and therefore can be referred to by a pronoun, for example.

In sum, apposition resembles coordination in three respects: it uses the same connectors, case marking is distributed over the connected elements, and multiple elements can be connected. I proposed that these resemblances occur because coordination and parenthetical construal both belong to the class of parallel construal.

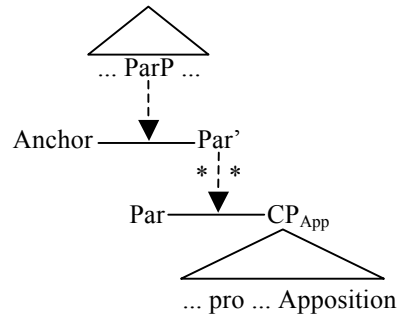
4.8 Conclusion

In this chapter, I showed that appositions are parenthetically related to the matrix sentence in which they occur, and in particular to their anchor. Several syntactic tests support the idea that appositions are not integrated in the sentential structure in the usual way, but are less closely connected, in some respects reminiscent of intersentential relations. This idea is also confirmed by tests revealing a correlation between appositions and discourse phenomena like E-type pronouns or modal subordination. Concluding that appositions are parentheses, the question remains how this can be accounted for in the syntactic structure.

After reviewing several previous accounts, including Potts's (2005) semantic alternative, I conclude that a special, parenthetical, construal is necessary. This is called supplementation. This relation between the apposition and the host is built by a special type of Merge, which does not lead to dominance relations. This explains the paradoxical behavior of appositions with respect to their hosts, being both integrated and independent at the same time.

Finally, I show that the parenthetical construal argued for resembles coordination. This may seem contradictory to the conclusion from the previous chapter, where I found that appositions have a predicational, subordinate, relation to their anchors. Yet, it is possible to combine these two ideas into the following structure:

(104)



Here, the predicational structure I argued for in chapter 3 is integrated as the complement of Par in the parenthetical structure. Within the clausal structure, the anchor is represented by a little pro-subject and the apposition functions as a nominal predicate. Thus, the structure proposed here can explain the paradox that appositional constructions resemble both predication and coordination. In chapter 6, I will come back to this paradox and show that cross-linguistic case marking also shows paradoxical patterns suggesting the presence of both coordinate and predicative structure.

5. Appositional word order

Most of the literature on appositional constructions, as well as the previous sections in this thesis, focuses mainly on West-Germanic languages, and English and Dutch in particular. There are, however, some issues with respect to these constructions that cannot be solved without looking at several other languages as well. The first issue, raised in chapter 1, concerns the order of the two major elements of the constructions at hand: the anchor and the apposition. One might wonder whether the apposition always has to be the second element, or whether it may also precede its anchor. In order to shed more light on this question, I will discuss data from a head-final language, Japanese, where one might expect appositions to precede the anchor, at least if they are modifiers, as some people claim. In my analysis, however, the anchor is in the specifier of ParP, which means that it always has to precede the apposition. After all, spec-final languages do not exist. I will argue that Japanese does have appositional constructions, but that the relative order of anchor and apposition is the same as in English.

In the next chapter, I will discuss a second issue on the basis of crosslinguistic evidence. There, I use case marking data from several languages in order to get a better understanding of the relation between the anchor and the apposition.

5.1 *Inverted constructions?*

The main question for this chapter is whether the apposition *has* to follow its anchor or may also precede it. Note that I argued in chapter 1 that some absolute constructions might be inverted appositional constructions, that is with the apposition preceding its anchor. Consider the following examples:

- (1) a. A good teacher, John always explains things in different ways.
 b. A celebrated actress, Mary is often stalked by paparazzi.

Clearly, the first constituent in these examples does not belong to the main message. It rather describes a property of the sentence's subject as some extra information. Therefore, one might conclude that this first element is an apposition, where the subject of the utterance is the anchor and that inverted appositions exist. Somehow, however, the fact that the extra information is provided before an element is introduced in the main message results in a different semantics: the property described by the first part of the absolute construction is taken as a cause for the proposition from the matrix, thus resembling subordinate adverbial clauses. Also, note that the constructions only occur sentence-initially, whereas appositions can occur anywhere in the sentence. Compare (1b) to the sentences in (2):

- (2) a. The paparazzi often stalk Mary, a celebrated actress.
 b. The paparazzi often stalk a celebrated actress, Mary.

Note the difference in interpretation between (1b) and (2b). As soon as the expression *a celebrated actress, Mary* does not occur at the start of the sentence, *Mary* is no longer part of the main message, but provides the extra information. This is confirmed by the fact that *a celebrated actress* in (1b) may be preceded by *being*, whereas this is impossible in (2b). See also section 1.6 for further differences. Given all these differences, I conclude that absolute constructions as in (1) have to be distinguished from normal appositions.

Yet, clear cases of appositional constructions sometimes also suggest that they are inverted as well. This occurs in particular if the first element of the appositional construction is indefinite and the second is definite. Potts (2005: 137) shows that this is not the case, however. Consider his examples below:

- (3) a. A former linguist, Edward Witten, is now the top-dog in string theory.
 b. Edward Witten, a former linguist, is now the top-dog in string theory.

If (3a) would be the inverted variant of (3b), we would expect the first element not to be part of the matrix and therefore not to interact with elements from the matrix. Contexts with existential *there*, however, show that only the first element in constructions like (3a) is sensitive for the matrix with respect to the definiteness effect. The examples are again from Potts (2005: 137):

- (4) a. There was a former linguist at the party.
 b. There was a former linguist, Edward Witten, at the party.
 c. # There was Ed Witten at the party.
 d. # There was Ed Witten, a former linguist, at the party.

These examples clearly show that a definite element in an appositional construction only leads to definiteness effects if it is the first element. This leads to the conclusion that, in English, an apposition is always the second element in an appositional construction. One final argument in favor of this idea, given before in section 3.4, concerns information structure. Whereas sentences like (3a) and (b) may express the same information, this information is not structured in the same way. Whereas (3a) says something about a certain former linguist, (3b) provides more information about Edward Witten. Which one of these utterances may be used depends on the question under discussion. As an answer to the question ‘who is Edward Witten?’, for instance, (3b) is felicitous, but (3a) is not. Thus, I conclude that appositional constructions in English have a rigid order of the anchor preceding the apposition.

5.2 Previous literature

The question remains, however, whether this generalization holds crosslinguistically. If we consider the anchor as the head of the appositional construction, one wonders what happens in head-final languages, such as Japanese. Potts (2005: 106) provides an interesting statement in this respect: “Another argument for the right-adjunction view of NAs (nominal appositives, HH) in

particular derives from the apparent absence of such clauses in languages that forbid right adjunction categorically. Turkish, for instance, seems not to have NAs [...] Turkish seems also not to have syntactically, morphologically, or intonationally distinguished supplementary relative clauses. I believe that these considerations extend to Japanese as well.” With respect to Turkish, Lehmann (1984: 277-278), states that Turkish uses a postnominal or extraposed variant especially for appositive relatives (see also De Vries 2002: 29, fn. 26). This is illustrated in the following example from Lehmann (1984: 144):

- (5) Ben-I unut-ma ki san-a yardim et-ti-m. [Turkish]
 I-ACC forget-NOT [C_{rel} you-DAT help do-PRET-1]
 ‘Do not forget me, who helped you.’

Even though the statements of Potts and Lehmann are contradictory, the conclusion regarding the order of the two elements in appositive constructions is the same: appositions and appositive relatives always have to follow their antecedent, even in a head-final language like Turkish.

De Vries (2006: 264) makes this generalization more explicit. He hypothesizes that the following is true cross-linguistically:

- (6) a. *Prenominal nonrestrictive appositions do not exist.*
 b. *Only postnominal relatives can be appositive.*

De Vries bases this hypothesis mainly on the idea that appositions and appositive relatives specify their antecedent, where a specification by definition follows the element it specifies. Further support comes from the fact that not only Turkish, but also Basque, Lahu and Nama have postnominal appositive relatives, whereas they use a prenominal construction for the restrictive variant.

Yet, there are also some languages for which people have suggested that they do have prenominal appositive relatives. Good examples are Japanese and (Mandarin) Chinese. Let us first consider Chinese, which has been scrutinized in this respect by Del Gobbo (2003, 2010 and other work). She concludes that earlier claims about the existence of prenominal appositive relatives in Chinese (e.g. Chao 1968 and Hashimoto 1971) were based on a misinterpretation of the facts and that all relatives in this language are actually restrictive. The discussion concerns the difference between two types of prenominal relative clauses, which at first sight differ only in the order of the demonstrative and the relative clause (Del Gobbo 2003: 48):

- (7) a. na-ge [dai yanjing de] nanhai (Dem RC)
 that-CL wear glasses DE boy
 ‘that boy, who wears glasses’
 b. [dai yanjing de] na-ge nanhai (RC Dem)
 wear glasses DE that-CL boy
 ‘the boy who wears glasses’

As the translation suggests, the construction with the demonstrative preceding the relative clause is often taken to be non-restrictive, whereas the inverse order is analyzed as restrictive. Del Gobbo, however, argues that the semantics of constructions like (7a) and non-restrictive relatives is only similar due to the scope of the determiner, but that the relative clause is in fact restrictive. She mentions nine properties of appositive relatives from the literature and shows that the Chinese construction under discussion does not have them. Here, I provide three of these properties.

First, whereas restrictive relatives can only have nominal antecedents, their appositive counterparts may have antecedents of any maximal projection, such as AP, PP or CP (8). Second, appositive, but not restrictive relatives may contain sentential adverbs (9). Third, unlike restrictive relatives, non-restrictive ones cannot relate to a quantified anchor (10). In all three cases, the Chinese relatives preceded by the determiner are on a par with restrictive rather than appositive relatives. The Chinese examples are slightly adapted from Del Gobbo (2003: 52, 54, 55):

- (8) a. [John broke a glass]_i, which_i made Mary furious.
 b. * [John broke a glass]_i that_i made Mary furious.
 c. * [_{CP} Hen darao Lisi de] [_{CP} Zhangsan hai mei-you lai].
 very bothers Lisi DE Zhangsan yet not-have arrive
 Int: ‘Zhangsan has not arrived yet, which bothers Lisi a lot.’
- (9) a. The boys, who have frankly lost their case, should give up.
 b. * The boys that have frankly lost their case should give up.
 (Emonds 1979: 239)
 c. * Naxie shunbianshuokaoshi shibai de nanhai zhuandao lingwai yi-suo
 those frankly exam fail DE boys transfer other one-CL
 daxue qu-le.
 university go-LE
 Int: ‘Those boys, who frankly failed the exam, transferred to another university.’
- (10) a. * Every student, who wears socks, is a swinger.
 b. Every student that wears socks is a swinger. (Ross 1967: 246)
 c. [Mei-yi-ge [Op chuan wazi de xuesheng]] dou shi tiaowude.
 every-one-CL wear socks DE student all be dancers
 ‘Every student who wears socks is a dancer.’

Del Gobbo also provides a more principled argument against the existence of postnominal appositive relatives in general. In her theory, as in mine (see section 4.2), appositive constructions involve an E-type pronoun. Such pronouns, which resemble anaphors across sentence boundaries, may not precede the referential

expression to which they are anaphorically related, as illustrated in the examples below from Reinhart (1983: 85)¹:

- (11) a. Rosa_i entered the room. She_i was wearing a hat.
 b. * She_i was wearing a hat. Rosa_i entered the room.

Therefore, Del Gobbo concludes that appositions and appositive relatives must always follow their anchor². Whereas appositive relatives seem completely absent in Chinese, then, Del Gobbo does give an example of a Chinese apposition (p. 103). Yet, it occurs postnominally, as she predicts:

- (12) Zhangsan jiandao Daiyu, yi-ge hen piaoliang de guniang.
 Zhangsan meet Daiyu, one-CL very beautiful DE girl
 'Zhangsan met Daiyu, a very beautiful girl.'

Thus, Del Gobbo (2003) concludes that even though there are some differences in the interpretation and word order of the two types of relatives in Chinese, both types are restrictive. This suggests that the distinction between restrictive and non-restrictive relatives is not always clear and that an in-between type may exist as well.

For Chinese, there is one more piece of evidence, which is not mentioned by Del Gobbo, but perfectly fits her conclusions, namely constituency. Note that in the type of constructions that may be characterized as non-restrictive, for instance (7a), the antecedent's demonstrative and noun are separated by the relative clause. Thus, unless some extraordinary movement is assumed, the demonstrative and the noun do not form a constituent together. Yet, the general idea that in appositive relative constructions only the noun and not the relative clause is in the scope of the determiner, suggests that in appositive constructions the antecedent's determiner and noun form one group. Therefore, constituency supports Del Gobbo's conclusion that these Chinese constructions do not really involve non-restrictive relatives.

Similarly, Cinque (2008) argues that Italian has two types of non-restrictive relatives, most clearly distinguished by the relative pronoun used. He calls relatives introduced by *che/cui* 'integrated' and those introduced by *il quale* 'non-integrated'.

¹ Interclausal cataphora, as illustrated in (i), only occurs if the first clause is subordinate to the second one and not in the context of paratactical or intersentential relations between two clauses:

- (i) Before he_i kissed her_k, John_i lifted Mary_k up.

For further restrictions, see Cann & McPherson (1999).

² The idea that appositive elements cannot occur prenominally is challenged by the existence of appositive adjectives, as in *the industrious Chinese* (referring to all Chinese people, who are characterised as being industrious). Interestingly, Del Gobbo (2003) shows that these adjectives have several characteristics in common with apparent appositive relatives in Chinese and concludes that these adjectives are not really non-restrictive either.

Obviously, the integrated type is closer to restrictive relatives. Cinque assumes that languages can have either one of the two types, both, or none. For example, English only has the non-integrated type, Italian has both, Chinese only has the integrated type and Gungbe (see Aboh 2005) has no non-restrictive relatives at all. Cinque also suggests in a footnote (p. 122, fn. 5) that prenominal relatives can only be of the integrated type (see also Aygen 2003 on Turkish). He relates this idea to the established generalization that prenominal relatives do not involve genuine wh-pronouns to introduce the relative clause (e.g. Downing 1978 and Keenan 1985). Such pronouns may be necessary to function as E-type pronouns and therefore to realize non-integrated non-restrictive relatives (see also Citko 2008 and Del Gobbo 2010).

To sum up, the linguistic work discussed so far argues that ‘real’ prenominal non-restrictive relatives do not exist. Prenominal relative clauses that at first sight seem appositive are actually integrated non-restrictive or even simply restrictive³.

5.3 Japanese relative clauses

In order to test the hypothesis that prenominal appositive elements, either non-restrictive relatives or appositions, do not exist, let us explore the case of Japanese, a rigid OV language, in more detail. With respect to Japanese, it has been claimed that there are no morphosyntactic or phonological differences between restrictive and non-restrictive relatives (Kuno 1973, Keenan 1985: 169). Generally, both readings are available, as illustrated in the following example from Ishizuka (2010: 3).

- (13) Ken-ga [[ani-ga karite-ki-ta] muzukasii syoosetu]-o
 Ken-NOM older.brother-NOM borrow-come-PAST difficult novel-ACC
 yon-da.
 read-PAST
 ‘Ken read a difficult novel, which his older brother checked out.’
 ‘Ken read the difficult novel that his older brother checked out.’

Yet, the question remains whether these clauses can be really non-restrictive. A suggestion in this direction comes from Kamio (1977), who pointed out that there are differences between the two types of relatives. His ideas are confirmed and extended by Ishizuka (2010). Remember that the distinction between restrictive and non-restrictive relatives is often ascribed to the scope of the antecedent’s determiner. Non-restrictive relatives are said to be outside this scope. Japanese usually does not use articles, but the difference between the two types of relatives shows up if the

³ De Vries (2006) adds another alternative, namely that these sentences may in fact be free relatives that serve as the anchor for an apposition, the element that at first seemed to be the antecedent. This is best explained by giving an English paraphrase, for example (*the one*) *who is a good teacher, John, says he learns more from his students than he teaches them*. The validity of this claim can only be evaluated if the structure of free relatives in the languages at hand is studied in more detail. I will leave this for future research.

antecedent contains a demonstrative, just as we saw in the case of Chinese above. Yet, the respective orders of the ‘restricted’ and ‘non-restricted’ relatives with respect to the antecedent’s demonstrative in Japanese shows the exact inverse of the situation in Chinese. In Japanese, if the demonstrative precedes the relative, the relative gets a restrictive interpretation. If the demonstrative follows the relative, however, both a restrictive and a non-restrictive interpretation are available. Consider the following examples, slightly adapted from Ishizuka (2010: 4-6)⁴:

- (14) [Restrictive context]
 Ito-san-ni-wa san-nin musuko-ga iru. Sakunen hito-ri-wa
 Ito-Ms.-DAT-TOP three-CL son-NOM exist. last.year one-CL-TOP
 isya-ni, huta-ri-wa bengoshi-ni nat-ta.
 doctor-DAT two-CL-TOP lawyer-DAT become-PAST
 ‘Ms. Ito has three sons. Last year one became a doctor, and two became lawyers.’
- a. [Sono [sakunen isya-ni nat-ta] musuko]-ga [Dem RC NP]
 that last.year doctor-DAT become-PAST son-NOM
 kekkon-si-ta.
 marriage-do-PAST
 ‘That son who became a doctor last year got married.’
- b. [[Sakunen isya-ni nat-ta] sono musuko]-ga [RC Dem NP]
 last.year doctor-DAT become-PAST that son-NOM
 kekkon-si-ta.
 marriage-do-PAST
 ‘That son who became a doctor last year got married.’
- (15) [Non-restrictive context]
 Ito-san-ni-wa musuko-ga hito-ri iru.
 Ito-Ms.-DAT-TOP son-NOM one-CL exist
 ‘Ms. Ito has a son.’
- a. *?[Sono [sakunen isya-ni nat-ta] musuko]-ga [Dem RC NP]
 that last_year doctor-DAT become-PAST son-NOM
 kekkon-si-ta.
 marriage-do-PAST
 Int: ‘That son, who became a doctor last year, got married.’
- b. [[Sakunen isyan-ni nat-ta] sono musuko]-ga [RC Dem NP]
 last-year doctor-DAT become-PAST that son-NOM
 kekkon-si-ta.
 marriage-do-PAST
 ‘That son, who became a doctor last year, got married.’

In (14), a context is given that forces a restrictive interpretation for the relatives in (14ab). In such a context, both orders for the relative clause and the demonstrative

⁴ Note that in Japanese, even though it is clearly a head-final language, the demonstrative precedes the noun.

are grammatical. In (15), on the other hand, the context forces a non-restrictive interpretation for the relatives in (15ab). Here, only (15b), where the relative clause precedes the demonstrative, is grammatical. A relative following the demonstrative leads to ungrammaticality in this non-restrictive context. Thus, these examples show that the order of the relative clause with respect to the antecedent's demonstrative affects the possible interpretation as a non-restrictive relative. See Ishizuka (2010) for an analysis explaining these facts.

Yet, the question remains whether this difference in interpretation also relates to a structural difference other than the relative order with respect to the demonstrative. First note that, unlike in Chinese, the demonstrative and the noun of the antecedent are adjacent and thus may form one constituent together. Therefore, this pattern fits in with the idea that in appositive constructions, the noun is in the scope of the determiner, whereas the relative clause is not. Also, constituency explains why examples like (15a) are ungrammatical with an appositive interpretation, since the demonstrative and the noun cannot form one constituent there.

Ishizuka (2010) provides one more piece of evidence that the relatives in the RC-Dem-order really can be non-restrictive, namely the possible occurrence of the adverb *tokorode*, 'by the way', in these clauses. Not only does the meaning of this adverb explicitly express the character of an appositive element as providing side-information to its anchor, the presence of such high adverbs in general is also often included as a test for appositive elements. In particular, it also appears in Del Gobbo's (2003) list and one of her arguments that Chinese relatives are never truly non-restrictive is that these high adverbs are impossible. Ishizuka (2010: 6) illustrates her point with the examples in (16ab). Sentence (16c), from Tomoko Ishizuka (p.c.), shows that other high adverbs are possible as well:

- (16) a. [Tokorode isya-ni natta] sono musuko-ga kekkonsi-ta. [RC Dem]
by.the.way doctor-DAT became that son-NOM marry-PAST
'The son, who became a doctor by the way, got married.'
- b. * Sono [tokorode isya-ni natta] musuko-ga kekkonsi-ta. [Dem RC]
that by.the.way doctor-DAT became son-NOM marry-PAST
'The son who became the doctor by the way got married.'
- c. Soccyoku-ni it-te amari yoku kak-are-tei-nai kono hon-wa
frank-DAT say-TE not.much well write-PASS-TEI-NEG this book-TOP
ookuno-hito-o yaruki.ni-s-ase-ta.
many-people-ACC inspire-do-CAUS-PAST
'This book, which is frankly speaking not well written, inspired a lot of people.'

