# A note on the projection of appositives*

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## 1 A projection problem for appositives

It is often descriptively noted that appositives are *scopeless* in the sense that they escape the scope of any operator that occurs in the sentence the appositive is anchored in (e.g. Potts 2005). For instance, the nominal appositive in (1) is interpreted outside the scope of the negation. That is, it entails that Jake is a famous boxer.

(1) It is not the case that Jake, a famous boxer, lives in Utrecht.

Nominal appositives (NAs) share this property with non-restrictive, or appositive, relative clauses (ARCs). The example in (2) also entails that Jake is a famous boxer.

(2) It is not the case that Jake, who is a famous boxer, lives in Utrecht.

It was noted by Wang et al. 2005, however, that there are cases where the scopal properties of appositive relative clauses (ARCs) and nominal appositives (NAs) diverge in interesting ways. Consider for instance the pair (3)/(4).

(3) If a professor, a famous one, publishes a book, he will make a lot of money.

(4) If a professor, who is famous, publishes a book, he will make a lot of money.

Both conditionals have a reading where *a professor* is interpreted as a specific indefinite. On that construal, the conditionals convey two things: (i) there is this professor such that if s/he publishes a book, s/he will make a lot of money; and (ii) the professor in question is famous. For (3), however, the most salient reading is one in which the NA is interpreted restrictively, yielding an interpretion synonymous to *if a famous professor publishes a book, he will make a lot of money.*

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This reading is absent from (4). In fact, the specific indefinite interpretation seems to be the only interpretation for (4).

There are two questions that need to be answered. The hard one is what exactly is responsible for the contrast between (3) and (4). I will have some speculations on this, but will not embark on a full-fledged attempt at answering this question in this squib. The second question, the one I want to focus on here in particular, is what accounts for the contrast between the wide-scope interpretation of the appositive in (1) and the narrow-scope interpretation in (3). In this paper, I will evaluate the recent literature on the semantics and pragmatics of apposition, applying the proposals to the puzzling case of (3). Although I will not be able to offer a definitive analysis, I will draw some conclusions on the empirical reach of some proposed mechanisms for apposition in the literature. Ultimately, I will argue that the scopal behaviour observed in (3) is to be seen part of the general heterogeneity of appositives, in particular those with indefinite anchors.

The structure of the paper is as follows. Section 2 gives a general introduction of the relation between the anchor and the appositive, focusing in particular on the alleged unavailability of quantified anchors. I discuss two types of theories of apposition: an account that treats appositives as predicates of the anchor due to Potts (2005) and an account that treats appositives as open propositions anaphoric to the anchor (del Gobbo 2007; Nouwen 2007). Such theories have no immediate explanation for the restrictive interpretation of (3). In section 3, I show that with the assumption of flexible attachment (Schlenker 2010a), an explanation does become available. Furthermore, the account I sketch in that section correctly predicts that restrictive readings of appositives occur more often than is usually assumed. At the same time, however, the account overgenerates in that it wrongly predicts restrictive readings to occur with definite or specific indefinites. In section 4, I sketch some conclusions to be drawn from the overgeneration problem of the flexible attachment account. I moreover discuss some further issues to be considered.

## 2 Quantificational achors

It has been suggested in various parts of the literature on apposition that the anchors of appositive constructions are always referring expressions.[1] In particular, the suggestion is that *quantificational DPs* cannot anchor an appositive. For example, while the proper name is a felicitous anchor for the NA in (5-a), the quantificational expression *every boxer* in (5-b) appears not to be able to form an appositive construction.

(5) a. Jake, a famous boxer, took part in the event.
b. #Every boxer, a famous one, took part in the event.

[1] See Potts (2007) and del Gobbo (2007) for discussion and references to such suggestions, which include Ross (1967), Rodman (1976), McCawley (1981), McCawley (1988) and Huddleston and Pullum (2002).

There have been two kinds of approaches to account for this contrast. According to the theory in Potts (2005), there are compositional reasons why (5-b) is unacceptable: referential expressions and quantificational expressions differ in type, and (5-b) contains a type clash. A range of other analyses, e.g. del Gobbo (2003), del Gobbo (2007) and Nouwen (2007), claim that (5-b) is out for purely semantic reasons, that concern a referential relation that needs to be established between anchor and appositive. I will now briefly discuss Potts's analysis and argue that the semantic approach more accurately covers the data.