Several other characteristics of appositive relatives are hard to test in Japanese, especially since Ishizuka (2010) and others argued that RC-Dem-relatives can be both restrictive and non-restrictive. For instance, appositives cannot have a quantified NP as their anchor and quantified elements and negation are impossible in the matrix. Thus, these tests can only positively confirm the existence of appositives in Japanese if something is impossible. However, if Japanese relatives with the RC-Dem-order can have negation or a quantified element in the matrix, this

does not imply that these relatives can never be non-restrictive. It only shows that RC-Dem-relatives can be restrictive.

Del Gobbo (2003) does use one complex test, combining two characteristics of appositive relatives, which could provide some more insight in these cases. The first characteristic is the possibility to modify a proper name. Del Gobbo argues that this possibility alone is not enough to argue that a relative clause is non-restrictive. In her opinion, the proper name in this case can be interpreted similar to a proper name preceded by a (definite) determiner in English, as in *the Chomsky that I know is different from the Chomsky that you know*. Therefore, she combines this with a second characteristic, namely that no element in a non-restrictive relative clause can be bound by a quantifier in the host sentence. Therefore, if a non-restrictive relative has a proper name as its anchor, the non-restrictive character of the clause is confirmed if it cannot contain an element bound by a quantifier in the matrix. For Chinese, it turns out that a relative clause relating to a proper name can contain an element bound from the matrix, thus confirming Del Gobbo's idea that these relatives are actually restrictive. This is illustrated in (17a) from Del Gobbo (2003: 89). According to Ishizuka (p.c.), however, a similar sentence in Japanese is ungrammatical, as shown in (17b), suggesting that these sentences really are appositive. Note that quantification is possible if the anchor is not a proper name (17c):

- (17) a. [Mei-yi-ge xuesheng]_i dou yuanliang na yi-ge [Chinese]
 every-one-CL student all forgives that one-CL
 [RC cengjing shanghai-guo ta_i de] Lisi.
 formerly insult-GUO him DE Lisi
 lit. 'Every student forgives the Lisi who insults him.'
 * 'Every student forgives Lisi, who insults him.'
- b. * Zibun-ni_i kanmei-o atae-ta Cyomusukii-ni tsuite [Japanese]
 self-DAT impression-ACC give-PAST Chomsky-DAT about
 daremo-ga_i kaku.
 everyone-NOM write.
 * 'Everyone_i writes about Chomsky, who impressed him_i.'
- c. Zibun-o_i nak-asi-ta otoko-ni tuite [dono seito-mo]_i kai-ta.
 self-ACC cry-CAUS-PAST man-DAT about every student-MO write-PAST
 'Every student wrote about a man who made him cry.'⁵

We get the same result if we use another combination of characteristics for appositive relatives. If a relative contains the high adverb *tokorode*, 'by the way', it is impossible for an element in the relative to be bound by a quantifier in the host. Here is another example from Tomoko Ishizuka (p.c.):

⁵ Ishizuka (p.c.) notes that in this sentence *otokoni*, man, cannot be preceded by the demonstrative *sono* (if *sono* precedes *zibuno*, the sentence is fine). This could be explained if using the demonstrative in this position would always result in a non-restrictive relative. Yet, we saw before that this order can be restrictive as well. This may suggest that there is a different reason for the ungrammaticality of definite elements in these sentences and therefore also for the ungrammaticality of proper names.

- (18) * daremo_i-ga tokorode zibun_i-ga sukide nai hanashi-o shita.
 everyone-NOM by.the.way self-NOM like NEG story-ACC did.
 int. 'Everyone_i told a story, which he_i didn't like by the way.'

On the other hand, Japanese Dem-RC-relatives also lack an important characteristic generally attributed to appositives, namely the possibility to relate to anchors of all kinds of syntactic categories. Japanese relatives can only relate to nominal elements, just like English restrictive relatives. For instance, the sentence in (19a), where a CP functions as the anchor for a relative clause, is best translated by using a coordinate construction in Japanese, as in (19b) from Tomoko Ishizuka (p.c.):

- (19) a. John kissed Mary, which does not surprise me.
 b. watasi-wa odoroka-nai-ga John-ga Mary-ni kisu-si-ta.
 I-TOP surprise-NEG-but John-NOM Mary-DAT kiss-do-PAST
 Lit. 'I do not surprise, but John kissed Mary.'

In conclusion, the facts with respect to relative clauses in Japanese are hard to interpret and ambiguous. The existence of prenominal non-restrictive relatives cannot easily be confirmed, nor can it be easily rejected. In the remaining part of this chapter, I will show that the same is true for appositional constructions.

5.4 Japanese appositional constructions

An interesting study in this respect comes from Sode (2004). She discusses five types of constructions in Japanese that might be appositional, three of which are relevant to us here: [NP₁-no NP₂], [NP₁ NP₂] and [NP₁-EX NP₂]. Here, *-no* is an 'appositive' suffix⁶ and -EX stands for one of the suffixes Sode calls exemplifiers: *-nado*, *-ra* and *-tati*⁷. Here are some examples, slightly adapted from Sode (2004: (8)):

- (20) a. Nihonzin-no Tanaka-san-wa misosiru-ga suki da. [NP₁-no NP₂]
 Japanese-NO Tanaka-Mr.-TOP miso.soup-NOM like COP
 'Mr. Tanaka, *a Japanese*, likes miso soup.'
 b. Syuto Wasinton DC-ni-wa mittu-no kuukoo-ga aru. [NP₁ NP₂]
 capital Washington DC-at-TOP three-of airports-NOM are
 'There are three airports in Washington DC, *the capital*.'

⁶ Sode (2004) glosses *-no* in this construction as a copula. See the main text for her arguments. Since I am not sure that this is the right analysis, I will use the affix itself in the gloss.

⁷ These suffixes may also be analysed as collective or plural markers, as suggested by the translation 'and others' in (20c). See the discussion of examples (32)-(35).

- c. Tanaka-giin-ra sanseiha-ga [NP₁-EX NP₂]
 Tanaka-congressman-EX supporters-NOM
 kisyakaiken-o hirai-ta
 press.conference-ACC hold-PAST
 ‘Congressman Tanaka and the others, *the supporters*, held a press conference.’

First, consider the construction with *-no*. This affix has several functions in Japanese, such as marking possession (genitive) and location. Following several other linguists, e.g. Jordan & Noda (1988), Sode assumes that in examples like (20a) this suffix is a form of the copula *da*. Therefore, she concludes that these examples involve relative clauses rather than appositions. She gives three arguments in favor of this idea. First, *-no* in these examples can, without change in meaning, be replaced by *dearu*, which is often analyzed as a variant of the copula *da*. Thus, the following two examples (Sode’s (9)) apparently differ only with respect to style: (21b) is more formal than (21a).

- (21) a. Nihonzin-**no** Tanaka-san-wa ‘r’-no hatuon-ga nigate da.
 Japanese-NO Tanaka-Mr.-TOP ‘r’-of pronunciation-NOM poor COP
 ‘Mr. Tanaka, *a Japanese*, is not good at pronouncing the r sound.’
 b. Nihonzin-**dearu** Tanaka-san-wa ‘r’-no hatuon-ga nigate da.
 Japanese-COP Tanaka-Mr.-TOP ‘r’-of pronunciation-NOM poor COP
 ‘Mr. Tanaka, *a Japanese*, is not good at pronouncing the r sound.’

Note, however, that *dearu* does not only have a clearer relation to the copula *da*, it also behaves more like a verb in that it can be inflected for tense (the past form is *deatta*) and for negation (the negative form is *denai*)⁸. *No*, on the other hand, has only one form. Also, whereas *no* in this meaning is restricted to the construction under discussion, *dearu* can be used as a copula in other contexts as well, as illustrated in the following example from Kaori Miura (pc.):

- (22) Biru-ga watashi-no otouto dearu/*no jijitsu
 Biru-NOM I-GEN brother COP/NO fact
 ‘the fact that Bill is my brother’

I conclude, then, that the similarity between *no* and *dearu* is not strong enough to argue for an analysis of the constructions at hand as relative clause constructions.

A second argument to analyze the constructions with *-no* as relative clauses is their co-occurrence with temporal adverbs. Here are some examples from Sode (2004: (13)) with her translation:

⁸ *Dearu* might be analysed as the combination of an adverbial form for the copula *da*, *de*, and the auxiliary verb *aru*. This auxiliary verb is inflected then.

- (23) a. Izen-kara hosyha-no ozi-wa konkai-no senkyo
 before-since conservative-NO uncle-TOP this.time-of election
 demo zimintoo-ni ire-ta.
 also Liberal.Democratic.Party-for vote-PST
 ‘Uncle, who has always been a conservative, voted for the Liberal Democratic Party again in this election.’
- b. Itumo izimekko-no Atuo-wa mata sensei-ni sikar-are-ta.
 always bully-NO Atuo-TOP again teacher-by scold-PASS-PST
 ‘Atuo, who is always a bully, was scolded by the teacher again.’

As we saw in sections 3.8 and 3.9, adverbs like these occur in (mainly attributive) appositions as well. Therefore, it is still possible that Japanese [NP₁-no NP₂] constructions involve appositions rather than relative clauses.

Sode’s third argument to analyze the constructions at hand as relative clauses concerns the ambiguity between a restrictive and a non-restrictive reading. As we saw earlier in this section, Japanese relatives generally can have both interpretations. The same is true for the constructions with *-no*. Thus, an expression like *Nihonzin-no Tanaka-san-wa*, as in (20a), may either be interpreted as ‘Mr. Tanaka, a Japanese’, or as ‘Mr. Tanaka the Japanese’ (as opposed to other, non-Japanese, Tanakas). Interestingly, the generalization with respect to the restrictive/non-restrictive distinction that Ishizuka (2010) found for relative clauses (see (14) - (16) above) applies to the constructions under consideration as well: if a demonstrative accompanies the second NP (the one not marked by *-no*), a non-restrictive reading is only available if the demonstrative follows the NP. The examples are from Kaori Miura (p.c.):

- (24) a. Tokorode isya-no sono musuko-ga kekkonsita
 By.the.way doctor-NO that son-NOM married
 ‘That son, *a doctor by the way*, got married.’
- b. * Sono tokorode isya-no musuko-ga kekkonsita.
 That by.the.way doctor-NO son-NOM married
 Int: ‘That son, *a doctor by the way*, got married.’

As in the relatives in (16) above, the adverb *tokorode*, ‘by the way’, is used to force a non-restrictive reading. Thus, the example in (24a) can only be used in a context that concerns only one son, about whom the speaker adds the information that he is a doctor. As (24b) shows, the presence of *tokorode* is incompatible with a word order where the demonstrative *sono* precedes NP-*no*.

I conclude, then, that [NP₁-no NP₂] constructions indeed show similar behavior as relative clause constructions with a non-restrictive interpretation. This does not necessarily mean that they involve relative clauses, however. After all, appositional constructions have non-restrictive and restrictive variants as well.

Yet, there are also reasons to think that the construction at hand is not an appositional construction either, but is closer to the absolute construction discussed in the beginning of this section and illustrated in (1), repeated below as (25):

- (25) a. A good teacher, John always explains things in different ways.
 b. A celebrated actress, Mary is often stalked by paparazzi.

A first suggestion in this direction comes from the translation in Sode's (2004) example (17):

- (26) Nihonjin-no watasi-wa nakanaka iya to ienai.
 Japanese-NO I-TOP readily no that say.cannot
 'Being Japanese, I find it hard to say "no".'

Note that sentences like (25) can easily be preceded by *being*, without changing the meaning. Thus, the translation in (26) is very similar to these absolute constructions.

Second, in discussing the interpretation of the [NP₁-no NP₂]-construction, Sode (2004: section 2.3) mentions that the construction often gets a causal reading, as is clear from the translation in (26), which suggests that the speaker finds it hard to say no because (s)he is a Japanese. The same is true for constructions like (25), as stated at the beginning of this section. Whereas Sode shows that the construction may also have an adversative reading in certain contexts (27a), she also suggests that it cannot easily get a neutral reading, as illustrated in (27b), her (21):

- (27) a. Nihon-umare Nihon-sodati-no Tanaka-san (sae) piza ya
 Japan-born Japan-raised-NO Tanaka-mr. (even) pizza and
 hanbaagaa-ga suki da.
 hamburgers-NOM like COP
 'Mr. Tanaka, a Japanese born and raised in Japan, likes pizzas and hamburgers.'
 b. Tokyo syussin-no Akira-wa pc yori Mac-ga suki da.
 Tokyo native-NO Akira-TOP pc than Mac-NOM like COP
 'Akira, a native of Tokyo, prefers a Macintosh to a pc.'

Sode states that if there is no widely accepted cultural stereotype about Tokyoites regarding their computer preferences, the sentence in (27b) may sound vague.

Third, the examples Sode provides of the [NP₁-no NP₂]-construction are all sentence-initial. This seems to fit the characteristic of English absolutes, which have to occur sentence-initially, as we saw before.

Therefore, I suggest that the [NP₁-no NP₂] construction in Japanese is closer to the absolute constructions in (1) than to appositional constructions. This would explain that the first element in these constructions provides the secondary information, which also fits with the position of *tokorode*, 'by the way', in a sentence like (24a): in the first element. This also means that [NP₁-no NP₂]-construction is no counterexample against the idea that appositional elements always have to follow their anchor.

Now, let us consider another construction discussed by Sode (2004), where two NPs are juxtaposed without a connecting element like *-no*: [NP₁ NP₂]. Here are some more examples from Sode (2004: (31))⁹:

- (28) a. Nihon saidai-no mizuumi, Biwa-ko
 Japan largest-of lake Biwa-lake.
 (K. Iwahara, *Yookoso Shiga*, 17/06/97: 101)
 ‘Lake Biwa, *Japan’s largest lake*’
- b. Keishityoo Soosa-ikka-no keizi Katayama
 Keihesityoo investigation-section.one-of detective Katayama
 Yositaroo-ni kii-ta-to sitara
 Yositaroo-to ask-PST-QT if
 (J. Akagawa, *Mikeneko Hoomuzu no ansokubi*: 7)
 ‘If one were to ask Katayama Yositaroo, *detective at Investigation Section 1 at Keishityoo* (the Tokyo Metropolitan Police Department)’

Note that there is a comma between the two elements of the construction in (27a), which represents ‘comma intonation’ in spoken language. This special intonation pattern generally shows up if the first NP is long or complex. Even though this prosodic feature does not appear in all instances of this construction, it is reminiscent of the comma intonation we find in appositional constructions in other languages (see the discussion in section 1.1).

In contrast to the construction with *-no* described above, the juxtaposed construction always gets a non-restrictive reading. This contrast is illustrated in the following examples from Sode (2004: (30)), which force a restrictive interpretation:

- (29) a. Syuto-no Wasinton zya-naku-te, daitooryoo-no Wasinton-no
 capital-NO Washington is-not-and president-NO Washington-of
 koto-o itterun-desu.
 thing-ACC saying-COP
 ‘I am talking about Washington the president, not Washington the capital city.’
- b. ?*Syuto Wasinton zya-naku-te, daitooryoo Wasinton-no koto-o
 capital Washington is-not-and president Washington-of thing-ACC
 itterun-desu.
 saying-COP
 Int: ‘I am talking about Washington the president, not Washington the capital city.’

Whereas it is possible for the *-no* construction in (29a) to disambiguate between several entities NP₂ might refer to, as in restrictive appositions, this is impossible for the juxtaposed construction in (29b). Other differences between the two

⁹ In the following examples, I represent the translations given in the literature or by my informants, where the second NP is translated as the anchor in English and the first as the apposition. Below, I will argue that these translations may actually be misleading, suggesting that the appositional constructions in Japanese have the same order as in English.

constructions are similar to the differences between identificational and attributive appositions, where the *-no* construction is on a par with attributive appositions and the juxtaposed construction with the identificational variant. The examples below are from Kaori Miura (p.c.):

- (30) a. Se-ga hikui akaimegane *(-no) otoko-ga heya-ni haiteki-ta.
 Height-NOM short red.glasses-NO man-NOM room-LOC enter-PAST
 ‘A man, a short guy with red glasses, entered the room.’
 b. Giri-no ani(-no) Ken-wa konputa enjinia da.
 obligation-of brother-NO Ken-TOP computer engineer COP
 ‘Ken, my brother in law, is a computer engineer.’

In (30a), where NP₁ clearly denotes a property as in attributive appositions, *-no* is obligatory. In (30b), on the other hand, where NP₁ is ambiguous between a property and an entity, *-no* is optional, depending on the different readings.

Just like identificational appositional constructions in English, the Japanese construction without *-no* allows markers like *sunawati*, ‘that is’¹⁰:

- (31) a. Kare-wa Aranae, sunawati kumo-ni-wa tai-setu-ga
 He-TOP Aranea that.is spiders-at-TOP body-segments-NOM
 ni-setu aru to itto.
 two-segments exist that said
 ‘He told that Aranae, that is spiders, have two body segments.’
 b. 1973-nen-ni Skylab-wa ni-hiki-no doobutu, sunawati kumo-no
 1973-year-at Skylab-TOP two-CT-of animal that.is spider-NO
 Arabella to Anita-o utyuu-ni tureteitta.
 Arabella and Anita-ACC space-to took
 ‘In 1973, Skylab took two animals, namely the spiders Anita and Arabella into space.’

These examples are particularly interesting with respect to the word order of the elements within the construction under discussion. In these examples, the intonation (here represented with a comma) and the translation suggest that NP₂ is closer to the marker *sunawati* than NP₁. Thus, NP₂ seems to correlate with the apposition in English (and other languages), which suggests that the apposition here follows rather than precedes the anchor, just as the Chinese example we saw in (12) above. This suggests that the translation in the earlier examples, where NP₁ is translated as an apposition in English, may be misleading. Example (28a), for instance, might be translated as *Japan’s largest lake, lake Biwa*, rather than *Lake Biwa, Japan’s largest lake*. Just as in the case of relative clauses, it turns out to be very hard to establish whether non-restrictive appositions can precede their anchor. Yet, I do conclude that the Japanese [NP₁ NP₂] construction is a truly non-restrictive appositional construction.

¹⁰ The meaning of *sunawati* corresponds to ‘that is’, but it does not involve a pronoun and a copula as in English.

Let us now turn to the third Japanese construction that resembles apposition: [NP₁-EX NP₂]. Whereas we saw that [NP₁-*no* NP₂] looks more like attribution and [NP₁ NP₂] seems closer to identification, [NP₁-EX NP₂] at first sight resembles inclusion. Consider the following examples from Sode (2004: (35)):

- (32) a. Watanabe-giin-ra sanseiha-ga kesa
 Watanabe.congressman-EX supporting.faction-NOM this.morning
 kisyakaiken-o okonat-ta.
 press.conference-ACC hold-PST
 ‘Congressman Watanabe and the others, the supporting faction, held a
 press conference this morning.’
- b. Akitaken-nado oogataken-ni saikin ninki-ga aru.
 Akitas-EX large.breed.dogs-DAT recently popularity-NOM has
 ‘Recently, Akitas and other large-breed dogs are becoming popular.’

The meaning of these constructions is similar to inclusive appositional constructions, such as *the supporting faction, including congressman Watanabe* and *large breed dogs, such as Atikas*. I will argue that they are structurally more closely related to identificational and attributive appositions, however.

The suffixes *-ra* and *-nado* are characterized as exemplifiers here. Another option would be to view them as collective markers. Hence, they can be translated as ‘etcetera’ or ‘and the others’, as in the given translations of the example sentences. Whereas *-nado* always has this function, *-ra* (and *-tati*) is used as a plural suffix on common nouns. It only functions as an exemplifier on proper nouns. NPs with these suffixes are not restricted to the construction discussed here. They can also function as the predicate in primary predication, for instance. Thus, the secondary messages in (32) can be paraphrased by the following examples from Sode (2004: (38)):

- (33) a. Sanseiha-wa Watanabe-giin-ra da.
 supporting.faction-TOP Watanabe.congressman-EX COP
 ‘The supporting faction is (the group consisting of) Congressman
 Watanabe and the others.’
- b. Oogataken-wa Akitaken-nado da.
 large.breed.dogs-TOP Akitas-EX COP
 ‘The large breed dogs are (the group consisting of) Atikas and others.’

Thus, this construction differs from the English inclusive appositions for which paraphrases like these are ungrammatical (see section 3.1): utterances like *the supporting faction is for example congressman Watanabe* or *large breed dogs are including Atikas* are unacceptable. Furthermore, it seems that the Japanese constructions in (32) really convey equivalence of the groups denoted by the two NPs. In English, on the other hand, the secondary message concerns not only the anchor, but the whole primary message. Thus, the Japanese construction is more similar to identificational and attributive appositions than English inclusive appositions. This may also explain that the marker *sunawati*, ‘that is’ and the *-no*

suffix can appear in the exemplifier construction, as illustrated below. The examples are from Sode (2004: (37)-(38)):

- (34) a. Watanabe-giin-ra, sunawati sanseiha-ga
 Watanabe-congressman-EX that.is supporting.faction-NOM
 kesa kisyakaiken-o okonat-ta.
 this.morning press.conference-ACC hold-PST.
 ‘Congressman Watanabe and the others, that is, the supporting faction,
 held a press conference this morning.’
- b. Watanabe-giin-ra(-no) sanseiha
 Watanabe-congressman-EX-NO supporting.faction
 ‘Congressman Watanabe and others, the supporting faction’
- c. Akitaken-nado(-no) oogataken
 Akitas-EX-NO large.breed.dogs
 ‘Akitas and others, the large-breed dogs’

Note that it is also possible to use explicit markers of exemplification, such as *tatoeba*, ‘for instance’:

- (35) Kanozyo-wa tabun oisii musu, tatoeba utyuu-bae nado-o
 she-TOP maybe delicious bug for.instance space.fly etc-ACC
 hokaku si-ta-katta no daroo.
 trap do-want-PSTNO probably
 ‘She probably wanted to trap a delicious insect, *for instance a space fly*.’

Interestingly, in this case the exemplifying element is second, as in the English word order. Thus, like *sunawati*, the position of *tatoeba* suggests that the order of anchor and apposition is actually anchor-apposition, rather than apposition-anchor. These findings may be taken as an argument in favor of the idea that non-restrictive elements cannot precede their anchors. After all, if prenominal appositive elements could be found anywhere, it would be in a typical head-final language like Japanese.

5.5 Conclusion

I conclude that Japanese does have appositional constructions. Whereas I argued that [NP₁-no NP₂] is more closely related to English absolute constructions, I concluded that [NP₁ NP₂] is a true identificational apposition. Constructions with exemplifiers or collective markers may be identificational or attributive. In contrast to the usual translations, the position of markers like *sunawati* and *tatoeba* in [NP₁ NP₂]-constructions indicate that the second element in these constructions functions as the apposition. Thus, the Japanese data provide several arguments in favor of the idea that appositional elements universally follow their anchor. One problem in this respect comes from the presence of high adverbs in non-restrictive relatives. Therefore, the data provided in this section are insufficient to draw strict conclusions about the possible existence of appositive elements that precede their anchor. From the perspective of my theory developed so far, the existence of appositions

preceding the anchor would cause problems. First, I use an empty E-type pronoun in the underlying structure of the apposition referring to the anchor. This would be impossible if the apposition precedes the anchor. Second, I proposed that the anchor is in the specifier of a ParP and the apposition is in its complement. Since languages are never Spec-final, this predicts that an apposition always has to follow the corresponding anchor. Therefore, I will assume here that appositions cannot precede their anchors, though further research in this respect is necessary.

6. Case marking

In the previous chapter, I used data from several languages, and Japanese in particular, to argue that the two main elements in an appositional construction always follow the same order: the anchor has to precede the apposition.

This chapter again considers appositional constructions from a cross-linguistic perspective, addressing case marking. In the earlier chapters, my focus has been mostly on English and Dutch, which both have very little case marking. Therefore, this aspect did not get much attention. Yet, case marking can of course be very useful in studying grammatical relations between elements within a sentence. I think the key to understanding appositional constructions lies in the relation between their two main elements: the anchor and the apposition. As we saw in chapters 3 and 4, this relation shows features of both predication and coordination. Since languages mark predicational relations with a different case pattern than coordinate relations, studying case marking patterns in appositional constructions might shed some more light on this crucial relation between anchor and apposition.

In this chapter, I present case marking data for appositional constructions in several languages from different families, both case poor and case rich. The collection contains seven Indo-European languages: English, German (both West-Germanic), Norwegian, Icelandic (both North-Germanic), Romanian (Romance), Russian (East-Slavic) and Czech (West-Slavic). From the Uralic family, Hungarian is included. Finally, I use some data from the Japonic language Japanese again.

For English and Norwegian, the data are mainly taken from the existing literature. For the other languages, I used a survey, in which I asked people to translate English sentences with different types of appositional constructions into their native language. I also explicitly asked them to indicate if more than one translation would be possible with variation in case marking. All my informants for this survey had a linguistic background so that they could provide the glosses themselves. My most extensive investigation concerns German. Case marking in appositional constructions in this language has received quite some attention in the linguistic literature already, revealing some very interesting patterns. Furthermore, since I am familiar with this language myself, I could use a different kind of survey in this case. I set up a test with sentences including appositional constructions with varying case marking and asked the participants to judge the grammaticality of these sentences. This approach has the advantage that ungrammatical sentences can be tested as well. Also, such a test is less time consuming, which makes it easier to find people to participate in the test. Whereas the translation task was carried out by only one or two speakers per language, I got results for the German judgment test from seven native speakers.

The case marking data collected in this way again point both to predication and coordination. In discussing the data, I will use the theory developed so far to explain the facts, combining my ideas with a theory on case marking proposed by Matushansky (2008, 2009). The basic idea of this theory is that one head may assign case features to several elements and that one element may receive multiple case

features. In section 6.9, I note a problem concerning the data from Czech and present an alternative proposal involving multidominance.

6.1 English and Norwegian

English and Norwegian are no obvious candidates for an investigation concerning case marking. These languages are ‘case-poor’ (Sigurðsson 2006). They have two distinct case forms only for pronouns, usually described as nominative and accusative. Nevertheless, appositional constructions form an interesting context with respect to case marking in these languages. Emonds (1986), for instance, includes appositional constructions in his list of ‘grammatically deviant prestige constructions’ in English: constructions for which people’s intuitions differ from the normative standard. In particular, the (apparently) accusative form is usually accepted for pronominal appositions with a subject anchor, whereas normative grammarians prescribe the nominative form in this context. Here are some examples from Schütze (2001: 210/227):

- (1) a. The best athlete, *her*, should win. [English]
 b. The teacher said that the smartest student, *namely me*, should give a speech.
 c. Laereren sa at den smarteste studenten, *altså meg*, skulle gi en tale. [Norwegian]
 the-teacher said that the smartest student, thus
 me should give a speech.

Whereas most studies on this topic only mention accusative pronouns in appositions with a subject anchor, Grano (2006: 5-6) also found examples of accusative pronouns in subject anchors themselves:

- (2) a. This really blew my mind, the fact that *me*, *an overfed, long-haired leaping gnome*, should be the star of a Hollywood movie.
 (E. Burdon, ‘Spill the Wine’, song lyrics)
 b. I never thought that *me*, *a teenager*, could actually like this CD.
 (<http://www.uniquegiftsale.com/index.php?Operation=CustomerReviews&ItemId=B00004YM0D&ReviewPage=4>)

Interestingly, similar observations have been made for coordination phrases in subject position, both in first and second conjuncts¹. The English examples in (3a-b) are from Parrott (2007: 248). Those from the Norwegian dialects in (3c-d) are from

¹ Several studies (eg. Emonds 1986, Sobin 1997, Angermeyer and Singler 2003, Parrott 2007) show a pronoun-specific asymmetry: *him* and *her* only occur in first conjuncts. Note also that pronouns in the nominative form have been attested in coordination phrases in object position. In such contexts, *I* only occurs in second conjuncts. I consider these instances a form of hypercorrection.

Johannessen (1998: 1, 65)²:

- (3) a. I dreamed last night that you and **me** went on a canoeing trip. [English]
 b. **Her** and Britney are trying to grow up.
 c. Han og **meg** var sammen om det. [Stavanger dialect]
 he:NOM and me:ACC were together about it
 (Berntsen and Larsen 1925)
 ‘He and I were in it together.’
 d. **Meg** og **deg** hjalp no godt te’, då. [Bergen dialect]
 me:ACC and you:ACC helped now well too then
 (Larsen and Stoltz 1912)
 ‘But then me and you did help a lot, too.’

Apposition and coordination are not the only constructions on Emonds’s (1986) list of ‘grammatically deviant prestige constructions’. Another important construction where accusative pronouns show up in prescribed nominative positions is nominal predication. Example (4c) is from Schütze (2001: 236).

- (4) a. The best athlete is **her**. [English]
 b. It’s **me**, oh Lord... (traditional black gospel song)
 c. Det er **ham/meg**. [Norwegian]
 it is him/ me
 ‘It is him / me.’

Thus, the accusative case marking on appositional pronouns is indecisive with respect to the choice between coordination and predication. The accusative in these contexts has been characterized as ‘default case’ (spelled out on DPs that did not get case otherwise, e.g. Schütze 2001), ‘relational case’ (marking dependency on the presence of a nominative DP, Sigurðsson 2006), or ‘emphatic case’ (marking a focused position, Zwart 2000). Analyses of this phenomenon are also provided by Sobin (1997), Johannessen (1998), Quinn (2005), and Parrott (2007, 2009). I will not choose for a particular analysis here, but simply conclude that case marking on appositions in English and Norwegian fits in both with a predicative status of the apposition and with a coordination-like relation between the anchor and the apposition.

In the following sections, I turn to case marking on appositions in ‘case-rich’ languages, which do distinguish between case marking on conjuncts and nominal predicates.

6.2 German

The German data concerning case marking on appositions are rather complex. Also, the literature on this topic (see Schindler 1990: 29-32 for an overview) is

² Hilton and Parrott (2009) claim, on the basis of corpus research, that accusative pronouns on subject conjuncts are rare in Norwegian, in contrast to English, where it is fairly common.

contradictory or unclear at some points. Often, German grammars state that the anchor and the apposition agree in case, as in the following examples from Vater (2006: 2); the glosses are mine. Note that the form *Herrn Müller* is ambiguous between dative and accusative. In (5c), it is dative, because it is the complement of the dative-assigning preposition *mit*. In (5d), it is accusative, because it functions as a direct object there.

- (5) a. Herr Müller, *unser Chef*, ist verreist.
 Mr.:NOM Müller our manager:NOM is made.a.journey
 ‘Mr. Müller, *our manager*, has made a journey.’
- b. Das ist der Schreibtisch Herrn Müllers, *unseres Chefs*.
 that is the desk Mr. Müller:GEN our:GEN manager:GEN
 ‘That is the desk of Mr. Müller, *our manager*.’
- c. Ich habe eben mit Herrn Müller, *unserem Chef*, gesprochen.
 I have just with Mr.:DAT Müller our:DAT manager spoken
 ‘I just spoke to Mr. Müller, *our manager*.’
- d. Da müssen Sie Herrn Müller, *unseren Chef*, fragen.
 there must you Mr.:ACC Müller our:ACC manager ask
 ‘You must ask Mr. Müller, *our manager*, about that.’

For some authors, case agreement is even part of the definition for appositional constructions (see for instance Behaghel 1928: 412; Schulz and Griesbach 1982: 362). Bergenholtz (1985) investigated a corpus of 2.202.000 words (both written and spoken language) and found 3910 appositional constructions with clear case marking on the apposition³. In 96,6% of these constructions, the anchor and the apposition showed case agreement. Therefore, Bergenholtz concludes that case agreement is the rule. On the other hand, several other scholars claim that this rule is restricted or at least has some important exceptions. There are two main issues here. First, some authors (e.g. Heidolph et al. 1981: 290; Jung and Starke 1981: 110) argue that the nominative can be used on appositions, irrespective of the anchor’s case. Second, some researchers (e.g. Gippert 1981: 59; Engel 1994: 807) claim that the dative can be used as an appositional case, especially if the anchor has genitive or accusative case.

Though Bergenholtz’s (1985) study suggests that non-agreeing cases on appositions are rather rare, it is important to see that this phenomenon is related to certain contexts. Bergenholtz himself identifies two such contexts for a nominative case on appositions with an anchor in a different case. First, he observes that 80% of the non-agreeing cases in his corpus represent nominative case on a bare nominal

³ I excluded so-called *als*-appositions, such as the one below (Bergenholtz 1985: 36), from his results, since these constructions are no appositions at all, according to my definition. This does not lead to substantial differences in the conclusions.

- (i) Sie bezweifelt nicht den Wert des Modellprogramms als eines ersten Schritts.
 she doubts not the value the model.program:GEN as a first step
 (Zeit 63)
 ‘She does not doubt the value of the model program as a first step.’

(i.e. a nominal without a determiner). This confirms ideas from Heidolph et al. (1981: 582) and Zifonun et al. (1997: 2039). The latter even state that nominative case is obligatory in these contexts. They give the following example; the glosses are mine.

- (6) Man pflichtete dem jungen Atomphysiker, *Student/*
 one agreed the:DAT young nuclear.physicist student:NOM
 **Studenten* (an einer Renommieruniversität), begeistert bei.
 student:DAT at a renowned.university enthusiastically with
 ‘They enthusiastically agreed with the young nuclear physicist, *a student*
 (at a renowned university).’

Zifonun et al. (1997) state that the nominative in examples like these is used as a null case. I think that such a statement does not do justice to the type of context we are dealing with here, however. In chapter 2, I argued that appositions consisting of bare nominals are always attributive. In chapter 3, I used the existence of this kind of appositions to argue that attributive appositions are nominal predicates by showing that bare nominals cannot occur in argument positions. Thus, these contexts stress the predicative status of the apposition. Therefore, I think the nominative is a predicative case here. After all, nominal predicates in German primary predication get nominative case as well, as illustrated by the copular sentence below, which paraphrases the appositive message in (7):

- (7) Der junge Atomphysiker ist Student an einer
 the young nuclear.physicist is student:NOM at a
 Renommieruniversität.
 renowned.university
 ‘The young nuclear physicist is a student at a renowned university.’

Bergenholtz’s (1985) second observation concerns appositions that contain adverbials, particularly temporal adverbs. He gives the following examples (p. 39); the glosses are mine:

- (8) a. Auch unter den Mameluken – *ursprünglich türkische*
 also under the:DAT Mamelukes originally Turkish:NOM
Söldner, die in der ägyptischen Armee Karriere gemacht hatten -
 mercenaries who in the Egyptian army career made had
 kam das einstige Pharaonenreich nicht zur Ruhe.
 came the former pharaohs.empire not to.the rest
 (*Spiegel*, 12/10/81: 148)
 ‘Under the Mamelukes - *originally Turkish mercenaries, who had made*
a career in the Egyptian army - the former pharaohs’ empire didn’t calm
 down either.’

- b. Ich traf dort einen einstmals sehr reichen Industriellen aus Wien,
 I met there a:ACC once very rich industrialist from Vienna
gleichzeitig einer unserer intelligentesten Kunstsammler.
 at.the.same.time one:NOM our:GEN most.intelligent art.collectors
 (S. Zweig, *Die Welt von Gestern, Erinnerungen eines Europäers*: 483)
 ‘I met there a once very rich industrialist from Vienna, *at the same time*
one of our most intelligent art collectors.’

Also in these examples, the appositions have nominative case, unlike the corresponding anchors. This pattern was also observed by Haberkorn (1970: 127), Schindler (1990: 91), and Zifonun et al. (1997: 2040). The former two even claim that the nominative is obligatory if an adverbial is present. Bergenholtz (1985) states that this claim is too strong, but the tendency seems rather clear. For the examples in (9) below, my seven native informants all accepted the non-agreeing nominative and marked the agreeing case with ?* at best. When I left out the adverbial, five of them accepted the agreeing case and four of those even preferred it over the nominative. Note that the anchor in (9a), *Peter*, does not have any overt case marking, but it is selected by the preposition *über*, which assigns accusative in this context:

- (9) a. Der Dokumentarfilm über Peter, einmal ein/ *einen Junkie,
 the documentary about Peter once a:NOM a:ACC junkie
 zeigte die Veränderung in seinem Leben als er mit den Drogen
 showed the change in his life when he with the drugs
 aufhörte.
 quit
 ‘The documentary about Peter, once a junkie, showed the change in his
 life after he quit drugs.’
- b. Für meinen Freund, glücklicherweise {ein guter} / *{einen guten}
 for my:ACC friend fortunately a:NOM good a:ACC good
 Schüler, war die Prüfung einfach.
 pupil was the test easy
 ‘For my friend, fortunately a good pupil, the test was easy.’

Again, the presence of adverbials reveals the predicative or even clausal status of the apposition, as shown in chapter 3. Thus, the fact that the non-agreeing nominative is used in these contexts reinforces the idea that we are dealing with a predicative case.

In addition, the non-agreeing nominative seems to be used obligatorily if a subordinator is present in the apposition, as illustrated below⁴. Note that in (10), the anchor, *Johann*, does not have overt case marking, but its function as an indirect object requires dative case.

⁴ One of my informants did not accept the presence of *obwohl* in this example at all. The others all chose the nominative case for the apposition.

- (10) Seine Freunde haben Johann, *obwohl* {kein grosser}/*{keinem
 his friends have Johann though no:NOM big no:DAT
grossen} Sportfreund, Karten für ein Fussballmatch gegeben.
 big sports.fan cards for a soccer.game given
 ‘His friends gave Johann, *though* no big sports fan, cards for a soccer
 game.’

As I argued in chapter 3, the presence of a subordinator also shows the clausal status of the apposition. Therefore, examples like (10) support the analysis of the non-agreeing nominative as a predicative case as well.

Appositions containing bare nominals, adverbials, or subordinators are typically attributive. Therefore, one might wonder whether the non-agreeing nominative is exclusively related to this class. Schindler (1990: 32) concludes that this is indeed the case. According to him, only attributive (i.e. ‘prototypical’, in his terms) appositions can get non-agreeing nominative case. He states that an attributive apposition only has to agree in case with the anchor if case marking is needed to disambiguate between possible anchors. He gives the following example (p. 91):

- (11) Er hat dem Freund des Onkels, {ein stämmiger Mann}/
 he has the:DAT friend the:GEN uncle a:NOM sturdy man
 {einem stämmigen Mann}/ {eines stämmiges Mannes}, geholfen.
 a:DAT sturdy man a:GEN sturdy man helped
 ‘He helped the friend of the uncle, a sturdy man.’

In order to clarify whether it is the uncle or his friend who is a sturdy man, the speaker should use case agreement. If he uses the non-agreeing nominative, the example is ambiguous.

If there is no ambiguity, Schindler considers case agreement for attributive appositions optional. If an apposition consists of a bare nominal or contains an adverbial, the non-agreeing nominative is even obligatory.

With respect to attributive appositions, I think Schindler’s observations are right. Also, I agree on his claim that appositions in the class of inclusion always agree with their anchor. Here are some of his examples (pp. 32, 314); the glosses are mine:

- (12) a. Man hat den Haien, vor allem den / *die Hammerhaien
 one has the:DAT sharks for all the:DAT the:NOM hammerheads
 getrotzt.
 defied
 ‘They defied the sharks, in particular the hammerheads.’
 b. Man nahm sich vieler Vögel, z.B. der / *die Stare und
 one took self many:GEN birds e.g. the:GEN the:NOM starling and
 Finken, an.
 finches on
 ‘They took care of many birds, e.g. starlings and finches.’

Yet, it turns out that the non-agreeing nominative also shows up in identificational appositions. For example (13a), two out of seven informants considered the nominative grammatical and two marked it with a question mark. For example (13b), one informant accepted the nominative and three marked it with a question mark. Note that the morphological form of the anchor in (13b), *Ihr Kennzeichen*, is ambiguous between nominative and accusative, but it has to be accusative because it functions as the direct object of the matrix verb.

- (13) a. Man wird den Gewinner, %mein/ meinen Freund Heinrich, mit
 one will the:ACC winner my:NOM my:ACC friend Heinrich with
 einer Medaille belohnen.
 a medal reward
 ‘The winner, *my friend Heinrich*, will be rewarded with a medal.’
- b. Ihr Kennzeichen, %der/ den Kode H23#, finden Sie oben
 your reference the:NOM the:ACC code H23# find you on.top
 auf der Schachtel.
 on the box
 ‘You find your reference, *the code H23#*, on top of the box.’

Furthermore, we saw before that it is not entirely impossible to use adverbials in identificational appositions. In such contexts, all seven informants consider the non-agreeing nominative acceptable. In contrast to the attributive cases, however, the agreeing case is not completely out for two out of seven speakers.

- (14) a. Man wird den Gewinner, selbstverständlich mein/ ?*meinen
 one will the:ACC winner obviously my:NOM my:ACC
 Freund Heinrich, mit einer Medaille belohnen.
 friend Heinrich with a medal reward
 ‘The winner, obviously *my friend Heinrich*, will be rewarded with a medal.’
- b. Ihr Kennzeichen, ab heute der/ ?*den Kode H23#, finden
 your reference from today the:NOM the:ACC code H23# find
 Sie oben auf der Schachtel.
 you on.top on the box
 ‘You find your reference, from now on *the code H23#*, on top of the box.’

I conclude, then, that the non-agreeing nominative on appositions in German is a predicative case. For attributive appositions, this case is obligatory if elements are used that stress a predicative or even clausal status for the apposition, such as bare nominals, adverbials and subordinators. For other attributive appositions, this case is optional and depends on speaker preferences. In identificational appositions, the predicative case is possible as well, but for fewer speakers. Only if adverbials are used there is a general tendency towards using the non-agreeing nominative.