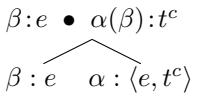
### 2.1 Potts 2005

Potts 2005 treats apposition as an example of a phenomenon of two-dimensional content. That is, the fact that the appositive in (6) is scopeless is captured by assuming this sentence gives rise to two levels of content, containing two *independent* propositions, namely (6-a) and (6-b).

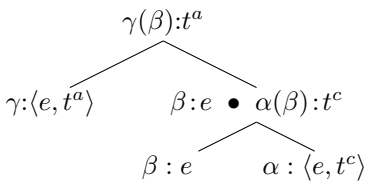
(6) It's not the case that Jake, a famous boxer, lives in Utrecht.
   a. It's not the case that Jake lives in Utrecht.
   b. Jake is a famous boxer.

The content in (6-a) is the *at issue* content, which (in this case) ends up being asserted. In contrast, (6-b) is not at issue (and not asserted) but instead has the status of a *conventional implicature*. This means, for instance, that it is content that is not up for discussion in the subsequent discourse, whereas the at issue content is.

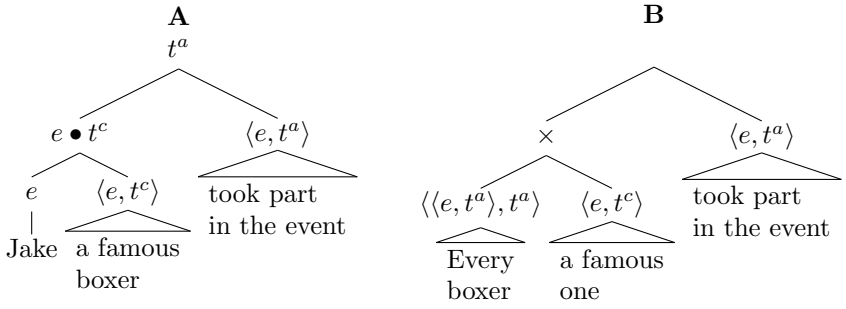
Potts proposes to distinguish the two levels of content in the type-system. He distinguishes two types $t$: $t^a$ for the at issue level and $t^c$ for the secondary, conventionally implicated level. An expression of type $\langle e, t^a\rangle$ is a predicate that when combined with an appropriate subject results in an at issue proposition, while an $\langle e, t^c\rangle$ predicate has special properties due to the following composition rule.

(7)



What this rule says is that when a type $\langle e, t^c\rangle$ predicate combines with its subject, it forms a complex object consisting of this subject and a propositional conventional implicature. Combinatorily, this complex •-object behaves as if it were a regular type $e$. That is, the conventional implicature plays no role in the remainder of the derivation, as illustrated by the tree in (8).

(8)


These combinatorics have consequences for the anchors of appositives, if, as Potts assumes, nominal appositives are $\langle e, t^c \rangle$ predicates. While tree A is fine, B presents a type clash.[2]




A crucial element in Potts's approach is that the anchor of the apposition is used twice in the compositional process, once as an argument in the matrix sentence and once as an argument of the predicate denoted by the appositive. I will now discuss some arguments that indicate that the relation between anchor and appositive is anaphoric, rather than compositional.

### 2.2 Appositives have an e-type anaphoric subject

It has been observed on several occasions that there is a striking similarity between nominal appositives and certain e-type anaphoric phenomena (Sells 1985; Demirdache 1991; del Gobbo 2003; del Gobbo 2007; Nouwen 2007). One way to see this is to have a closer look at the parallel between the anaphoric potential of a quantificational noun phrase and its capacity to anchor an appositive.

While strong quantifiers can only bind singular variables in their scope, they can antecede semantically plural pronouns outside their scope (Kamp and Reyle 1993; van den Berg 1993; Nouwen 2003). To illustrate, (9-a) does not have an interpretation where for the majority of groups of students, each of the students in the group thinks the group is a good team. Beyond the sentence level, however, distributive quantifiers do license plural anaphora, as in (9-b).

(9) a. #Most students think they are a good team.
b. Most students came to the party. They had a good time.