With respect to the second non-agreeing case on appositions linguists mentioned, the dative, Bergenholtz (1985) concluded that his data could not confirm a regular occurrence of this pattern. With this conclusion, he criticizes work of

linguists like Winter (1966), who claims that appositions with a genitive anchor often get dative, and Leirbukt (1978), who claims the same with respect to appositions with an accusative anchor. Though these authors provide attested examples, Bergenholtz (1985) notes that they did not report research on the (relative) frequency of this phenomenon and seems to suggest that they confused accidental mistakes with a regular pattern. In order to argue that the examples he found are not mistakes, Leirbukt (1978: 5-6) adduces that some of the appositions consist of coordinated structures where the dative is used several times and not just once. Here is one of his examples; the glosses are mine:

- (15) [...] und hier denke ich auch an unsere technische Hochschule,
 and here think I also at our:ACC technical college
der einzigsten technischen Hochschule des Bundesgebietes
 the:DAT only technical college the:GEN state.domain
und der größten von Nordrhein-Westfalen.
 and the:DAT biggest of Nordrhein-Westfalen
 (Deutschen Spracharchiv III/78)
 ‘... and here I also think of our technical college, *the only technical college in the state’s domain and the biggest in Nordrhein-Westfalen.*’

Furthermore, Leirbukt argues that the phenomenon discussed here concerns a regular pattern rather than some accidental mistakes because the contexts in which a non-agreeing dative can occur on appositions are restricted. He refers to Schönmann (1959), who noticed that dative appositions occur predominantly with accusative anchors in cases where the anchor gets its case from a preposition. Leirbukt takes this to be a strict condition rather than a tendency and considers it ungrammatical to use a dative apposition with an accusative anchor that is not selected by a preposition.⁵ He gives the following examples (Leirbukt 1978: 6); the glosses are mine:

- (16) a. * Ich besuchte dann Herrn Müller, *unserem Vertreter* in
 I visited then Sir:ACC Müller our:DAT representative in
Pforzheim.
 Pforzheim
 ‘After that, I visited Sir Müller, *our representative in Pforzheim.*’
 b. * Das betrifft die Schule, einer Zwanganstalt.
 that concerns the:ACC school a:DAT coercive.institution
 ‘That concerns the school, *a coercive institution.*’

Van Riemsdijk (1983: 247) confirms these judgments and adds that a nominative anchor can never give rise to a dative apposition either. He illustrates this with the example below; I slightly changed the glosses:

⁵ Note that the non-agreeing dative is always optional. Leirbukt does not argue that selection of the anchor by an accusative-assigning preposition necessarily leads to dative case morphology on the corresponding apposition, but that the apposition cannot get dative case marking if the accusative anchor is not selected by a preposition.

- (17) Im Haus wohnte ein alter Mann, **einem/ einer der*
 in.the house lived an old:NOM man one:DAT one:NOM the:GEN
ältesten Bewohner der Stadt.
 oldest inhabitants the:GEN city
 ‘In the house lived an old man, *one of the oldest inhabitants of the city.*’

On the basis of data like these, Van Riemsdijk claims that the non-agreeing dative on appositions can show up if the anchor receives an oblique case: either genitive or accusative assigned by a preposition. He concludes that the dative is used as an unmarked (or default) oblique case here. In his view, an apposition obligatorily agrees with its anchor if it has a grammatical case, but if the anchor bears an oblique case, the apposition can optionally be assigned dative as default oblique case.

Vater (2006), who collected a lot of examples (both written and spoken) of non-agreeing appositional constructions from the media, observed genitive and accusative anchors with dative appositions as a pattern as well. Though he does not mention it himself, all his examples with an accusative anchor are selected by a preposition, thus supporting the restriction observed by Leirbukt and Van Riemsdijk. Here are some of Vater’s (2006: 3-4) examples. The examples in (18) have a genitive anchor and those in (19) an (oblique) accusative; the glosses are mine:

- (18) a. Doch Sofia, ..., die lange Zeit im Schatten ihres Mannes,
 nevertheless Sofia who long time in.the shadow her:GEN husband
dem spanischen Staatsoberhaupt, stand ...
 the:DAT Spanish state.chief stood
 (*Kölner Stadtanzeiger*, 07/03/02: 40)
 ‘Nevertheless, Sofia, ..., who was overshadowed by her husband, *the Spanish chief of state*, for a long time ...’
- b. Der Wasserpegel des Jangtse, *Chinas längstem Fluss*, ist auf
 the water.level the:GEN Jangtse China’s longest:DAT river is on
 einem historischen Tiefstand. (*Kölner Stadtanzeiger*, 24/08/06: 20)
 a historical low.point
 ‘The waterlevel of the Jangtse, *China’s longest river*, reached a historical low point.’
- (19) a. Seit dem Sprengstoffanschlag auf die Moschee von Samarra,
 since the explosive.attack on the:ACC mosque of Samarra
einem der wichtigsten Heiligtümer der Shiiten, ...
 one:DAT the:GEN most.important sanctuaries the:GEN Shiites
 (*Yahoo, Internet-Nachrichten*, 19/03/06)
 ‘Since the bomb attack on the mosque of Samarra, *one of the most important sanctuaries of the Shiites*, ...’

- b. Die Einführungskurse in Nordisches Wandern, also zügigem
 the introduction.course in Nordic:ACC walking so quick:DAT
Gehen mit Stöcken, erfreuen sich laut Aktiv-Club
 walking with sticks enjoy self according.to Aktiv-Club
 Erfstadt(ACE) großer Beliebtheit.
 Erfstadt(ACE) bigger popularity
 (*Kölner Stadtanzeiger*, 21-22/08/04: 41)
 ‘The introductory course in Nordic walking, so quick walking with sticks,
 enjoy a bigger popularity according to Aktiv-Club Erfstadt (ACE).’

Interestingly, Vater (2006: 8) states that German speakers are increasingly uncertain about case marking and adds that this uncertainty does not only show up on appositions, but also on other constructions, including coordination. The examples he gives with respect to coordination (p. 8, fn. 21; p. 15-16, att. D-E) all concern a first conjunct bearing an oblique case, either genitive or accusative, and a second conjunct with dative case. Below are some of his examples; the glosses are mine:

- (20) a. Währenddessen hockten die Vermittler wieder einmal ...mit den
 meanwhile sat the mediators again once with the
 Entführern zusammen.Um die letzten Details für die Freilassung
 kidnappers together to the last details for the release
 der neun Deutschen, vier Schweizer und einem Niederländer
 the:GEN nine Germans, four Swisses and one:DAT Dutchman
 auszuhandeln. (*Kölner Stadtanzeige*, 20/08/03: 2)
 to.arrange
 ‘Meanwhile, the mediators sat down with the kidnappers once again in
 order to arrange the last details for the release.’
- b. Wir kennen ihn durch seine historisch nicht ganz
 we know him by his:ACC historically not completely
 einwandfrei belegbare riesige Nase und seiner tragischen Liebe
 faultlessly provable gigantic nose and his:DAT tragic love
 zu einer Schönen, die ... (*Kölner Stadtanzeige*, 28/07/05: 31)
 to a beauty who
 ‘We know him because of his historically not completely faultlessly
 provable gigantic nose and his tragic love for a beauty, who ...’

Given that the non-agreeing dative indeed shows up both on appositions and on second conjuncts in the same contexts, this may support the idea put forward in chapter 4 that appositional constructions are structurally related to coordination. I conclude, then, that the non-agreeing dative on appositions is a default oblique case. Therefore, it may be better to speak of a partially-agreeing dative, which reflects that the anchor it belongs to has an oblique case, but does not specify which of the oblique cases.

Yet, the dative pattern on appositions is not accepted by many speakers. Consider the following examples, all with an anchor selected by a preposition assigning accusative case. Examples (21a-b) were considered ungrammatical by all of my seven native informants. The best marking for (21c) was ?*, assigned by two

out of seven informants. Only (21d) seems to be an exception. For this sentence, four informants considered the dative on the apposition as a grammatical option. This may be related to the fact that the anchor in this example is a bare nominal and therefore lacks overt case marking. Note that both (21c) and (21d) were used as grammatical examples by Leirbukt (1978) and Van Riemsdijk (1983):

- (21) a. * Für meinen Freund, *einem gute Schüler*, war die Prüfung einfach.
 for my:ACC friend a:DAT good pupil was the test easy
 ‘For my friend, *a good pupil*, the test was easy.’
- b. * Der Flüchtling redet nicht über sein Vaterland, *dem Iran*.
 the refugee talks not about his:ACC country.of.origin the:DAT Iran
 ‘The refugee doesn’t talk about his country of origin, *Iran*.’
- c. * Der Verkauf des Grundstücks an den Komponisten, *dem späteren Ehrenbürger der Stadt, ...*
 the sale the:GEN plot.of.land to the:ACC composer
 the:DAT later freeman the:GEN city
 ‘The sale of the plot of land to the composer, *the later freeman of the city, ...*’
- d. % Der König kam aber ohne Krone und Zepter, *den wichtigsten Symbolen seiner Macht und Würde*.
 the king came however without crown and scepter the:DAT most.important symbols his:GEN power and dignity
 ‘However, the king came without his crown and scepter, *the most important symbols of his power and dignity*.’

To conclude, I think that the non-agreeing dative is not as regular as the non-agreeing nominative. It does occur, however, and in that case it is restricted to contexts where the anchor bears an oblique case. In those cases, the dative is used as a default oblique case. Appositions are not the only constructions where this default case shows up and I think it is especially related to a coordination-like structure here.

Finally, several linguists found that some speakers use a genitive on appositions if the anchor receives dative from the preposition *von*, ‘of’. The examples below are from Vater (2006: 14) and Ringer Heringa (p.c.), respectively; the glosses are mine:

- (22) a. Wie die meisten anderen Neubauten in Vrin ist auch die Telefonzelle das Werk von Gion Antoni Caminada, *des neuen Sterns am Schweizer Architektenhimmel*.
 like the most other new.buildings in Vrin is also the phone.booth the work of Gion Antoni Caminada the:GEN new star at.the Swiss architects.sky
 (*Kölner Stadtanzeiger*, 31/07/02: 33)
 ‘Like most other new buildings in Vrin, the phone booth is also the work of Gion Antoni Caminada, *the new star in the Swiss architects’ sky*.’

- b. Der Verfasser, *Miklós Molnár*, ist (...) Autor unter vielen anderen
 the author Miklós Molnár is author among many others
 von “*Sieg einer Niederlage*”, eines Standardwerkes über die
 of victory a:GEN defeat a:GEN standard.work on the
 Ungarische Revolution von 1956. (M. Molnár, *Geschichte Ungarns*: 7)
 Hungarian revolution of 1956
 ‘The author, *Miklós Molnár*, is (...) the author of, among many other
 things, “*Sieg einer Niederlage*” (victory of a defeat), *a standard work on
 the Hungarian revolution of 1956.*’

I think examples like these are to be considered as a kind of ‘semantic case agreement’, since the genitive and the *von* preposition are both interpreted as possession. Maybe, it is even better to analyze them as unbalanced appositions, where the anchor consists of a PP and the apposition is a nominal phrase with a ‘prepositional’ meaning because of the genitive. Therefore, I conclude that such contexts do not show the use of a non-agreeing case on appositions.

In sum, there are several case marking patterns for German appositions. First of all, an apposition may agree in case with its anchor. This pattern is obligatory in inclusion and is also very common in the class of identification. If the anchor bears an oblique case, it is possible for some speakers to use the dative as a default oblique case, thus resulting in partial agreement. Another important pattern is the non-agreeing nominative. This case is often assigned to attributive appositions and obligatorily so if an apposition contains elements stressing its predicative status: bare nominals, adverbials, floating quantifiers, or subordinators. For some speakers, this is an option in identification as well, but it is only generally accepted if adverbials are present.

Several linguists have suggested that the use of non-agreeing cases on appositions has increased over the years. Bergenholtz (1985) rightly criticizes claims in that direction by pointing out that actually no one carried out diachronic research on this topic. As far as I know, his critique is still valid. Bergenholtz himself searched a small corpus of four texts in Frühneuhochdeutsch (early new standard German), written between 1519 and 1691, and found that 6 out of 146 appositions, or 4,1%, got a non-agreeing case. This number is very similar to the 3,4% non-agreeing cases he found on appositions in his much bigger corpus of Neuhochdeutsch (new standard German). The corpus is probably too small to draw firm conclusions, but these data give no reason to think that there is a diachronic change going on. Interestingly, Wunderlich and Reis (1924: 186-187) even state that “neuerdings immer mehr die Kongruenz angestrebt wird und nunmehr allgemeingültige Regel geworden ist.” (recently, case agreement is more and more desired and at present has become a general rule, HH) On the other hand, Vater (2006: 7), for example, concludes with respect to appositions: “Die alte Kasusübereinstimmung mit dem Antezedens (...) findet sich zwar noch (...), ist aber mittlerweile nur noch eine von vielen Möglichkeiten.” (though the old case agreement with the antecedent still shows up, it is by now just one of many possibilities, HH) He suggests that the change he signals is part of a tendency in German that speakers are increasingly uncertain about the use of case marking and even considers the possibility that the case system will disappear completely. It

would be very interesting to see whether diachronic corpus research could justify such claims.

In the next section, I will take the patterns of agreeing case and the non-agreeing nominative on appositions as a starting point for a theory of case in appositional constructions. In developing this theory, I will ignore the non-agreeing dative pattern because of its debatable status.

6.3 Case theory: multiple feature assignment

In the previous section, we found two more or less regular patterns for case marking in German appositional constructions: anchor and apposition agree in case, or the apposition gets nominative case, independently of the anchor's case. The non-agreeing nominative occurs more often if the construction is attributive and is obligatory if high adverbs or subordinators are present. How can these patterns be explained?

In order to answer that question, let us first focus on the obligatory nominative caused by the presence of high adverbs and subordinators. This phenomenon suggests that the presence of some additional structure leads to the spell-out of nominative case. This could be explained if some element in this part of the structure assigns a nominative case feature. It is commonly assumed that nominative case is related to the T head. Thus, it seems reasonable to assume that the presence of high adverbs or subordinators is related to the presence of a T head and that this T head assigns case to the apposition. As I argued before, appositions receive this case because they are nominal predicates. I take it, then, that nominative case on predicate nominals in German (and other languages where the predicate in primary predication receives nominative case) is assigned by a T head. Thus, the T head does not only assign case to the subject, but also to predicate nominals. This idea does not conform to standard minimalist assumptions, which require that a case feature is only assigned once. In order to explain the presence of two nominatives in one sentence, however, this assumption would make it necessary to have two separate case mechanisms: one (for example assignment by T) for the subject and another (for instance 'default case') for the nominal predicate. I think, however, that a theory that abstracts over these two cases fairs better.

A related question to answer is how it is possible for T to assign a case feature to the nominal predicate. I assume, following Matushansky (2008, 2009), that case assignment is not based on a particular relation between a head and a nominal constituent, but on a relation between a head and its sister, thus directly going back to the basic Merge operation (see also Zwart 2006, who argues that dependency relations, and in particular agreement relations follow from sisterhood). Case is then assigned by a head to its sister and spread over all its elements, which makes it possible that one case feature is spelled out on several elements. Thus, T assigns nominative case to all elements contained in its sister, for instance little vP. In the case of a copular clause, this sister includes a small clause with the subject and the nominal predicate, which both get assigned nominative. In this way, this system explains why a more elaborate structure, in particular the presence of a T head, in an apposition leads to nominative case. Note that a small clause's subject

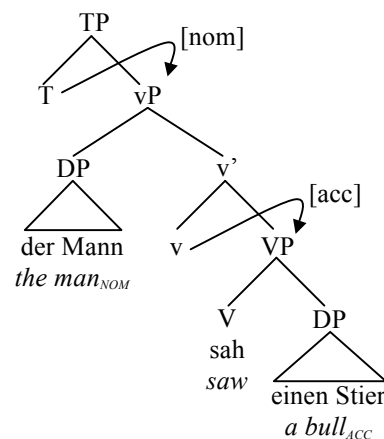
and predicate agree in case in German in other constructions as well, which is immediately explained if the small clause gets a case feature as a whole and distributes this feature over its elements. The following example is from Schumacher et al. (2004: 379); the glosses are mine:

- (23) Ich finde ihn einen tollen Schauspieler.
 I find him:ACC a:ACC good actor
 ‘I consider him a good actor.’

This system also explains why an apposition ‘agrees’ in case with the anchor if the appositional structure is less elaborate and does not contain a T head. The case feature spelled out on the anchor is not only assigned to the anchor, but to the appositional construction as a whole, including both the anchor and the apposition, thus resulting in the same case on both elements of the construction. This is similar to the situation in coordination, where the CoP gets a case feature that is spread over both conjunctions.

Given that we assume that case features are assigned by heads to their sisters and distributed over all the elements included in this sister, we are led to the conclusion that one constituent may receive more than one case feature. Suppose, for example, that little *v* assigns accusative case. This means that a direct object, which is embedded in little *v*’s sister, which is embedded in T’s sister, receives an accusative as well as a nominative case feature. For such cases, morphological rules are required to determine how a combination of features is spelled out. This can be done, for example, by ranking case morphology rules. If the rule that spells out an accusative feature with accusative case morphology takes precedence over the rule that spells out a nominative feature with nominative morphology, a direct object, with both a nominative and an accusative feature, is spelled out as accusative, whereas a subject, with a nominative feature only, is spelled out as nominative:

- (24) Der Mann sah einen Stier.
 the:NOM man saw a:ACC bull



In (24), the object, *einen Stier* receives both a [nom]-feature from T and an [acc]-feature from little v. Since the rule for spelling out accusative case morphology is ranked higher than the one for nominative case morphology, the object gets accusative case marking. The subject, *der Mann* only receives the [nom]-feature from T. Therefore, the accusative-rule does not apply and the lower ranked rule for nominative spell-out leads to nominative case morphology on the subject. Note that these rules and their ranking are subject to parametric variation.

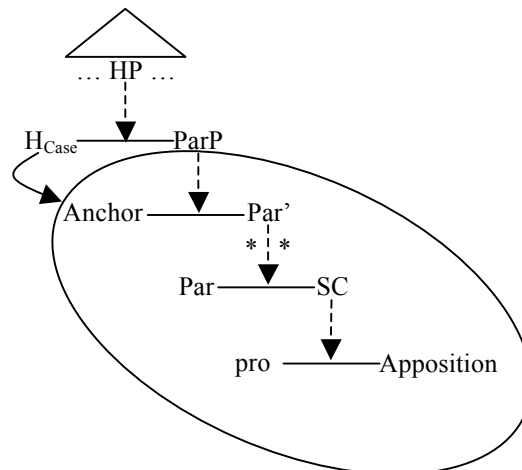
There is one restriction to the spreading of case features over all the elements in the sister of the case-assigning head. These features may be blocked by barriers. An obvious barrier for case features is CP. Consider the following example:

- (25) Der Mann erzählte seinem Freund [_{CP} daß er einen Stier sah].
 the man told his:DATfriend that he:NOM a:ACC bull saw
 'The man told his friend that he saw a bull.'

Here, the [dat]-feature assigned to the indirect object *seinem Freund* does not reach the subject of the subordinate clause, *er*. If that were the case, this subject would have been marked with dative case as well. This can be explained if the CP functions as a barrier for case features.

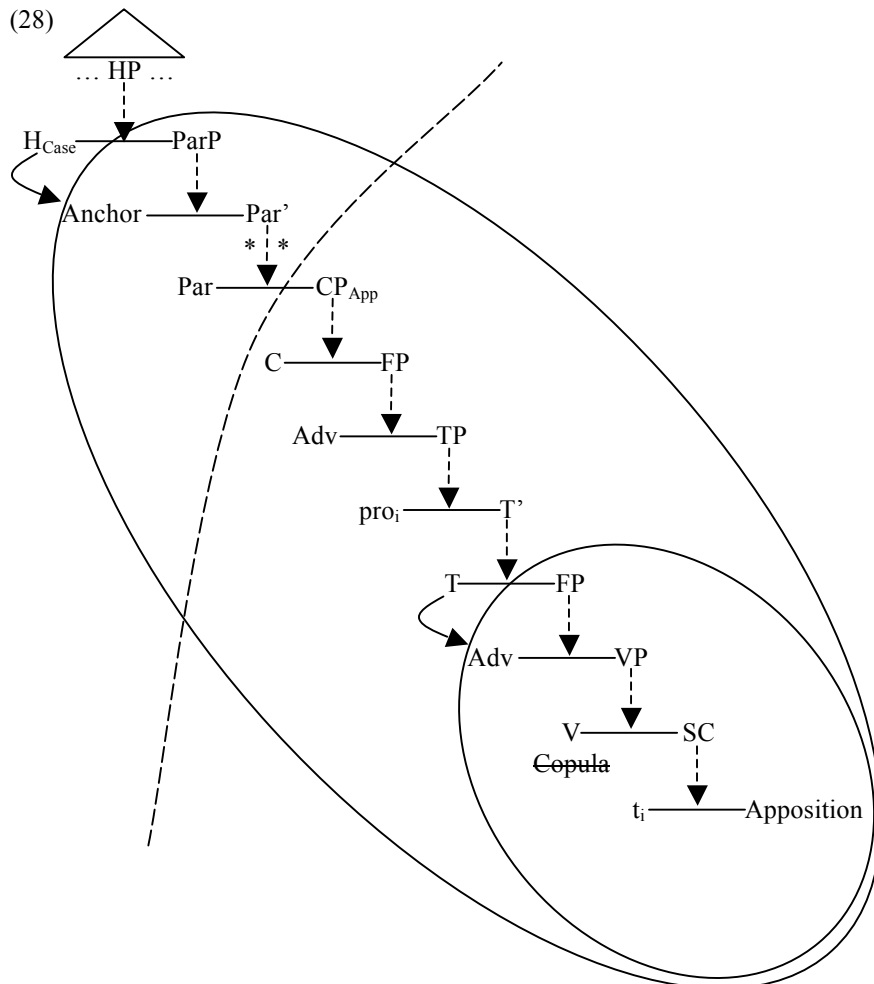
Following the case theory sketched here, agreeing case marking on appositional constructions in German may be explained by the structure in (26) in combination with the morphological rules in (27). Note that the order of the rules indicates a ranking. The second rule only applies if the condition of the first does not hold and so on.

(26)



- (27) vocabulary insertion rules for German:
 [gen] → GENITIVE
 [acc] → ACCUSATIVE
 [dat] → DATIVE
 [nom] → NOMINATIVE

Some head H_{Case} in the matrix assigns a case feature, let's say [acc], to its sister, including ParP. This feature is distributed over all the structure below, including both the anchor and the apposition. In the case of the minimal appositional structure represented in (26), this is the whole story. The vocabulary insertion rules make sure that both the anchor and the apposition get the same, accusative, case morphology, similar to the situation in coordination. For a more elaborate structure, consider (28):



The tree in (28) represents the situation if the appositional structure is more elaborate, which is necessary for the presence of high adverbs and subordinators.

In this case, the T head assigns a [nom] feature to its sister, including the apposition. Given the system described above, we now expect the apposition to have (at least) two case features: [acc] from H_{Case} and [nom] from T. With the ranking of the rules in (27), this would lead to the realization of accusative case morphology on the apposition. After all, the insertion rule for [acc] takes precedence over the one for [nom]. This is not what happens, however. As we saw in the previous section, the apposition gets nominative in the case of a more elaborate appositional structure. How can this be explained? The spell-out of nominative case on the apposition follows if the [acc] feature from the matrix is blocked by a case barrier. I take it that such a case barrier is indeed present: CP, as illustrated by the dashed line in (28). As stated before, CP needs to be a case barrier in this system anyway, since subordinate clauses are not influenced by case features from a higher clause⁶. Given that CP indeed blocks case features from the matrix, the apposition in the elaborate structure only receives a [nom] feature from the appositional T. Therefore, nominative case morphology is realized.

Finally, the previous section showed that nominative case is often realized on attributive appositions, even in the absence of high adverbs or subordinators. In these cases, then, I assume that the structure is more elaborate as well. It is not clear to me why this structure occurs more often in attributive appositions than in identificational ones. It may be related, however, to the fact that predicative copular clauses more easily allow high adverbs than equative copular clauses.

In this section, I outlined a case theory to explain the case marking on German appositional constructions, as described in the previous section. In this theory, heads assign case features to their sisters. These features are distributed all the way down, unless they are blocked by a case barrier such as CP. Thus several elements may receive the same case features from the same head. Also, one element may receive more than one case feature. Language specific morphological rules determine how a combination of case features is realized. Thus, appositions receive case features from the matrix (the same as those received by the anchor) and optionally from a head within the appositional clause. If the appositional clause has a minimal structure, without functional projections such as TP and CP, the case from the matrix is realized, thus resulting in 'agreement' with the anchor. If TP and CP are present, however, T assigns nominative to the apposition and CP blocks the case feature from the matrix, resulting in nominative case morphology on the apposition.⁷

⁶ See Matushansky (2008) for a list of other potential case barriers. She suggests that all phases might be case barriers.

⁷ As stated at the end of section 6.2, I ignore the non-agreeing dative pattern on German appositions here. Yet, I argued that this concerns a default oblique case and therefore partial agreement. This suggests that more than one (case) feature is involved in the spell-out of oblique accusative cases: a [+oblique] feature and at least one extra feature. The combination of these features leads to accusative case marking. In the absence of the extra feature, dative case morphology is spelled out. The described pattern would follow if the [+oblique] feature assigned to the anchor reaches the apposition as well, but the additional feature is blocked.

6.4 Romanian

In the previous section, I developed a theory about the structure and case marking system for appositional constructions on the basis of the German data presented in section 6.3. In the following sections, I want to investigate whether and how this theory applies to case marking data from other languages. Here, I start out with Romanian. First, consider the inclusive type of apposition. Just like German, Romanian marks these appositions with the same case as their anchors, as illustrated by the following example:

- (29) a. Ea de asemenea a făcut astronautilor, *in special*
 She also PAST:3SG made astronauts:DEF:DAT in special
oamenilor de știință, o pânză.
 people:DAT of science a web
 ‘She too made the astronauts, *in particular* the scientists, a web.’
- b. Pânzele meșteșugite ale unor păianjeni, *de exemplu, ale țesătorului*
 Webs sophisticated GEN some spiders for example GEN weaver
de globuri, pot fi folosite pentru a prinde o varietate largă de insecte.
 of orbs can be useful for to catch a variety large of insects.
 ‘The sophisticated webs of some spiders, *like* the orb weaver, can be used to catch a whole variety of insects.’

The agreement of case between the anchor and the apposition in this case is expected, since inclusive appositions were analyzed as a reduced form of sentence coordination, where the apposition has exactly the same function in the sentence as the anchor, resulting in the same case.

Identificational appositions show the agreement pattern for case marking as well, again similar to the situation in German. Here are some examples:

- (30) a. În 1973, Skylab a luat două animale, *pe păianjeni*
 in 1973 Skylab PAST:3SG took two:ACC animals ACC spiders:DEF
Arabella și Anita, în spațiu.
 Arabella and Anita in space
 ‘In 1973, Skylab took two animals, *the spiders Arabella and Anita,*
 into space.’
- b. Au dat-o și Anitei, *celuilalt păianjen.*
 PAST:3PL gave-it too Anita:DAT other:DAT spider
 ‘They gave it Anita, *the other spider,* as well.’

The explanation for the agreement pattern in identificational apposition is the same as for German. The appositional clause in these constructions is relatively small and does not project a CP. Therefore, the same features that are assigned to the anchor are also spread over lower elements, including the apposition. Even if TP is present in this smaller structure, the nominative case feature it assigns is overruled by other

This could be the case if the two features involved have a different scope. In order to develop a more detailed analysis along these lines, more research is necessary.

case features by the morphological rules that determine the spell-out of case on the basis of feature bundles.

For attribution, the case marking pattern is slightly different from the German pattern. Whereas in German the nominative is often optional for attributive appositions, in Romanian the nominative case is obligatory in these cases:

- (31) a. Astronauții au dat Arabelei, un păianjen de
 astronauts:DEF PAST:3PL gave Arabella:DAT a:NOM spider of
grădină, apă și carne, o masă frumoasă pentru un păianjen.
 garden water and meat, a meal nice for a spider
 ‘The astronauts gave Arabella, *a garden spider*, water and meat, a nice
 spider meal.’
- b. Aspectul Deinopidei se aseamăna cu cel al lui
 appearance:DEF Deinopida:GEN self resembles with that of DEF:GEN
 Shreck, *căpcăunul modern*.
 Shreck ogre:DEF:NOM modern
 ‘The appearance of Deinopida is similar to that of Shrek, *the modern
 ogre*.’

Thus, in Romanian case can be used to disambiguate between an identificational and an attributive reading for an appositional construction. If the nominative is used on the apposition, it is interpreted as attributive and the agreement pattern results in an identificational interpretation. The identificational example in (30b), for instance, gets an attributive interpretation if the nominative is used:

- (32) Au dat-o și Anitei, celălalt păianjen.
 PAST:3PL gave-it too Anita:DAT other:NOM spider
 ‘They gave it Anita, *the other spider*, as well.’

Whereas in (30b) Anita is identified as the other spider in the story, in (32) the property of being the other spider is attributed to Anita. Thus, subtle differences can be expressed by using different cases.

How can it be explained that attributive appositions are always marked with nominative case in Romanian? Following the theory on case marking in appositional constructions developed so far, an option that comes to mind is that attributive appositions in Romanian always involve an elaborate clausal structure, projecting up to CP. In that case, CP blocks case features from higher up in the clause and T assigns a nominative feature to every element in its complex sister. Another option would be that Romanian always assigns nominative to attributive elements, for example because they have a feature [pred], assigned by a Pred-head that is present in predicational, but not in equative small clauses (see the discussion on Russian in section 6.7). In that case, we also expect the nominative in small clause constructions, for example. This seems indeed the case:

- (33) O consider o persoană plăcută
 Her consider:1SG a person:NOM pleasant
 ‘I consider her a pleasant person.’

Note, however, that Romanian usually has the same form for nominative and accusative case. Therefore, data like these are not decisive.

I conclude, then, that there are two options to explain the nominative case on attributive appositions in Romanian. Either attributive appositions obligatorily project a bigger clausal structure or attributive elements always get assigned nominative. If case marking is a morphological reflex of a feature bundle, as described in the previous section, this latter alternative can be implemented, for instance, by introducing an interpretational value that gets the value [pred] for predicative elements, or properties. A feature bundle including both this feature and a nominative case feature may be spelled out as nominative, even if other case features are present as well.

6.5 Japanese

Now, consider Japanese once again. As we saw in the previous chapter, there are at least two Japanese constructions that could be characterized as appositional constructions: the [NP₁ NP₂]-construction and the [NP₁-EX NP₂]-construction. Here, it is important to note that only one of the two NPs in the constructions discussed in the previous chapter is marked for case (or information structure): always the second one. Example (34a) is from Sode (2004: (31)), (34bc) come from the translation task.⁸

- (34) a. Keishityoo Soosa-ikka-no keizi Katayama
 Keihesityoo investigation-section.one-of detective Katayama
 Yositaroo-ni kii-ta-to sitara
 Yositaroo-DAT ask-PST-QT if
 (J. Akagawa, *Mikeneko Hoomuzu no ansokubi*: 7)
 ‘If one were to ask Katayama Yositaroo, *detective at Investigation Section 1 at Keishityoo* (the Tokyo Metropolitan Police Department)’
- b. 1973-nen-ni Skylab-wa ni-hiki-no doobutu, sunawati kumo-no
 1973-year-at Skylab-TOP two-CT-of animal that.is spider-NO
 Arabella to Anita-o utyuu-ni tureteitta.
 Arabella and Anita-ACC space-to took
 ‘In 1973, Skylab took two animals, namely the spiders Anita and Arabella into space.’
- c. Asi nado karada-no bubun-no hotondo-ga dai-is-setu-ni
 legs and.others body-GEN part-GEN most-NOM first-CT-to
 tunagatteiru.
 connecting
 ‘Most body parts, such as the legs, are connected to the first segment.’

⁸ Following my argumentation in chapter 5, the anchors and appositions in the translations in (34a) and (34c) may actually be in the wrong order. It would be better to translate the appositional constructions at hand as *the detective at Investigation Section 1 at Keishityoo*, *Katayama Yositaroo* and *The legs etc., most body parts* respectively.

The fact that only one of the appositional elements is marked for case confirms the idea that the anchor and the apposition form one constituent together, since Japanese only marks case at the end of a constituent. In this respect, these constructions resemble coordination. The example is from Vermeulen (2008: 345):

- (35) John-ga Mary-to Bill-o mita.
 John-NOM Mary-and Bill-ACC saw
 ‘John saw Mary and Bill.’

If in cases like (34) the first element would be the apposition, one might also argue that the apposition does not get case marking at all in these constructions. This would correspond to the idea that the apposition is a predicate in the underlying structure, since nominal predicates in Japanese are not marked for case. The example is from Citko (2008: 283):

- (36) John-wa sugureta suugakusha da
 John-TOP fine mathematician COP
 ‘John is a fine mathematician.’

In the previous chapter, however, I argued that the apposition always has to follow the anchor, even in a head-final language like Japanese. From this perspective, the case marking data from Japanese support an analysis for appositional constructions with coordination rather than predication. Yet, as the previous chapter showed, the status of the Japanese construction at hand is not very clear. Also my data on appositional case marking patterns for Japanese are rather limited. Therefore, I will not draw firm conclusions here, but leave this for future research.

In the following sections, however, we will see that there are more languages in which appositions always get coordinate case.

6.6 Hungarian and Icelandic

In section 6.4, we saw that in Romanian attribution is distinguished from identification with case marking. Instead of case agreement between the anchor and the apposition, attributive constructions were marked with predicative case on the apposition. The languages discussed here, Hungarian and Icelandic, on the other hand, basically do not have attributive appositions at all. As in all the other languages I examined, identificational appositions in Hungarian and Icelandic agree with their anchors:

- (37) a. Azt mondta, hogy az Araneaknak, *vagyis a* [Hungarian]
 that said:3SG that the Aranea:PL:DAT or the
pókoknak, két testjük van.
 spiders:DAT two body.area is
 ‘He told that Aranae, *ie spiders*, have two body segments.’

- b. 1973-ban a Skylab az ūrbe vitt két állatot,
1973-in the Skylab the space.in brought two animal:ACC,
Arabella és Anita pókokat.
Arabella and Anita spiders:ACC
'In 1973, Skylab took two animals, *the spiders Arabella and Anita*, into space.'
- (38) a. Hann sagði að áttfætlur, það er köngulær, hefðu [Icelandic]
He said that araneae:NOM that is spiders:NOM had
tvískiptan bók.
two.divided body
'He said that Aranae, *that is spiders*, have two body segments.'
- b. Deinopida kastaði vefnum yfir bráð sína, lírfuna
Deinopida threw web:DEF over prey:ACC her:ACC larva:DEF:ACC
hans Jóns.
his John:GEN
'Deinopida cast the net over her prey, *John's caterpillar*.'

Attributive appositions, on the contrary, are generally impossible in Hungarian and Icelandic. Instead, an appositive relative has to be used: the relative pronoun cannot be left out. If an appositive relative is used, the predicate gets nominative case:

- (39) Az ūrhajósok Arabellának, a kerti póknak vizet [Hungarian]
the astronauts Arabella:DAT the garden spider:DAT water:ACC
és húst adtak, *(ami)kitünö pókétel / * pókételt.
and meat:ACC gave, which lovely spiderfood:NOM spiderfood:ACC
'The astronauts gave Arabella, the garden spider, water and meat, which is a nice spider meal.'
- (40) Arabella bjó til fyrsta vefinn, *(sem var) [Icelandic]
Arabella made to first:ACC web:DEF:ACC that was
Ófullkomin / *ófullkomna smíð.
incomplete:NOM incomplete:ACC construction
'Arabella made the first web, which was an incomplete construction.'

It is not clear to me why attributive appositional constructions would be absent in these languages. One option that comes to mind is a mismatch between two case marking patterns. Imagine that the predicative structure of attributive appositions forces predicative case marking on the apposition, as in Romanian. On the other hand, the coordination-like structure principally leads to case agreement between the anchor and the apposition. These two conflicting patterns might result in a crash in the derivation.

Interestingly, I found one exceptional example in Hungarian, which supports this way of reasoning. The exception concerns an attributive apposition where the anchor functions as the subject, leading to nominative case on the apposition. This is illustrated in (41):

- (41) János, *egy nyelvész*, a pókokról tartott előadást. [Hungarian]
 John:NOM a linguist:NOM the spiders:DEL held lecture
 ‘John, a linguist, gave a talk on spiders.’

One might think that this attributive construction is possible because the nominative case agreement with the subject anchor on the basis of the coordinate structure does not contradict the nominative case marking forced by the predicative structure. Indeed, nominal primary predicates in Hungarian are marked with nominative case. Here are some examples from Matushansky (2008: (10)) to illustrate this:

- (42) a. János orvos.
 János:NOM doctor:NOM
 ‘John is a doctor.’
 b. János orvos volt.
 János:NOM doctor:NOM was
 ‘John was a doctor.’

Yet, a rule that excludes other cases than nominative on nominal elements in a predicative structure cannot exist in Icelandic and Hungarian. In Icelandic, small clause constructions with clearly weak interpreted (i.e. predicative) predicates, the predicate receives the same case as its subject and need not be nominative. In Hungarian, small clause predicates often get dative case. Example (43a) is from Maling and Sprouse (1995: 170) and (43b) from Matushansky (2008: (30)):

- (43) a. Ég taldi hana/*hún vera kennara/*kennari. [Icelandic]
 I believed her:ACC/she:NOM be teacher:ACC/NOM
 ‘I believed her to be a teacher.’
 b. Az anyja tanárnak tanítatja Pétert. [Hungarian]
 the mother teacher:DAT learn-make Peter:ACC
 ‘His mother made Peter to learn to become a teacher.’

Therefore, I cannot give firm conclusions with respect to the reason behind the general absence of attributive appositional constructions in Hungarian and Icelandic and I leave this issue for future research.

6.7 Russian

In section 6.2, I showed that agreement in case between the anchor and the apposition is a fairly common pattern in German. Yet, I also found certain contexts for which native speakers generally accept a non-agreeing nominative marking of the apposition. This is the case when a high adverb like *glücklicherweise*, ‘fortunately’ or a subordinator like *obwohl*, ‘though’ is present in the apposition; see the discussion of examples (9) and (10) above. In section 6.3, I argued that this exceptional non-agreeing nominative is in fact a predicative case, reflecting the presence of a clausal structure. In particular, it can be explained by the presence of two functional projections in the syntactic structure of these appositional

constructions: TP and CP. In my theory, the presence of TP explains that nominative case is assigned, since this is done by the T-head. The presence of CP explains why nominative case is not only assigned, but also spelled out in the end, because CP functions as a barrier: it prevents the case feature assigned to the anchor from being distributed to the apposition as well. If CP would not block this feature, it would be spelled out on the apposition, since the nominative is ranked lowest in the German case hierarchy.

In Russian, the agreeing pattern is even more common for appositional constructions than in German. As in German, appositions in this language always get the same case as their anchor, independently of the semantic class they belong to:

- (44) a. Astronavty dali Arabelle, *sadovoj paučixe*, vodu
 astronauts gave Arabella:DAT garden spider:DAT water:ACC
 i mjaso, *vkusnuju paučju edu*.
 and meat:ACC tasty spider food:ACC
 ‘The astronauts gave Arabella, a garden spider, water and meat, a nice spider meal.’
- b. Oni dali edu i Anite, *drugoj paučixe*.
 they gave food also Anita:DAT other spider:DAT
 ‘They gave the food to Anita, the other spider, as well.’

Again, this pattern can be explained by the idea that case features are assigned to all the elements included in the sister of the assigning head. Because the anchor and the apposition belong to the same phrase, they receive the same case feature and thus get an ‘agreement’ pattern. Again, this is similar to the situation in coordination, where both conjuncts get the same case in Russian:

- (45) Ja znaju Dimu i Mishu.
 I know Dima:ACC and Misha:ACC

Unlike German, Russian shows an agreement pattern on appositional constructions even if the apposition involves a high adverb, such as *once* or *frankly*:

- (46) a. Dokumental’nyj fil’mo Kit-e, *v proshlom narkoman-e*,
 documentary film about Keith-LOC in past junky-LOC
 rasskazyvaet ob izmenenijax, proizoshedshix v ego zhizni posle
 tells about changes happening in his life after
 togo, kak on brosil narkotiki.
 DET.GEN how he stopped drugs
 ‘The documentary about Keith, once a junky, shows the change in his life after he quit drugs.’
- b. Dlja mo-*ej* zhen-y, *k schast’ju prilezhn-oj studentk-i*, ekzamen
 for my-GEN wife-GEN to happiness good-GEN student-GEN, exam
 proshel legko.
 went easily
 ‘For my wife, fortunately a good student, the exam was easy.’

Thus, these examples do not reveal a specific predicative case like the non-agreeing nominative in German. Yet, Russian does mark nominal predicates with a different case than their subjects. Here, predicates get either instrumental or nominative case.

There is a huge literature on case marking for predicates in Russian and especially the choice between instrumental and nominative case (see Bailyn and Rubin 1991, Bailyn and Citko 1999, Bailyn 2001, Geist 2006, Pereltsvaig 2007, Markman 2008, Citko 2008 and Matushansky 2008, 2010, among others). Here, I ignore the differences between nominal and adjectival phrases in this respect, because appositions typically involve nominal phrases.

Basically, nominal predicates in Russian are marked by instrumental case, except in two cases of primary predication: in equative (or specificational) clauses and in present tense, where the copula is absent. In these exceptional cases the predicate is marked by the nominative (47cd). The examples below concern a small clause predicate (47a), a nominal predicate with an object controlled PRO as its subject (47b) and primary predication in past (47c) and present (47d) tense. The difference between the two options in (47c) is that the nominative indicates an equative reading and the instrumental a predicational one⁹:

- (47) a. Ja sčitaju Dimu pisatelem / *pisatel' /*pisatelja.
I consider Dima:ACC writer:INSTR writer:NOM writer:ACC
'I consider Dima a writer.'
- b. Institut objazyvaet novyx spetsialistov PRO byt'
institute:NOM obliges new specialists:ACC be
professionalami s opytom
professionals:INSTR with experience.
'The institute obliges new specialists to be professionals with experience.'
- c. Puškin byl {velikijpoët}/ {velikim poëtom}.
Puskin was great poet:NOM great poet:INSTR
'Puskin was a great poet.'
- d. Vera assistent/ *assistentom
Vera assistant:NOM assistant:INSTR
'Vera is an assistant.'