Within the scope of the distributive quantifier singular variables may be bound, as in (10-a), where, despite its plural form *'they'*, the pronoun ranges over single students. Singular anaphora is not possible outside the quantifier's scope.[3]

[2] The possibility of quantifier raising complicates this contrast. See section 3.2 below.

[3] There are exceptions to this generalisation, namely cases of *telescoping* (Roberts 1987), such as Roberts' example (via Barbara Partee) in (i).

(i) Each degree candidate walked to the stage. He took his diploma from the Dean and returned to his seat.

(10) a. Most students think they are smart.
b. Most Dutch men are arrogant. #He thinks he is very knowledgable.

Exactly these anaphoric possibilities are paralleled in the data on nominal appositives. Consider, for instance, the similarities between (11) and (12). Just like distributive quantifiers license plural but not singular discourse anaphora, they license plural but not singular nominal appositives.

(11) a. Jake lives in Utrecht. He is a famous boxer.
b. Every boxer took part in the event. #He is famous.
c. Every climber made it to the summit. They were all experienced adventurers.

(12) a. Jake, a famous boxer, lives in Utrecht.
b. Every Dutch boxer, #a famous one, took part in the event.
c. Every climber, all experienced adventurers, made it to the summit.

The observation that non-referential anchors may form appositive constructions under certain constraints (constraints that mirror those on discourse anaphora) forms a problem for the approach of Potts, where it is assumed that the anchor itself is the subject of the appositive.

### 2.3 Appositives as propositions in discourse

The data in the previous subsection suggests that the subject of an appositive is not the anchor, but rather a pronoun anaphoric to this anchor. Here, the relevant anaphoric relation is akin to *discourse anaphora*, which subsumes both coreference and e-type anaphora (to the exclusion of binding). A consequence of this view is that appositives are not predicates as in Potts (2005), but rather (open) propositions (del Gobbo 2007, Nouwen 2007, Heringa 2012).

Del Gobbo 2007 assumes that appositives move at logical form to adjoin to a discourse node that dominates the matrix CP.[4] In other words, the interpretation of an appositive is exactly like that of a clause separated from the matrix clause in discourse. At logical form, (11) and (12) are indistinguishable.

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It remains to be seen whether the parallel that I sketch below between discourse anaphora with quantifiers and the anchoring of an appositive extends to such exceptional cases.

[4] In Nouwen (2007), I also assumed that appositives are propositional and are linked to their anchor via anaphora. However, in that article I attempted to construct a framework that is faithful to the work of Potts in the sense that appositives are interpreted in situ. The result is what one could call a one-and-a-half-dimensional semantics: whilst the propositional content of an appositive is separated from the propositional content of the matrix sentence, appositive and host sentence are interpreted with respect to the same assignment function. One problem with the framework of Nouwen (2007) is that it is very difficult to define a semantics for negation without encoding in that semantics that its scope should ignore any appositive material. As far as I can see, similar problems extend to simpler systems based on similar ideas, as, for instance, the logic used in AnderBois et al. (2010).

The propositional account of apposition has no immediate explanation for the puzzling data of Wang et al. (2005). Clearly, (13-a) and (13-b) are not equivalent in interpretation. In fact, the pronoun in (13-b) cannot be anaphorically linked to the indefinite *a professor* unless it is interpreted as a specific indefinite.

(13) a. If a professor, a famous one, writes a book, he will make a lot of money.
b. If a professor writes a book, he will make a lot of money. He is famous.

Nevertheless, as we will see next, the propositional account opens up a way to account for the data. For if (13-a) is an exceptional case where the appositive proposition is interpreted not in discourse but *in situ*, the derivation of the desired interpretation falls out naturally.

## 3 Appositives as propositions with flexible attachment

The analysis I have sketched in the previous section differs in one important respect from the approach of Potts. Whilst in Potts' system appositives are interpreted *in situ*, in the approach of Del Gobbo their representation is somehow syntactically removed from their surface scope domain.