Thus, the challenge of case marking on Russian predicates is to explain how the instrumental case is assigned and why the nominative is restricted to exactly those two contexts described above. Here, I present the solution to this challenge provided by Matushansky (2008, 2010), which I will use as a basis to explain the case marking data on Russian appositions presented before.

In order to explain the difference in case marking on predicates between equative and predicational copular clauses, Matushansky assumes a structural

⁹ Not everyone agrees that the difference between nominative and instrumental marked predicates in these contexts is related to the equative/predicational distinction. Other linguists describe the difference as related to the distinction between individual level and stage level predicates or link it to eventuality (see Bailyn and Rubin 1991, Pereltsvaig 2007, Markman 2008).

difference in the small clauses that are at the basis of these clauses. For equative clauses, she assumes a ‘real’ small clause, where the subject and the predicate are merged to each other directly, thus resulting in a symmetrical structure. For predicational clauses, on the other hand, an intermediate head is assumed between the subject and the predicate: Pred. Thus, predicational small clauses form an asymmetrical structure with the subject and the predicate functioning as the specifier and the complement in PredP (see Bowers 1993 for the original proposal of the Pred-head and Pereltsvaig 2001, 2007 for a similar view on differentiating between equative and predicational clauses by the presence or absence of a head similar to Pred).

The absence of the Pred-head in equative clauses may explain that the instrumental case does not show up if the presence of this head is crucial for assigning instrumental case. Just like in German, T assigns a nominative case feature to its sister and all the elements in it, including the predicate. Only if Pred is present, instrumental may be assigned.

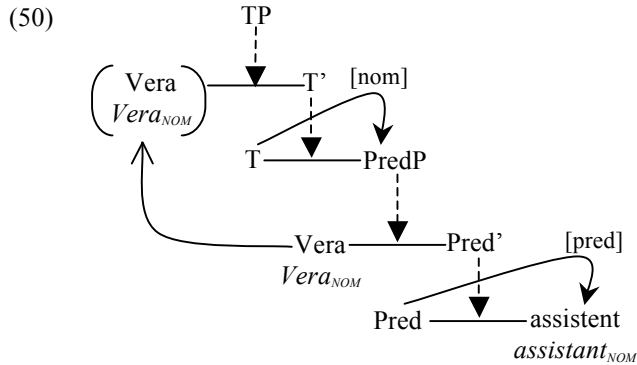
Yet, this does not explain why the predicate is obligatorily marked with nominative case in all present tense copular clauses. After all, there is no reason to assume that the Pred-head is absent in all these clauses, including the predicational ones. Therefore, Matushansky (2008, 2010) argues that the presence of Pred alone is not sufficient to assign instrumental case to a predicate. Rather, the spell-out of the instrumental marking is the result of the presence of a combination of two features, one of them being [pred], assigned by Pred. The other feature then has to be assigned by an element that is present in the context of instrumental marked predicates, but not in the present tense copular clauses. Now, it is important to note that the most obvious difference between copular clauses in past and present tense is the presence of an overt copula. In present tense clauses, the copula is absent. Therefore, it seems logical to relate the second feature that is needed for instrumental marking to the (overt) presence of the copula. Particularly, Matushansky assumes a feature [event], that is assigned by the little v-head, the presence of which in its turn depends on the presence of an overt verb, in this case the copula. The instrumental case marking is then spelled out as a result of the following, highly ranked rule:

(48) [pred, event] → INSTRUMENTAL

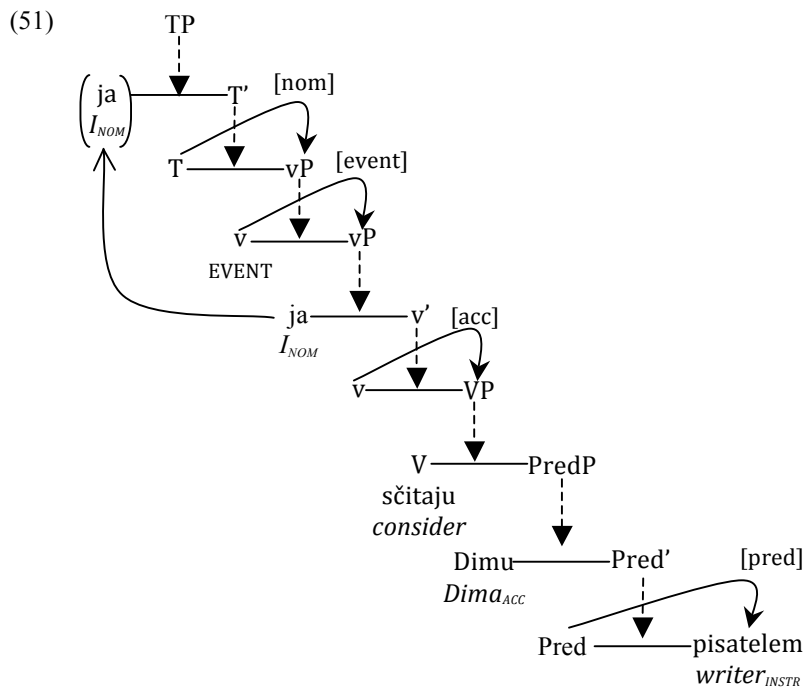
Thus, if both [pred] and [event] are assigned to an element, this element is marked with instrumental case. If either of these features misses, however, other rules will be invoked. In other words, both Pred and an overt verb have to be present for instrumental case to be spelled out.

The case marking patterns in Russian predication can then be illustrated by the simple structure in (50), representing example sentence (47d), and the complex structure in (51), which represents sentence (47a), in combination with the ranking of vocabulary insertion rules in (49):

- (49) [pred, event] → INSTRUMENTAL
 [acc] → ACCUSATIVE
 [nom] → NOMINATIVE



Here, the predicate receives two relevant features: [pred], assigned by the Pred-head and [nom], which T assigns to its sister PredP and is then distributed over all the elements in this phrase, including the predicate. Since the predicate does not receive an [event]-feature, the highest ranked rule in (49) does not apply. Therefore, the third rule is invoked and the predicate gets a nominative case marking. The same is true in equative contexts, where the Pred-head and therefore the [pred]-feature is absent. The situation changes if an overt verb is present, as in (47a):



Here, the small clause PredP is taken as a complement by the verb *sčitaju*, ‘consider’. This verb projects two little vPs. The first assigns [acc] to its sister, VP, and is used to merge with the verb’s subject, which ends up in its specifier. The second vP is present because the verb indicates an event. In this phrase, the little v-head therefore assigns an [event]-feature. After that, T is merged to the highest vP and assigns the [nom]-feature to it. Finally, the subject remerges with T’ and therefore sits in SpecTP in the end.

The predicate now receives four relevant features: [pred], [acc], [event] and [nom]. Since both [pred] and [event] are present, the highest ranked rule in (49) applies and the predicate is spelled out with instrumental case morphology. The subject of PredP has all the features except [pred]. This violates the condition of the first rule, but the second rule can be applied. Thus, this element is spelled out with accusative case. A similar situation arises in copular clauses with an overt verb. The copula projects an eventive little vP and [event] is assigned, resulting in instrumental case for the predicate.

Now, let us get back to the Russian case marking patterns in appositional constructions. The question that has to be answered is why Russian appositions are marked with the same case as their anchors, even if a high adverb is present in the apposition. To put it the other way around, why are appositions with a clearly predicative character not spelled out with instrumental or nominative case?

If we want to answer this question, the first thing to note is that the case feature assigned to the anchor is clearly not blocked by a barrier like CP, but is distributed over the appositional structure as well. This leads to the conclusion that the predicational structure of these Russian appositions does not project up to CP. High adverbs in appositions have to be located below the ‘CP space’ then. Some data suggest that CP cannot be present in Russian appositions at all. English appositions may contain a subordinator like *though*, which indicates the presence of the C-head. In Russian, on the other hand, this is impossible. Consider the following examples:

- (52) a. Bill-u, xot’ on i ne javlja-et-sja bol’sh-im ljubitel-em sport-a,
 Bill-DAT though he and NEG be-3SG-REFL big-INSTR fan-INSTR sport-GEN
 dal-i bilet na xokejnyj match.
 gave-PL ticket on hockey match
 ‘They gave Bill, though he is no big sports fan, a ticket for a hockey match.’
- b. Bill-u, ne samo-mu bol’sh-omu ljubitel-ju sport-a, dal-I bilet
 Bill-DAT NEG most-DAT big-DAT fan-DAT sport-GEN gave-PL ticket
 na xokejn-yj match.
 on hockey match
 ‘They gave Bill, not the biggest sports fan, a ticket for a hockey match.’

In (52a), the paratactic clause with the subordinator *xot’*, ‘though’, contains both an overt pronoun and a copula. If these elements are left out, resulting in an appositional construction, the sentence becomes ungrammatical. If the subordinator is left out as well, as in the appositional construction in (52b), the sentence becomes grammatical again. Note that the nominal predicate in the paratactic clause in (52a)

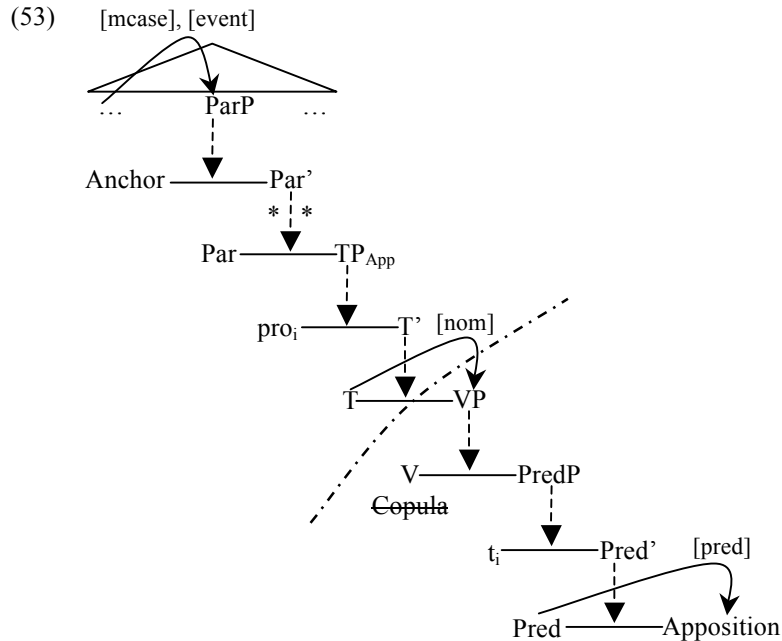
is marked with instrumental case, just as would be the case if it would be an independent sentence. Here, CP blocks the case features from the matrix clause. The apposition in (52b), on the other hand, agrees in case with its anchor, just as in the other appositional constructions.

It seems, then, that the appositional structure in Russian cannot project CP and therefore does not block case features from the matrix, including the anchor. The question remains, however, why attributive appositions are not marked with instrumental case. After all, the rule that spells out instrumental morphology on predicative elements is ranked higher than the rule that spells out accusative case, for example. Now, remember that this rule requires the presence of both [pred] and [event]. In attributive appositions, [pred] should be present. After all, these appositions resemble predicates in a predicational copular relation. That leaves us with only one possibility to explain why instrumental case is not spelled out on these appositions: the [event]-feature has to be absent.

It is reasonable to assume that appositions indeed lack the [event]-feature. Above, we saw that this feature is assigned by (a head in the functional projection of) an overt verb. In appositions, an overt verb is clearly missing. Yet, the host clause usually does involve an overt verb. If case features from the host are not blocked by CP or any other barrier, one might expect that an [event]-feature assigned in the higher clause reaches the apposition as well, which would lead to the spell-out of instrumental case.

To explain that this is not what happens, I think it is important to distinguish between different types of features. Different features may have different domains. Clearly, the domain for case features is CP. Therefore, CP functions as a barrier for these features. The [event]-feature, however, is not a real case feature. It only indirectly may influence case marking by a rule like (48). Since it is related to an event, however, its domain is smaller than that of case features: TP, little vP or maybe even big VP. Since these phrases are present in Russian appositional structure, the [event]-feature from the matrix is blocked and prevents that instrumental case is spelled out on the apposition.

Thus, the structure of Russian appositional construction can schematically be represented with the following tree:



Here, *mcase* stands for matrix case, a case assigned by some element in the matrix. Note that the barrier VP does not block the case features, but only the [event]-feature. Therefore, the apposition in the end receives three relevant features: [mcase], [nom] and [pred]. Following the ranking of the rules in (49), spell-out marks the apposition with the case corresponding to [mcase], thus agreeing with the anchor.

Interestingly, I found one exception where Russian appositions do not agree with their anchor. This concerns appositional structures with the Russian adverb *kstati*, ‘by the way’. These appositions are marked with nominative case:

- (54) *Žuri prisudilo Maše, kstati studentka/*studentke našego*
 Jury gave Maša:DAT, by.the.way student:NOM/DAT our:GEN
fakul'teta, priz zritel'skix simpatij.
 faculty:GEN, prize spectators' sympathies
 ‘The jury gave the spectators’ price to Maša, a student from our faculty
 by the way.’

If *kstati* is left out in this example, the apposition has to agree with the anchor again: the dative form *studentke* should be used, as in any other appositional construction. This can be explained if appositional structures with *kstati*, unlike other Russian appositional structures, project CP. In that case, CP blocks case features from the matrix, including the ones assigned to the anchor. The [event]-feature from the matrix is blocked as well. The only relevant feature on the apposition is then [nom],

which is assigned by the T-head within the appositional structure. Therefore, the apposition is marked with nominative case.

In sum, Russian appositions generally show an agreement pattern with the case marked on their anchors, even if predicational structure is clearly present. This pattern contrasts with Russian predicates, which are marked with instrumental or nominative case. I argued that this is so because CP is generally not projected in Russian appositional structures. Therefore, there is no barrier for case features from the matrix clause. I also argued that the spell-out of instrumental in Russian predicates involves an [event]-feature, assigned by an overt verb. Since appositional structure does not involve an overt verb, this feature is not assigned within this structure. [event]-features from overt verbs in the matrix clause are blocked by TP or little vP rather than by CP and therefore do not reach the apposition either. Thus, I explain the general agreement pattern in Russian appositional constructions.

6.8 Czech

In the other Slavic language in my data collection, Czech, the situation looks slightly different. To start with the similarities, the general picture for case marking in appositional constructions is almost identical: the apposition agrees in case with the anchor, both in identificational and in attributive constructions:

- (55) a. Astronauti dali Arabelle, zahradnímu pavoukovi, vodu
 astronauts gave Arabelle:DAT garden spider:DAT water:ACC
 a maso, dobrou pavoučí pochoutku.
 and meat:ACC good spider delicacies:ACC
 ‘The astronauts gave Arabelle, a garden spider, water and meat, a nice spider meal.’
- b. Deinopida, pavouk, zahlédl kořist svými očima, dvěma
 Deinopida:NOM spider:NOM spotted prey his eyes:INSTR, two
 obrovským složenými očkami.
 enormous compound lenses:INSTR
 ‘Deinopida, a spider, spotted a prey with his eyes, two enormous compound lenses.’

Again, this resembles the agreement in case between the first and second conjunct in coordinate constructions in this language:

- (56) Astronauti dali Arabelle vodu a maso.
 astronauts gave Arabelle water:ACC and meat:ACC
 ‘The astronauts gave Arabelle water and meat.’

Just as in Russian, the apposition even agrees in case with the anchor if the appositional structure contains a high adverb, such as *kdysi*, ‘once’ or *zjevně*, ‘obviously’:

- (57) a. Dokument o Karlovi, *kdysi feťákovi*, ukazuje, jak
documentary about Karel:LOC once junky:LOC shows how
se mu změnil život poté, co skoncoval s drogami.
REFL him changed life after COMP finished with drugs
'The documentary about Karel, once a junky, shows the change in his
life after he quit drugs.'
- b. Petr byl v tom kvízu poražen Marií, *zjevně velmi*
Petr was in that quiz beaten Marie:INSTR obviously very
intelligentní dívkou.
intelligent:INSTR girl:INSTR
'In the quiz, Petr was beaten by Marie, obviously a very intelligent girl.'

Czech differs slightly from Russian in the case marking of predication. Unlike in Russian, Czech copular clauses obligatorily contain an overt copula. In copular clauses, the predicate is usually spelled out with nominative case morphology (58a). Instrumental case marking in this context is sometimes possible as well, but has an archaic flavor and generally indicates stage level predication (58b). Like in Russian, nominal predicates in other contexts get instrumental marking. I give examples of the predicate of a small clause complement (58c) and a predicate with an infinitival copula (58d):

- (58) a. Ona je učitelka.
She is teacher:NOM
'She is a teacher.'
- b. Na letním táboře je vždycky učitelkou.
at summer camp is always teacher:INSTR
'At the summer camp, she always {is / takes the role of} a teacher.'
- c. Prezident ho jmenoval profesorem.
president him appointed professor:INSTR
'The president appointed him a professor.'
- d. Pøíkázala mi být vybíračem vstupného
ordered me:DAT be:INF collector:INSTR entrance.fee:GEN
'She ordered me to be an entrance fee collector.'

It is hard to tell the exact difference between the choice for instrumental or nominative on predicates in Russian and Czech. The differences in meaning are often subtle. It is reasonable to assume that some minor adjustments to the feature system will capture these differences. For example, the Czech copula does not always lead to the assignment of an [event]-feature, but only in the case of stage level predication. For a full understanding of the differences in case marking on predicates in the Slavic languages more research is necessary. For now, I will leave this issue aside.

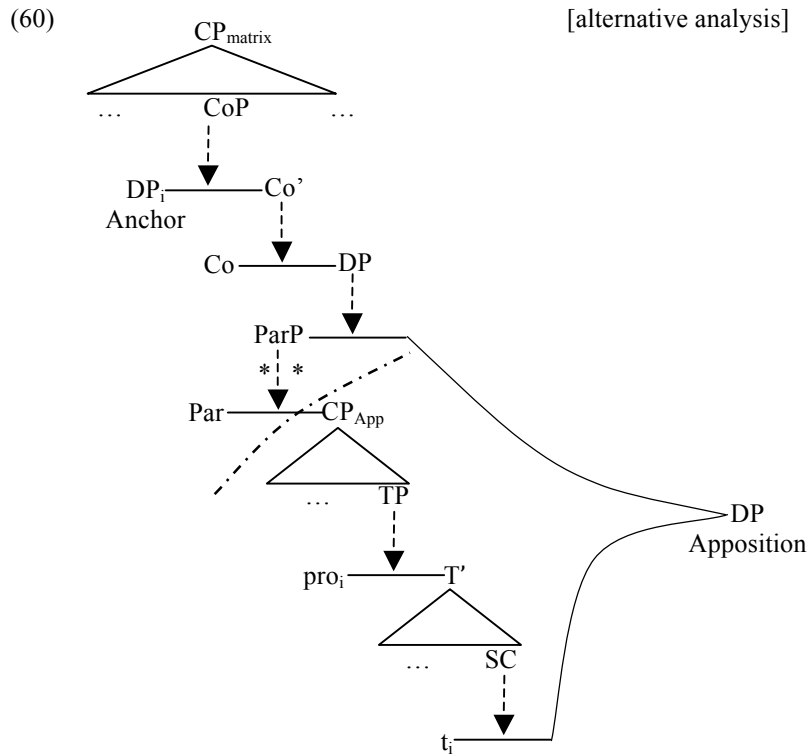
6.9 Alternative analysis: multidominance

The Czech data in my collection contain one complication I want to point out here. Note once more that the anchor and the apposition agree in case in Czech. Following the model I proposed so far, this means that no barrier for case features is present in the appositional structure here. In other words, CP must be absent again. This is not unambiguously confirmed by the data, however. Whereas in Russian appositions with a subordinator are ungrammatical, in Czech one of the two native speakers I asked accepted the subordinator *ač*, ‘though’ in these constructions and even in that case chose case agreement between the anchor and the apposition:

- (59) % Na narozeniny dali Bedřichovi, *ač* žádnému velkému
 For birthday gave:3PL Bedrich:DAT though no:DAT big:DAT
sportovnímu fandovi, lístek na hokejový zápas.
 sports:DAT fan:DAT ticket for hockey match
 ‘They gave Bedrich, though no big sports fan, a hockey match ticket for
 his birthday.’

If this pattern is indeed accepted, it poses a challenge for the theory I developed here. The presence of the subordinator clearly indicates the projection of CP, which in its turn is a clear barrier for case features. How can these data be explained? One interesting way to go would be to argue that the anchor and the apposition are involved in an additional, closer relation to each other. In Heringa (2011), I argue for such an analysis. In the model I propose there, the apposition is related to the anchor in two ways: via a predicational structure and parenthesis as described above and more directly via constituent coordination. Thus, the apposition is merged twice and accordingly has two sisters and is involved in two dominance relations. In other words, the analysis suggested here is a multidominance approach¹⁰. See Heringa (2011) for more details on such an account for appositional constructions. The following tree schematically represents a multidominance structure for appositional structures:

¹⁰ In the literature, this type of construal has been called *grafting*, *parallel merge* or *sharing* (see, for example, Van Riemsdijk 2006, Citko 2005, Guimarães 2004). See Carnie (2008) or De Vries (2009b) for an overview. De Vries (2009b) also provides a worked-out procedure on the basis of inclusion and sisterhood to spell out multidominance structures like these.



Here, $ParP$ is left-adjoined to the appositional DP , which means that the appositional DP is merged twice: once with the pro -subject of the appositional small clause (which moves to $SpecTP$ later on) and once with $ParP$. Thus, this DP is multiply dominated: by SC and by the higher DP . This higher DP is coordinated with the anchor DP . Even though the appositional CP within $ParP$ blocks case features from the matrix CP , these features do reach the appositional DP via the coordination structure. This explains that case features assigned by some head in the matrix can still be spelled out on the apposition, even though the appositional structure projects CP .

One of the advantages of this multidominance analysis is the presence of two connecting heads in the structure: Co and Par . This could explain why appositions involving a coordinator are often accompanied by some special particle, as shown in section 4.7.1. I repeat the relevant examples below:

- (61) a. Piet gaat een auto, *en wel een Porsche*, kopen. [Dutch]
 Piet goes a car and PRT a Porsche buy
 'Piet will buy a car, *namely a Porsche*.'

- b. Marie leest een boek over lexicalesemantiek,*of(te)(-wel)* [Dutch]
 Marie reads a book on lexical semantics or-PRT
woordbetekenis.
 word.meaning
 ‘Marie reads a book on lexical semantics, *or the meaning of words.*’
- c. Die Singvögel, *und zwar Amsel, Drossel, Fink und Star,* [German]
 the songbirds and PRT blackbird thrush finch and starling
 sangen eifrig.
 sang zealously
 ‘The songbirds, *namely the blackbird, the thrush, the finch and the starling,* sang zealously.’
- d. Ivan zivi u Sjedinjenim Drzavama *ili(-ti) Americi.* [Croatian]
 Ivan lives in United States or-PRT America
 ‘Ivan lives in the United States, or America.’
- e. Spojené Státu Americké, *nebo-li Amerika, ...* [Czech]
 United States American or-PRT America
- f. Viděl jsem něco krásného, *a to zlat* [Czech]
 saw AUX-1SG-PAST something beautiful and PRT golden
dům.
 house
 ‘I saw something beautiful, *namely a golden house.*’

In an analysis involving both a Co- and a Par-head, the coordinators might be in Co and the ‘appositional’ particles in Par.

Another advantage of a multidominance approach as sketched here is that it explains the obligatory adjacency of anchor and apposition discussed in section 4.1 better. In a CoP-structure, the conjuncts are always in the specifier and the complement of the same head, thus forcing adjacency. Though the anchor and the apposition are in the specifier and complement of ParP in my main proposal, a ParP-structure in general does not require this. Only anchored parentheticals are related to a matrix element in this way. In non-anchored parentheticals, ParP maybe adjoined to any element in the sentence.

On the other hand, multidominance obviously complicates the structures for appositional constructions a lot. It is questionable whether such a complication is really necessary and whether the advantages outweigh the disadvantages. If this analysis would be explored in future research, one should bear this question in mind.

6.10 Conclusion

In this chapter, I showed that case marking patterns give a better insight in the relation between the anchor and the apposition in an appositional construction. Whereas case agreement between the anchor and the apposition is the most common and therefore the best-known pattern, it is definitely not the only option. I argued that this is due to the complex relation between anchor and apposition, which does not only resemble coordination, but also involves a more or less elaborated predicative or even clausal structure.

This does not become clear if only case-poor languages like English and Norwegian are considered. In these languages, only pronouns get case marking and there are only two cases: ‘nominative’ and ‘accusative’. Appositions often get ‘accusative’ case marking and in this respect resemble both second conjuncts and nominal predicates. It is very well possible that the ‘accusative’ form in these languages has to be analyzed as a relational case, marking the dependency on another, nominative marked DP or as an emphatic case, expressing that the pronoun has an emphasized position in the sentence. At least, these data do not provide more information on the appositional relation with respect to the role of coordination-like and predicative structure.

Japanese shows case marking only once on the second element of the construction. Thus, it marks the whole construction as one constituent, just as in coordination. Alternatively, one could say that the first element is the apposition and does not get case marking because it functions as a predicate. I argue that the apposition is always the second element and therefore reject this alternative idea. The data from Hungarian, Icelandic and Japanese show the common agreement pattern between anchor and apposition. Yet, Hungarian and Icelandic are interesting, because they lack one semantic type of appositions: attribution. In chapter 4, we saw that the distinction between identificational and attributive appositions is related to the difference between two types of copular clauses: predicational and equative. Thus, the general absence of attributive appositions in Hungarian and Icelandic indicates that the underlying predicational structure plays an important role in appositional constructions. Yet, the ultimate reason for the lack of attributive appositions in these languages remains somewhat unclear.

Like Hungarian and Icelandic, Romanian distinguishes between identificational and attributive appositional constructions. Identificational appositions again show the familiar pattern of case agreement with the corresponding anchors, but attributive appositions are marked differently. They get nominative case morphology, which I analyze as predicative case marking. Thus, case marking in Romanian hints at the role of the predicative structure in appositional constructions. I argue that the nominative case on Romanian attributive appositions is the result of a T-head assigning a nominative feature that overrules the common agreement pattern. To get this working, I assume that one element may receive multiple case features (not necessarily involved in case marking only) and that morphological rules are used to decide how the combination of features on an element is spelled out. Furthermore, I assume that case features are not assigned to only one element, but to the sister of the feature assigning head and every element included in this sister. For this theory of case marking, I follow Matushansky (2008, 2010). This system immediately explains the agreement pattern in coordination and appositional constructions. After all, the two conjuncts and the anchor and the apposition are clearly part of the same structure and therefore receive the same case features. Thus, case agreement between the anchor and the apposition can only be overruled if there is additional structure between these two elements that may either block features from the higher structure or assign features to the lower structure. Both options are principally possible in Romanian. An additional head involved in predication may assign a feature that triggers a rule for spelling out the predicative nominative. Alternatively, one might assume that attributive appositions have a

more elaborate structure, including CP, which functions as a barrier for case features from the host sentence.

Following this case marking system, it is clear that variation in case marking on appositions can only be ascribed to variation in the structure that relates the anchor to the apposition. In this respect, German forms an interesting example. Though case agreement is a very common pattern in German appositional constructions, some native speakers accept a non-agreeing nominative on attributive appositions, like in Romanian. More importantly, however, the non-agreeing nominative is obligatory for all native speakers of German if the apposition contains a high adverb or a subordinator. I argue that this pattern indicates that the predicative structure in the appositional construction is rather elaborate in these cases, involving both TP and CP. The T-head assigns a nominative case feature, which in the end leads to the spell-out of nominative case morphology on the apposition. The CP functions as a barrier for the case features from the matrix and thus prevents the case agreement pattern. After all, following the case marking system proposed here, a nominative feature is present on almost all elements in a normal German sentence (because the T-head appears rather high in the structure and the feature is distributed over all structure below it) and should only be spelled out on an element if no other case feature is present, for example on primary predicates. In other words, the morphological rule that causes the spell-out of the nominative form has a low ranking. Thus, the nominative feature from the appositional T-head is only spelled out because the case features from the host sentence are blocked by the appositional CP.

Another interesting pattern in German is the possibility for some speakers to use dative case marking for appositions with genitive or accusative marking on the anchor. I argued that this pattern is an example of partial agreement, because it only occurs if the case marking on the anchor is oblique. Therefore, the dative on these appositions can be analyzed as a default oblique case. This default oblique dative also occurs on second conjuncts in some cases, which again confirms the resemblance between apposition and coordination.

At first sight, the case marking pattern for Russian seems straightforward: the apposition always agrees with the apposition. Yet, in light of the data we found in German, this pattern is surprising. Even if a high adverb, and therefore probably a T-head, is present, the apposition does not receive nominative case. I explain this by arguing that Russian appositional structures never project up to CP and therefore do not block the case features from the matrix. Thus, even though a nominative feature is assigned by the appositional T-head, it does not lead to nominative morphology, because the case features from the matrix reach the apposition as well and the rules leading to their spell-out have a higher ranking. The absence of CP in the Russian appositional structure is confirmed by the impossibility to use a subordinator in appositions.

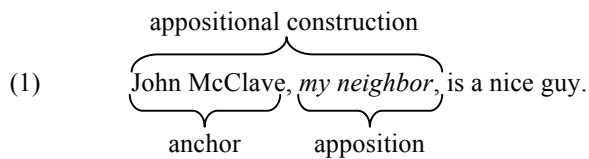
Yet, the situation in Russian is even more complex, because one also has to explain why the apposition does not receive the case marking for small clause predicates: instrumental. The rule that triggers instrumental case morphology on small clause predicates has to be highranked, since these predicates appear low in the structure and will have all kinds of other case features. I argue that they need one extra feature, [event], assigned by an overt verb and therefore absent in the

appositional structure. Though this feature is assigned in the matrix, it does not reach the apposition because it is blocked by the appositional VP.

Finally, I show that the Czech case marking pattern is only slightly different from the Russian situation. Yet, a problem appears, because some Czech speakers allow subordinators in appositions, indicating the presence of a CP barrier for case features from the matrix. Even in this case, the apposition agrees in case with the anchor. As a solution for this problem, I suggest an alternative analysis in terms of multidominance, where the apposition is related to the anchor not only via a clausal structure, but also more directly via constituent coordination. Thus, the case features from the matrix can reach the apposition even though an appositional CP is present. More research would be necessary to find out whether the advantages of such a solution outweigh the complication of the structure, however.

7. Conclusion

In this thesis, I investigate appositional constructions, as illustrated in (1), from a general linguistic perspective, but focusing mainly on the syntactic structure.



In my opinion, the key to a better understanding of these constructions is in studying the relation between its two main elements: the anchor and the apposition. This relation also functions as the link between the apposition and the host sentence in which it occurs, since the anchor is part of this host. I argue that this relation is so special because it has an ambivalent character. On the one hand, appositions have a rather close relation with their anchor: they form a constituent together. On the other hand, the connection between the apposition and its host is rather loose: the apposition provides its own, independent proposition.

I argue that this ambivalent nature of appositional constructions originates in syntax, but is also reflected in phonology, semantics and morphology. Phonologically, appositional constructions are characterized by so-called ‘comma-intonation’: intonational boundaries between the apposition and the matrix, expressed by pauses, but also changes in pitch, pitch range or speech rate. These boundaries give the apposition its own, independent intonation contour. Yet, this contour shows tonal subordination to the matrix: it reduplicates the tonal pattern of the anchor at a lower voice level or a compressed pitch range.

Semantically, the appositive content is interpreted separately from the matrix content. The appositional construction provides its own proposition: BE (anchor, apposition). This proposition is not overtly there, but is implied from the conventional meaning of words: it is a conventional implicature. Though the appositive message is thus separated from the main message of the sentence, it is related to this main message as an aside. It provides more information about a particular element in the host: the anchor. The appositional proposition is less important than the main proposition, but it is not taken for granted as part of the common ground of the speaker and the hearer. Rather, the speaker uses it to give the hearer new information.

Morphologically, the paradoxical nature of the appositional relation is expressed in variation in case marking on the apposition within and across languages. Often, the apposition agrees in case with the anchor. There are also situations, however, where the apposition is marked with a special, independent case in some languages, often the nominative. I argue that these different case marking patterns are the result of different relations between the anchor and the apposition.

Syntactically, the close relation between the anchor and the apposition is expressed in that the two elements form a constituent together. I argue that

independence of appositions with respect to their host follows because the apposition is not c-commanded by the anchor or other elements higher up in the matrix. This seems contradictory, since constituency and c-command are both taken to follow immediately from the basic operation Merge. After all, two merged elements form a constituent together and an element c-commands the structure it is merged to: its sister and everything included in that sister via dominance. In order to explain that an apposition forms a constituent with its anchor and yet is not c-commanded by that anchor, I use a special type of Merge: supplementation Merge or sup-Merge. In contrast to traditional Merge, now called dominance Merge or dom-Merge, sup-Merge does not lead to dominance relations, including c-command. Thus, sup-Merge always leads to special relations between elements. On the one hand, it connects elements just like dom-Merge, but on the other hand, it blocks c-command relations, leading to independency of the connected elements.

The apposition and the anchor are not sup-merged directly. Rather, the appositional structure is sup-merged to a head Par. The Par-head functions as the trigger for sup-Merge and also triggers the special phonology and semantics later on. Thus, the anchor and the appositional structure are in the specifier and the complement of ParP respectively. In this sense, appositional constructions resemble coordination, where the constituents are in the specifier and complement of a CoP.

Yet, the ParP-structure is not the only syntactic relation between the anchor and the apposition. I argue that the appositional structure in the complement of ParP is rather complex. In particular, it is a clausal structure involving a predication relation. The subject of this predication relation is a little pro that represents the anchor. The predicate is the apposition itself. The clausal appositional structure may contain just little pro and the apposition, forming a small clause, but it may also be a more elaborate structure including functional projections like TP and CP. This clausal structure represents the appositional proposition.

Thus, the apposition is related to the anchor both via predication and via the coordination-like ParP. This explains the variation in case morphology on the apposition. The coordination-like structure leads to the common agreement pattern, but in some contexts the predicational structure leads to predicative case, usually the nominative. I argue that these contexts are especially related to the presence of TP and CP in the predicational structure, because the T-head assigns nominative case and CP functions as a barrier for case marking.

To conclude, the syntactic relations between the anchor and the apposition are rather complex, involving a special type of Merge and both predication and coordination-like structure. This explains the ambivalent character of appositional constructions. Below, I present a chapter-by-chapter overview of this dissertation and discuss remaining questions for further research.

1 Introduction. In this chapter, I introduce appositional constructions on the basis of the existing literature on this topic. In the literature, the term apposition has been used for a whole range of constructions. I explicitly exclude so-called close appositions from my research. I show that the appositional constructions I investigate here differ from these close constructions by so-called comma-intonation, a non-restrictive semantics and several syntactic characteristics. The latter show more flexibility in the structure for both the anchor and the apposition.

After that, I discuss some conditions of equivalence between the anchor and the apposition that have been used in the literature as criteria for appositional constructions. I argue that these conditions are too strict. In this thesis, I follow the idea that the anchor and the apposition relate to the same referent, without restricting this relation any further. As stated before, this relation between the two main elements of appositional constructions is central to this dissertation. In the literature, this relation has been characterized both as coordination and as subordination. I list the arguments for both views and argue that both are right, as becomes clear in the following chapters. Finally, I list several related constructions, such as appositive relatives, absolute constructions, corrections and appositive epithets. I show that these constructions are all structurally different from appositional constructions. Yet, it would be interesting to compare some of these constructions in more detail in order to get a better understanding of what exactly defines a linguistic construction and what parameters there are to build different constructions.

2 A semantic classification. Several semantic classifications for appositional constructions have been proposed in the literature. There are several similarities, but all proposals lack a clearly defined basis. In my opinion, such a classification should be based on the relation between the anchor and the apposition. In order to define such relations, I characterize both related elements on a specificity scale for the interpretation of noun phrases, ranging from generic or non-specific to proper name. The classes are then defined in terms of the relative specificity of anchor and apposition. An apposition can be less specific, equally specific or more specific than its anchor. This leads to the classes of *attribution*, *identification* and *inclusion*, respectively. I investigated all possible combinations of anchors and appositions as characterized on the specificity scale. I give examples for all existing combinations and explain why the remaining combinations do not lead to grammatical appositional constructions. I also show that there is a clear correlation between the semantic classes and possible apposition markers. These elements explicitly express the relation between the anchor and the apposition and therefore can be used to distinguish between the semantic classes. Yet, one class usually does not have such markers: attribution. In future research, one might want to find out why markers are not used to express this relation.

3 The secondary proposition: clausal predication. I argue that the relation between the anchor and the apposition is interpreted as a complete message from the speaker, separate from the matrix proposition. Though the propositions are independent and have their own truth-value, the appositional proposition is less important than the matrix proposition: it only provides some extra information. Basically, this secondary message can be described as '[anchor] is [apposition]'. The two propositions can influence each other's content via discourse relations. The appositional message is always attributed to the speaker and not to the matrix's subject, for instance. Though it is a less important message, it is not taken for granted. Rather, the speaker uses it to provide the hearer with new information about a particular element in the host: the anchor. The appositional message is not overtly present, but implied from the conventional meaning and composition of words: it is a conventional implicature. Yet, I argue that this is not merely a semantic or

pragmatic phenomenon, but follows from a rather elaborate syntactic structure that connects the anchor and the apposition. This concerns a predicational structure that may be expanded to a full CP. First, I show that appositions behave as nominal predicates and not as arguments. Second, so-called complex appositions may contain overt subjects, referring to the anchor. I argue that simple appositions involve such a subject as well, namely a covert pronoun: little *pro*. Third, the semantic types of appositions correlate with types of copular clauses: attributive appositions are related to predicational copular clauses and identificational appositions are related to equative copular clauses. Fourth, appositions can have their own tense. This idea is supported by the fact that appositive clauses may show contemporaneity with a reference point in time different from the temporal reference of the matrix. Also, appositive clauses may contain temporal adverbs. The presence of tense also confirms the idea of a subject in the appositional clause, since this is required by SpecTP. Fifth, the possible presence of high adverbs and in particular point of view adverbs in appositions indicate that the appositional structure may contain functional projections up to CP. This is confirmed by the possible presence of subordinators and independent illocutionary force for the appositional message.

At the beginning of chapter 3, I show that appositional constructions from the type of inclusion are different from identification and attribution. For this class, the arguments in favor of the presence of a copular structure fail. Therefore, I argue that inclusive constructions should get a different analysis and suggest that they involve sentence coordination. In order to validate this suggestion and extend it to a more detailed analysis, more research is needed. Also, it should be investigated in more depth how it is possible that these constructions fit in the semantic classification so clearly and yet seem to have a different syntactic structure.

4 Parenthesis. Central to this thesis is the ambivalent character of the relation between appositions and their hosts. On the one hand, appositions are closely related to the anchor, an element of the host sentence. On the other hand, appositions are only loosely related to the host sentence. This paradox is explained in chapter 4. First, I list some phenomena that show the apposition's independency. Appositions are separated from the host by comma intonation, they are ignored in syntactic processes like agreement and pronoun interpretation, the appositive proposition can enter into discourse relations with the main proposition, the apposition may have its own illocutionary force, temporal reference and subordinators of a non-integrated type, appositions cannot occur in the focus of a cleft sentence and do not function as arguments of the main predicate, they are outside the scope of quantifiers in the host and show condition C-effects. I argue that these characteristics put appositions in the class of parentheses, together with appositive relative clauses, amalgams and parentheticals, for instance. On the other hand, appositions show tonal subordination with respect to the host and have to be adjacent to the anchor. Also the appositive message is just an aside to the main proposition. These aspects illustrate the integration of appositions in the matrix. After this, I show that the appositional constructions involve two phenomena that seem to contradict the independence of appositions at first, but actually turn out to confirm this independence, since these phenomena occur with separate sentences as well. First, I argue that the covert subject pronoun in the appositive clause argued for in chapter 3 functions as an E-

type pronoun. Second, I argue that appositional constructions may involve modal subordination in certain contexts.

After expanding on the parenthetical nature of appositions, I give an overview of analyses for parentheticals from the literature. These approaches can be divided in two main categories: orphanage and integration. Whereas orphanage approaches focus on the independence of parentheses, integration approaches underline the close relationship with the host. Clearly, both types of approaches have their own strengths, but fail to explain the strong point of the other. After evaluating several syntactic analyses, I also discuss the semantic alternative proposed by Potts (2005). I argue that such a purely semantic approach fails to account for the fact that independency phenomena are not only semantic in nature, but also syntactic and phonological.

After reviewing previous accounts, I develop my own proposal to explain the ambivalent relationship between parentheses and their hosts. I base my account on a special parenthetical type of syntactic construal, called supplementation. I start out with the idea that the anchor and the apposition form a constituent together and yet the anchor (or any other element higher up in the host) does not c-command the apposition. This can only be explained with a structure building operation that differs from standard Merge. I call this operation sup(plementation)-Merge and refer to the traditional operation as dom(inance)-Merge. Sup-Merge takes elements together forming constituents, but does not lead to dominance relations. Inclusion relations resulting from sup-Merge are called supplementation. Supplementation relations are less close than dominance relations, because they do not lead to c-command and related phenomena. I argue that sup-Merge is triggered by a special head: Par. This head is also used to connect the anchor and the apposition. The anchor is in its specifier and the appositional clause argued for in chapter 3 functions as Par's complement. Finally, I argue that ParP resembles CoP. In other words, appositional constructions resemble coordination. This is confirmed by the use of coordinators as apposition markers, the common pattern of case agreement between anchor and apposition, similar to the agreement between conjuncts, and the possibility of multiple appositions, just like coordination can involve multiple conjuncts.