Potts (2005) argues in detail for an *in situ* approach, pointing out for instance that in several languages the case marking of the appositive coincides with that of the anchor. Yet, the literature also offers some equally persuasive arguments against an *in situ* approach, like the observation that the anchor and the appositive do not appear to form a constituent (McCawley 1981; Schlenker 2010a).[5]

Schlenker (2010a) and (2010b) collects evidence for a mobile view of appositives: the attachment of appositives is flexible in nature. Schlenker's key argument is based on data from French. For instance, the absence of a condition C violation in (14) suggests that the relative clause is not interpreted in situ. Conversely, the subjunctive form in the appositive in (15) can only be accounted for if the appositive is interpreted with a low attachment (i.e. inside the scope of *conceivable*). The corresponding discourse version of (15), in (16), for instance, is unacceptable. The resulting reading for (15) is moreover one in which the relative clause is interpreted *within* the scope of *conceivable*.

(14) [Le Président]$_i$ est si compliqué qu' il$_i$ a donné au ministre
the president is so complicated that he has given to-the minister
de la Justice, qui n'aime pas Sarkozy$_i$, une tache impossible.
of the justice, who NEG-like NEG S a task impossible

[5] That is, at the very least such data indicate that an *in situ* approach cannot maintain that the appositive is composed to the matrix sentence using the standard mode of composition.

(15) Il est concevable que Jean ait appelé sa mére, qui ait
it is conceivable that J has-sub called his mother, who has-sub
appelé son avocat
called her lawyer

(16) Il est concevable que Jean ait appelé sa mére. *Elle ait
it is conceivable that J has-sub called his mother. She has-sub
appeé son avocat.
called her lawyer.

Semantically, Schlenker 2010a follows the propositional account presented in the previous section: appositives are propositions that are anaphorically linked to the anchor. Syntactically, however, Schlenker 2010a interprets the data as pointing to the possibility of what he calls *flexible attachment*: appositions can be attached to any node of propositional type dominating the anchor (Schlenker 2010a).

The data in (13-a) could be seen as further suggestive evidence for the flexible nature of apposition, given that it shows that apart from the usual widest scope interpretation of appositive material, there are cases where a narrow scope interpretation surfaces. I now explore a way of using flexible attachment to account for such cases.

### 3.1 Flexible attachment predicts restrictive interpretations for appositives

For simple examples like (17-a), Schlenker's approach does not differ much from del Gobbo's. That is, (17-a) is interpreted as (17-b) at logical form. (I am assuming here, with Schlenker, that the attached appositive proposition is interpreted conjunctively. I am hoping the logical form notation is otherwise self-explanatory, despite its informal presentation.)

(17) a. Jake, a famous boxer, lives in Utrecht.
b. [ *Jake$_i$ lives in Utrecht* ] AND [ *he$_i$ is famous* ]

Flexible attachment provides a handle on the examples discussed by Wang et al. (2005). That is, (18-a) can be analysed as (18-b), which yields the desired interpretation.

(18) a. If a professor, a famous one, publishes a book, he will make a lot of money.
b. *If* [ *a professor$_i$ publishes a book* AND *he$_i$ is a famous professor* ] , *he$_i$ will make a lot of money.*

Further options for interpretation are limited. Like quantifiers, conditionals cannot bind singular variables in discourse.[6]

[6] Unlike quantifiers, they do not set up plural discourse referents either. The example in (i) cannot be interpreted as saying that the professor who publish a book (and make a lot of money) are famous.

(19) If a professor publishes a book, he will often make a lot of money. #He is famous.

As a consequence of (19), an interpretation of (18-a) with high attachment of the appositive, outside the conditional is unacceptable, for this would give the following logical form:

(20) [ *If* [ *a professor publishes a book* ] , [ *he will make a lot of money* ] ] AND [ $he_{\#}$ *is a famous professor* ]

Here, and in what follows, I indicate the unacceptability of such logical forms by indexing the pronoun with a #. This indicates that no suitable reference resolution is possible.

What *is* an option for (18-a) is to interpret the indefinite as a specific one. In that case, high attachment is possible again.[7]

(21) [ *There is this professor*$_i$ ] AND [ *If* [ $he_i$ *publishes a book* ] , [ $he_i$ *will make a lot of money* ] ] AND [ $he_i$ *is a famous professor* ]

Now consider the following contrast:

(22) a. If a professor, a famous one, publishes a book, he will make a lot of money.
b. Every professor, #a famous one, published a book.