The fact that coordinators are used as apposition markers leads to the idea that these markers are located in the Par-head. For some markers, I argue that this is indeed the case. Yet, markers like *namely* and *in other words* seem to be adverbs rather than coordinators and are therefore probably located in some functional projection in the appositional clause. For *in other words*, this is confirmed by the fact that it may also follow the marker *or*. A marker like *that is* seems to be the overt counterpart of the otherwise covert pronoun and copula in the appositional structure. In future research, one might investigate apposition markers in more detail and find out where exactly in the structure they are located. Particularly interesting in this respect is the fact that some markers optionally follow rather than precede the apposition. Furthermore, it is not clear how far the parallel between parenthetical construal and coordination goes. Anchored parentheses like appositions may indeed involve a CoP-like configuration, but other parentheses are much more flexible with respect to their position in the host. Note also that in my analysis the Par-head does not relate the apposition to the anchor directly, but to a clausal structure including

the apposition. This would violate a condition like the law of coordination of likes. Thus, the extent to which appositional constructions really resemble coordinate constructions remains a question for future research.

5 Appositional word order. My proposal that the anchor and the apposition are in the specifier and the complement of the Par-head respectively, predicts that the anchor always has to precede the apposition, since spec-final languages do not exist. If, on the other hand, an anchor would be a head modified by the apposition, one might expect that the apposition would precede the anchor in head-final languages like Japanese. In order to investigate the possible orders of anchor and apposition, I first consider some English absolute constructions, which at first sight look like inverted appositional constructions. I argue that these are really different constructions, however. Also, I show that in English appositions always follow their anchor. After that, I consider other languages. First, I discuss the existing literature on a related construction: appositive relative clauses. The discussion particularly focuses on Chinese and Japanese. There is a tendency in the literature towards the idea that appositive relatives always have to follow their anchor. Nevertheless, there are some data that apparently show the existence of prenominal appositive relatives. In particular, some Japanese pronominal relatives may include high adverbs, suggesting that they are appositive. After this, I discuss literature on Japanese appositions and add some new data from this language. Some people have claimed that appositional constructions do not exist in Japanese at all. I argue, however, that they do exist. These constructions are often translated in the inverse order, suggesting that Japanese appositions precede their anchors. Yet, in constructions with apposition markers, the marker clearly belongs to the second element and translations suggest that the order is the same as in English. I argue that the translations for the appositional constructions without markers are misleading and that Japanese appositions always follow their anchors, just like in English, in accordance with the analysis I proposed in chapter 4. Still, the present Japanese data on relative clauses and appositional constructions are not fully conclusive in this respect. Therefore, more research is needed in this respect and it should preferably be extended to include other strict OV languages, for example Turkish.

6 Case marking. Relations between the elements in a sentence are often expressed morphologically via case marking. This is also the case for the relation between the anchor and the apposition. Therefore, case marking patterns on appositions in several languages can shed more light on this complex relation. Case marking is particularly useful to find out more about the interaction between the coordination-like structure and the predicational structure. First, I consider the case-poor languages English and Norwegian, which use case marking only on pronouns. Appositions in these languages get the same case as second conjuncts and nominal predicates: apparently accusative. Thus, these patterns are in accordance with the idea that appositional constructions involve coordination-like and predicational structure. Also, case marking patterns in coordination and on predicates in these languages are very interesting in themselves and have received all kinds of analyses, such as default, relational or emphatic case. Yet, these patterns do not give more insight in the structure of appositional constructions. In this respect, the case-rich

language German is of more value. This language shows two important patterns: agreement between the anchor and the apposition and nominative case marking on the apposition. Case agreement is a common and well-known pattern. The appositional nominative is more interesting. I argue that this is a predicative case and follows from the predicational structure of the apposition, since it occurs especially in contexts where the predicative status of the apposition is emphasized, namely in case adverbs or subordinators are present.

In order to explain these patterns, I present a case theory where heads assign case features to their sister and every element included in that sister. Thus, several elements may receive a case feature from the same head and one element may receive several features from various heads. In this latter case, morphological rules are used to determine which case is spelled out. This system immediately explains the case agreement pattern, since the anchor and the apposition are part of the same constituent and therefore generally receive the same case features. The independent nominative on appositions is explained by a more elaborate structure for the appositional clause. In the case of agreement, the appositional clause is a small clause consisting of little *pro* and the apposition. In the case of the independent nominative, two functional projections are present: TP and CP. The T-head assigns the nominative case feature and the CP blocks the case feature assigned to the anchor. This CP-barrier is necessary because the rule for spelling out nominative case has a low ranking.

In Romanian, the independent nominative is more common than in German: it occurs on all attributive appositions. This can be explained by the presence of an extra feature that is assigned by a head in predicational structures that is absent in equative structures. Japanese, Hungarian and Icelandic all show the agreement pattern. Hungarian and Icelandic are special in the sense that they lack attributive appositions. Russian shows the agreement pattern on all appositions, even if high adverbs are present. Basically, I argue that this can be explained by the absence of the barrier CP in Russian appositional constructions. This is confirmed by the impossibility to use a subordinator in Russian appositions. The explanation is more complex, however, because Russian does not always use nominative as a predicative case. In most contexts, the instrumental is used on nominal predicates. I argue that instrumental is not spelled out on appositions because this requires a feature that is assigned by an overt verb, which is absent in the appositional clause. The feature might be assigned in the matrix, but is then blocked by the appositional VP.

Finally, the appositional case marking pattern in Czech is very similar to the Russian pattern. There is one problem here, however, because some speakers allow subordinators in appositions and even then choose case agreement with the anchor. I suggest an alternative analysis involving multidominance to solve this problem. In this analysis, the apposition is not only related to the anchor via the clausal structure, but also more directly via constituent coordination. This means that case features from the matrix can reach the apposition even if the appositional clause contains a CP. Using multidominance would lead to a much more complex structure, however. More research is necessary to see whether the advantages of such an approach outweigh the disadvantages. Another issue that needs more research is the absence of attributive appositions in Hungarian and Icelandic. In

order to explain the cross-linguistic case marking patterns on appositions, more knowledge about case marking on nominal predicates is needed. This general topic deserves extensive research in the future.

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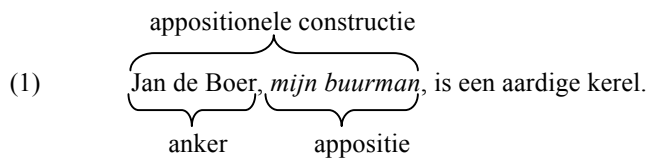
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Samenvatting in het Nederlands

In dit proefschrift onderzoek ik appositionele constructies, zoals in (1), vanuit een algemeen taalkundig perspectief, maar met het accent op de grammaticale structuur.¹



Ik ben van mening dat we deze constructies beter kunnen leren begrijpen door te kijken naar de relatie tussen de twee belangrijkste elementen in zo'n constructie: het anker en de appositie (ook bijstelling genoemd). Deze relatie vormt gelijk ook de schakel tussen de appositie en de zin die als gastheer voor de appositie fungeert. Het anker maakt namelijk onderdeel uit van deze zogeheten matrixzin. Ik betoog dat deze relatie bijzonder is omdat zij een ambivalent karakter heeft. Aan de ene kant hebben apposities een behoorlijk hechte relatie met hun anker: zij vormen samen een woordgroep. In (2) kan de appositie bijvoorbeeld alleen op de plaats van @, direct naast het anker, staan en niet op de plaats van de sterretjes:

- (2) * Piet @ heeft * vandaag * al * een * paar * quizen * gewonnen *.
Appositie: een slimme jongen

Aan de andere kant is de relatie tussen de appositie en de matrixzin eigenlijk behoorlijk vrij: de appositie voegt een geheel eigen boodschap toe, onafhankelijk van de boodschap van de rest van de zin. Die boodschap luidt ongeveer '[anker] is [appositie]', dus in (2) bijvoorbeeld 'Piet is een slimme jongen'.

Ik laat zien dat dit ambivalente karakter van appositionele constructies op verschillende taalkundige vlakken aanwezig is, maar zijn oorspong vindt in de grammaticale structuur. Op het vlak van de uitspraak vertonen appositionele constructies zogeheten 'komma-intonatie'. De grenzen tussen de appositie en de rest van de zin kunnen worden aangegeven door pauzes, maar veelal ook door veranderingen in de toonhoogte, het toonhoogtebereik of de spreeknelheid. Door deze grenzen krijgen apposities een onafhankelijk intonatiepatroon. Tegelijkertijd lijkt dit patroon wel op dat van het anker in de matrixzin, maar dan bijvoorbeeld zachter uitgesproken of met minder verschil in toonhoogte.

Op het vlak van de betekenis wordt de inhoud van de appositie los geïnterpreteerd van de inhoud van de matrix. Zoals eerder aangegeven levert de appositionele constructie een eigen boodschap: '[anker] is [appositie]'. Deze boodschap is niet expliciet aanwezig, maar wordt geïmpliceerd. Ik noem het daarom

¹ In deze samenvatting presenteer ik de resultaten van mijn onderzoek voor alle geïnteresseerden. Vakgenoten raad ik ook de meer gespecialiseerde Engelse introductie en conclusie aan en natuurlijk de afzonderlijke hoofdstukken voor inhoudelijke details.

een conventionele implicatuur, in aansluiting bij ander onderzoek. De appositionele boodschap staat dus in zekere zin los van de hoofdboodschap van de zin, maar fungeert wel als terzijde bij die hoofdboodschap. Zij geeft namelijk extra informatie over een bepaald element in de matrix: het anker. De appositionele boodschap is minder belangrijk dan de hoofdboodschap, maar wordt niet als vanzelfsprekend beschouwd op basis van de gemeenschappelijke kennis van spreker en hoorder. De spreker gebruikt deze boodschap juist om de hoorder nieuwe informatie te geven.

Op het vlak van de woordvorm blijkt het paradoxale karakter van de appositionele relatie uit variatie in naamvalsmarkering op de appositie binnen en tussen talen. Vaak krijgt de appositie dezelfde naamval als het anker, zoals in het Tsjechisch. Welke dat is hangt af van de toevallige grammaticale functie van het anker in de matrixzin, bijvoorbeeld onderwerp of meewerkend voorwerp. Maar in sommige talen, zoals het Duits of Roemeens krijgen apposities in bepaalde contexten een eigen, onafhankelijke naamval. Vaak is dat de nominatief. Ik betoog dat deze variatie in naamvalsmarkering het gevolg is van het feit dat er verschillende syntactische relaties tegelijkertijd bestaan tussen het anker en de appositie (zie verder).

Op het vlak van de grammaticale structuur blijkt zoals gezegd een hechte relatie tussen het anker en de appositie uit het feit dat deze twee elementen samen een woordgroep vormen. Niettemin bestaat er ook een zekere onafhankelijkheid van de appositie. Een aanwijzing daarvoor is dat bepaalde relaties met elementen in de matrix meer lijken op relaties over zinsgrenzen heen dan op relaties binnen zinnen. Vergelijk de volgende zinnen eens:

- (3) a. * Jan_i ontmoette Jan_i's vrouw voor het eerst op een taalkundige conferentie.
 b. Jan_i ontmoette Marie voor het eerst op een taalkundige conferentie.
 Marie is nu Jan_i's vrouw.
 c. Jan_i ontmoette Marie, *nu Jan_i's vrouw*, voor het eerst op een taalkundige conferentie.

De ster voor (3a) geeft aan dat deze zin ongrammaticaal is. Dit komt simpel gezegd doordat binnen de zin twee keer een naam gebruikt wordt om naar dezelfde persoon te verwijzen (de index *i* geeft aan dat het twee keer om dezelfde Jan gaat). Binnen de zin moet de tweede keer eigenlijk naar deze persoon verwezen worden met een voornaamwoord, in dit geval *zijn*. In een vervolgzin, zoals in (3b), kan vaak wel een naam gebruikt worden om naar een persoon uit de vorige zin te verwijzen. In de appositie in (3c) kan ook met een naam verwezen worden naar een eerder in de zin genoemde persoon. In dat opzicht lijkt het dus alsof de grens tussen anker en appositie een zinsgrens is. Ik betoog dat dit soort onafhankelijkheidseffecten bij apposities veroorzaakt worden door het ontbreken van een zogeheten c-commandeerrelatie.

Dat is vreemd. In het algemeen wordt aangenomen dat woordgroepen gevormd worden door de operatie Merge. Als je met Merge een element A toevoegt aan een element B, ontstaat een woordgroep, zeg C. Volgens de standaarddefinitie van Merge c-commandeert A in dit geval B. Als B zelf ook al een woordgroep is, c-commandeert A ook alle elementen die onderdeel uitmaken van B. Het bijzondere is nu dus dat het anker en de appositie een woordgroep vormen, terwijl de

c-commandeerrelatie tussen anker en appositie doorbroken wordt. Ik stel daarom dat er een tweede operatie bestaat die net als Merge woordgroepen vormt, maar geen c-commandeerrelaties oplevert. Die operatie noem ik sup(plementatie)-Merge. Het traditionele Merge noem ik dom(inantie)-Merge. sup-Merge zorgt dus altijd voor bijzondere relaties tussen de elementen van een woordgroep. Aan de ene kant zijn ze net zo hecht verbonden als elementen van andere woordgroepen, maar aan de andere kant zijn ze onafhankelijker, omdat de c-commandeerrelatie doorbroken wordt.

De appositie en het anker zijn niet direct met elkaar verbonden via sup-Merge. De appositionele structuur wordt via sup-Merge toegevoegd aan een element genaamd Par (voor parenthese). Par zorgt ervoor dat sup-Merge gebruikt wordt en zorgt later ook voor de speciale intonatie en interpretatie. Par kan impliciet zijn, maar kan ook uitgesproken worden als een appositie-markeerder, zoals *oftewel*. Par is dus een verbindend element tussen anker en appositie. In dat opzicht lijkt het op een voegwoord en de appositionele constructie lijkt op nevenschikking.

Maar de Par-structuur is niet de enige grammaticale relatie tussen anker en appositie. Ik betoog dat de appositionele structuur die met Par verbonden wordt vrij complex is. Het is een zinsachtige structuur waarin de zichtbare appositie fungeert als naamwoordelijk gezegde (predicaat). Het onderwerp van dit gezegde is een impliciet element dat verwijst naar het anker. Behalve dit impliciete onderwerp en de appositie als gezegde kan deze structuur ook bijvoorbeeld bijwoorden van tijd of onderschikkende voegwoorden bevatten. Deze zinsachtige structuur representeert de appositionele boodschap. Een voorbeeld is *Jan de Boer, destijds mijn buurman*.

Op deze manier zijn anker en appositie dubbel verbonden, via de zinsachtige structuur en via de nevenschikkingsachtige Par-structuur. Dit verklaart de variatie in naamvalsmarkering. De nevenschikkingsachtige structuur resulteert in de veelvoorkomende overeenkomst in naamval tussen anker en appositie. De zinsachtige structuur met naamwoordelijk gezegde resulteert in sommige contexten in een naamval voor naamwoordelijke gezegdes, vaak de nominatief. Ik betoog dat deze contexten vaak gekenmerkt worden door elementen die het zinsachtige karakter benadrukken, zoals tijdsgelateerde elementen.

Kortom, de grammaticale relaties tussen het anker en de appositie zijn vrij complex. Er wordt gebruik gemaakt van een speciale versie van de groepvormende operatie Merge en zowel een zinsachtige als een nevenschikkingsachtige structuur. Dit verklaart het ambivalente karakter van appositionele constructies. Hieronder geef ik een kort weer hoe het proefschrift is opgebouwd in hoofdstukken.

Hoofdstuk 1 introduceert appositionele constructies op basis van de bestaande literatuur over dat onderwerp. In de literatuur is de term *appositie* gebruikt voor een hele reeks constructies. Ik sluit zogeheten beperkende apposities expliciet uit van mijn onderzoek. Zoals hierboven beschreven staat de relatie tussen het anker en de appositie centraal in dit proefschrift. In de literatuur is er discussie geweest over de vraag of deze relatie geanalyseerd moet worden als nevenschikking of als onderschikking. Ik zet de verschillende argumenten op een rij en betoog dat in feite beide partijen tot op zekere hoogte gelijk hebben. Tot slot geef ik een overzicht van gerelateerde constructietypen en de verschillen met appositionele constructies.

In **hoofdstuk 2** bekijk ik de relatie tussen het anker en de appositie op basis van de betekenis. Ik beschrijf een classificatie waarmee appositionele constructies

worden opgedeeld in drie categorieën: identificatie, attributie en inclusie. Deze klassen zijn gedefinieerd aan de hand van een indeling van zowel het anker als de appositie op een specificiteitschaal. Zijn anker en appositie even specifiek, dan is er sprake van identificatie. Is de appositie minder specifiek dan het anker, dan hebben we te maken met attributie. Bij inclusie is de appositie juist specifiek dan het anker. De drie klassen zijn dus gebaseerd op drie verschillende soorten semantische relaties tussen het anker en de appositie.

Hoofdstuk 3 gaat vooral over de boodschap die de spreker over wil brengen met de appositie. Ik betoog dat de spreker de appositie gebruikt om secundaire informatie te verstrekken over een bepaald element uit de hoofdboodschap: het anker. Ik laat zien dat deze informatie altijd nieuw is voor de hoorder. Ook betoog ik dat deze boodschap niet alleen geïmpliceerd wordt op basis van de betekenis of de grotere context, maar ook impliciet aanwezig is in de grammaticale structuur. Uiteindelijk pleit ik dan voor een uitgebreide zinsachtige structuur waarin de appositie fungeert als naamwoordelijk gezegde en het anker gerepresenteerd is door een impliciet onderwerp.

In **hoofdstuk 4** kom ik aan de kern van het proefschrift: het ambivalente karakter van de relatie tussen de appositie en de matrixzin, inclusief het anker. De appositie lijkt tegelijkertijd geïntegreerd en onafhankelijk. Ik laat zien dat de appositie niet ondergeschikt is aan het anker of de rest van de matrix. Apposities behoren tot de speciale klasse van parentheses. Ik betoog dat deze klasse van constructies verbonden is met hun matrixzin via een speciale manier van grammaticale structuurvorming: supplementatie. Bovendien laat ik zien dat de zo gevormde structuur tussen het anker en de appositie lijkt op nevenschikking.

Hoofdstuk 5 behandelt de volgorde waarin anker en appositie verschijnen. De centrale vraag is hier of apposities altijd volgen op hun anker of dat ze er ook aan vooraf kunnen gaan. Ik bekijk deze vraag door te kijken naar verschillende talen, met name zogeheten hoofdfinale talen en in het bijzonder het Japans. Als omgekeerde appositionele constructies bestaan, zouden ze waarschijnlijk in dit soort talen voorkomen. Ik betoog op basis van de door mij gepresenteerde data dat apposities niet vooraf kunnen gaan aan hun anker.

In **hoofdstuk 6** kom ik terug op de vraag of de relatie tussen het anker en de appositie geanalyseerd moet worden als onderschikking of als nevenschikking. Deze vraag is gerelateerd aan een paradox tussen de hoofdstukken 3 en 4. Hoofdstuk 3 lijkt onderschikking van de appositie te ondersteunen (in de vorm van een zinsachtige structuur), terwijl hoofdstuk 4 juist in de richting van nevenschikking wijst. In hoofdstuk 6 maak ik gebruik van naamvalsmarkering op apposities in verschillende talen om meer licht te werpen op deze vraag. Talen gebruiken verschillende naamvalsmarkering voor nevenschikte elementen en voor naamwoordelijke gezegdes, vandaar dat deze data kunnen helpen om een beter inzicht te krijgen in de relatie tussen anker en appositie. Opnieuw bieden de data ondersteuning voor zowel onderschikking als nevenschikking. Ik laat zien hoe de ideeën uit de hoofdstukken 3 en 4 gecombineerd kunnen worden in één analyse en hoe deze analyse de naamvalsmarkering in de verschillende talen kan verklaren.

Tot slot vat ik mijn conclusies in **hoofdstuk 7** samen en bespreek ik een aantal resterende vragen die kunnen dienen als uitgangspunt voor toekomstig onderzoek.

Curriculum Vitae

Herman Heringa was born on September 13th, 1982 in Jos, Nigeria. He completed his secondary education in 2000 (Calvijn College, Goes). He continued his education at the University of Nijmegen (now called Radboud University Nijmegen), where he studied Linguistics (specialization Language and Speech Technology). He received his bachelor's degree in 2003 (cum laude) and his master's degree in 2005. From 2006 to 2010, he was employed as a PhD student at the Center for Language and Cognition Groningen (CLCG), University of Groningen. In 2008 he spent two months as a visiting PhD student at the University of Edinburgh, Scotland. This dissertation is the result of his PhD research. Herman currently works as an editor for c't magazine at the F&L Publishing Group in Nijmegen.