Flexible attachment gives a way to explain this contrast too. In (22-a) there are two nodes of type $t$ dominating the noun phrase that comes with the NA: the if-clause and the matrix sentence. We thus have the two possible logical forms (18-b) and (21). For (22-b) only one analysis is available, namely (23), since the matrix sentence itself is the only propositional node dominating anchor site.

(23) [ *Every professor publishes a book* ] AND [ $he_{\#}$ *is a famous professor* ]

As explained above, the form in (23) is infelicitous because strong quantifiers do not license singular discourse anaphora (cf. (11-b)). Since there is no other logical form available, the example is uninterpretable. If we add more structure to the quantificational subject, more logical forms are derived, since there are more propositional nodes. For instance, (24) does receive an interpretation, and it is indeed one in which the appositive is interpreted as part of the quantifier restrictor.

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(i) If a professor publishes a book, he will make a lot of money. #They are famous.

[7] This LF is intended as a theory-neutral representation of specific indefinites which captures both their wide-scope behaviour and their accessibility in discourse. Technically, it would resemble the referential account of specific indefinites of Fodor and Sag (1982), but nothing hinges on this. Any theory that accounts for the scopal and referential behaviour of specific indefinites will do.

(24) Every professor who wrote a book, one on linguistics, is eligible for a sabbatical.

So far, we have seen that flexible attachment can account for cases where appositives end up having a restrictive interpretation. Given this analysis, we now come to expect non-wide scope appositives in several other configurations, and, in fact, this is what we observe. For instance, NAs anchored to an indefinite NP in the scope of negation receive an interpretation *within* the scope of negation.[8]

(25) It is not the case that a boxer, a famous one, lives in this street.

This is explained readily by our assumptions. The two logical forms we derive are in (26).

(26) a. *It is not the case that* [ *a boxer*$_i$ *lives in this street* AND *he*$_i$ *is famous* ]
b. [ *It is not the case that a boxer*$_i$ *lives in this street* ] AND [ *he*$_\#$ *is famous* ]

In (26-b) the indefinite is not accessible to the pronoun and so (26-b) does not yield a felicitous interpretation. In contrast, (26-a) is interpretable and yields the observed interpretation.

### 3.2 Problems

Note that what is crucial in the examples under discussion here is that the NA is associated to noun phrases whose accessibility for pronominal anaphora is subject to scopal constraints. That is, the lack of a reading corresponding to the form in (26-b) is due to the fact that the referential reach of indefinites is limited to the scope of the negation. If we change the examples to include an appositive anchored to, say, a proper name, then the predictions and indeed the data change.

(27) It is not the case that Jake, a famous boxer, lives in this street.

[8] All native speakers I consulted verified that this example indeed has a local interpretation. Nevertheless, an anonymous reviewer notes that the example improves a lot with a concessive *at least* in the appositive: *It is not the case that a boxer, at least a famous one, lives in this street.* I do not believe this observation in any way puts my main point into question: nominal appositives can end up being interpreted in the scope of negation. Nevertheless, and as the same reviewer notes, the intuition that concessive markers influence the way we interpret nominal appositives suggests that the relation between anchor and appositive is something that can be mediated. Below, I present more dramatic examples of how adverbial markers like *"in particular"* influence the interpretation of NAs. As the reviewer speculates, it could be we should see such markers as discourse markers, and thus we should see the projection of NAs as a phenomenon linked to discourse coherence. I concur that this is a valuable option worth investigating in the future. In fact, between the lines I do suggest below that a discourse perspective is probably helpful.

Here, the wide scope interpretation, as in (28-b), *is* available. This is predicted too, since the referent of a proper name is globally accessible.

(28) a. *It is not the case that* [ *Jake*$_i$ *lives in this street* AND *he*$_i$ *is famous* ]
b. [ *It is not the case that Jake*$_i$ *lives in this street* ] AND [ *he*$_i$ *is famous* ]

Problematically, however, we now predict (27) to be ambiguous between the attested reading in (28-b) and the non-attested one in (28-a), which says that either Jake doesn't live in this street or he is not famous. This problem pops up in other cases too. For instance, for the case of (18-a), repeated here as (29), there is the logical form in (30), which yields an unavailable interpretation.

(29) If a professor, a famous one, publishes a book, he will make a lot of money.

(30) [ *There is this professor*$_i$ ] AND [ *If* [ [ *he*$_i$ *publishes a book* ] AND [ *he*$_i$ *is a famous professor* ] ] [ *he*$_i$ *will make a lot of money* ] ]

Consistently, whenever a wide-scope interpretation is available, it blocks a possible competing narrow-scope one. Here is one way of summarising the observation:

(†) **The scope of the appositive is always at least as wide as that of its anchor, never narrower.**

This is an admittedly crude way of formulating the observation in terms of scope, which makes sense only if one thinks of referential expressions as expressions having wide(st) scope. (Thinking of a discourse representation theory-style framework is perhaps helpful here.) However, independent of the theoretical framework, as far as I can see, there is no obvious way of excluding restrictive readings of nominal appositives anchored by referential definites and indefinites. Perhaps (†) should be seen as part of a bigger observation, namely that like other assertorically inert information (where notions like presupposition or conventional implicature have been applied), the information in an appositive tends to be interpreted as scopally independent. That is, if the anchor is scopally independent, then the appositive should be too. I see only limited explanatory value in this.

A related problem occurs with quantificational anchors. Above, I proposed that appositives in if-clauses can be read restrictively, because there is a propositional node they can attach to inside the conditional. In contrast, appositions attached to quantificational DPs have to outscope the quantifier in order to reach a propositional node. This picture ignores quantifier raising. That is, given flexible attachment, for (31-a) we could have the logical form (31-b), which would wrongly predict (31-a) has a restrictive reading.

(31) a. Every professor, #a famous one, published a book.
b. *Every professor*$_i$ [ $\lambda$ [ [ *t published a book* ] AND *he*$_i$ *is famous* ] ]

I do not see any way of excluding quantifier raising in a configuration like (31-b). Moreover, we will need quantifier raising to deal with examples like (32). (Thanks to Katja Jasinskaja p.c. for making me aware of such examples.)

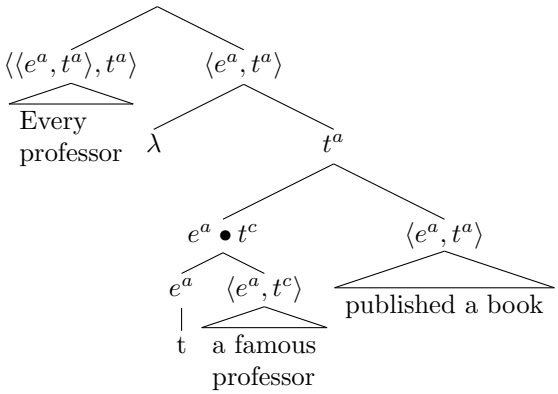
(32) Every boxer has a coach, a famous one.

a. [ [ *Every boxer*$_i$ [ *has a coach*$_j$ ] ] AND [ *he*$_{\#}$ *is a famous coach* ] ]

b. [ *Every boxer*$_i$ [ $\lambda$ [ [ *t has a coach*$_j$ ] AND [ *he*$_j$ *is famous* ] ] ] ]

Interestingly, Potts's (2005) analysis of quantified appositives could be seen having an issue that is related to the over-generalisation problem of the flexible attachment approach. The type clash that accounts for the absence of quantified appositives in Potts' system (see section 2.1), disappears once quantifier raising is allowed for. For (31-a), the following derivation would be an option.

(33)




However, it is not immediately clear what this ends up meaning. Given Potts' interpretation of *parsetrees* (trees such as this one), (31-a) would denote the conjunction of *every professor* $\lambda$ *[ t published a book]* and the open proposition *t is a famous professor*. That is, Potts' system allows for no interaction between at issue and non-at issue content, and so the trace left behind by the raised quantifier, whilst bound on the at issue level, is left unbound - and thereby uninterpretable - on the secondary level. While this would correctly rule (31-a) out, it is questionable whether such rigid separation is maintainable, given the pleas for anaphoric accounts of appositives such as del Gobbo (2007), but also given data that show more generally that cross-dimensional anaphoric links exist (e.g. Amaral et al. 2007 and AnderBois et al. 2010.)

## 4 Discussion

The flexible attachment approach I drafted above is successful in correctly predicting more restrictive readings with indefinites than just the conditionals cases

observed by Wang et al. (2005). However, it fails to limit such readings to (non-specific) indefinites only. The obvious next step is to investigate what is so special about indefinites. One clue is that the nominal appositives we have been looking at have an indefinite form just like their anchor.

### 4.1 Correction

On the basis of the parallelism of form between anchor and appositive, Jasinskaja (p.c.) suggests that restrictive appositives such as that in (34-a) are part of an independent phenomenon, namely that of correction. That is, the idea would be that (34-a) is paraphrasable by (34-b).

(34) a. If a professor, a famous one, writes a book, he will make a lot of money.
b. If a professor —correction: a FAMOUS professor— writes a book, he will make a lot of money.

If (34-a), on its restrictive reading, is a case of correction, then it immediately follows why such readings are absent with other anchors: correction necessarily involves two formally parallel DPs.

(35) #I know every student —correction: a PROFESSOR.

An analysis of the data will now go as follows. A propositional account of apposition without flexible attachment (as in del Gobbo 2007) will correctly predict that no restrictive readings exist for nominal appositives. The restrictive reading that we do observe, i.e. the data in Wang et al. and the restrictive examples I discussed in the previous section, are exactly those cases where we confuse corrections with regular apposition.

It is not easy to evaluate the idea that (34-a) is a case of correction. I do believe, however, there is some suggestive evidence against such a claim. First of all, the restrictive readings do not always display the neat parallelism we find in (34-a). Consider (36):

(36) If two professors, both famous academics, write a book together, they will make a lot of money.

This example has the same kind of restrictive reading as the one Wang et al. identified for (34-a). However, it is not a likely case of correction. For instance, (37) is infelicitous as a correction.

(37) Today, Mary met two professors —correction: both FAMOUS (academics).

Heringa (2012) discusses some differences between apposition and correction that provide some further insights. Nominal appositives are infelicitous if they are not followed by comma intonation. In contrast, corrections have an optional pause. The data is as follows. (I indicate the comma intonation here with '—'.)

(38) a. John gave a student — his favourite one #(—) a book.
b. John gave a student — I mean a professor (—) a book.

As (39) shows, comma intonation cannot be removed from the Wang et al. data, suggesting that we are not dealing with a correction phenomenon here.

(39) If a professor — a famous one #(—) writes a book — he will make a lot of money.

For a full rebuttal of the reduction of (39) to correction, a more in-depth comparison to correction phenomena is in order. This falls squarely outside the scope of this short paper. The suggestion that the Wang et al. examples are not your regular nominal appositives, but some separate phenomenon that resembles it, is one worth pursuing, though. As I will suggest in the remainder of this paper, it looks like apposition is a heterogeneous phenomenon and that the scopal (or attachment) possibilities differ from subclass to subclass. Let me first go back to the beginning of this paper and return to the contrast Wang et al. observed between nominal appositives and appositive relative clauses.

### 4.2 The case of appositive relative clauses

The flexible attachment approach to the projection behaviour of nominal appositives that I described above came in two parts: (i) semantically, nominal appositives are interpreted as conjuncts with a discourse anaphoric subject; (ii) syntactically, they may attach at any propositional node that dominates the anchor. These two ingredients, which I borrowed from Schlenker (2010a), account for the restrictive use of appositives anchored by indefinites, but they will not do for appositive relative clauses (ARCs). As I mentioned in the opening section of this paper, ARCs resist the kind of restrictive readings of if-clauses that are observed with nominal appositives (Wang, Reese, and McCready 2005).

(40) If a professor, a famous one, publishes a book, he will make a lot of money.

(41) If a professor, who is famous, publishes a book, he will make a lot of money.

Schlenker's approach to ARCs differs from my adaptation of that approach for (40) only with respect to the pragmatic component. According to Schlenker, ARCs are locally *non-trivial*, while at the same time they are *translucent*.

> **Translucency** (Schlenker 2010a) — content is *translucent* if and only if it can be made locally trivial by adding uncontroversial assumptions to the context
>
> **Pragmatic condition on ARCs** (Schlenker 2010a) — Appositive relative clauses are translucent

Translucency means that we should be able to add unsurprising assumptions to the context that make the ARC locally trivial: that make the local context

entail the ARC. Note that such a pragmatic principle cannot account for (40). If given some additional assumption it is locally entailed that the referent for *a professor* is famous, then we would not get a restrictive reading, but rather one in which all professors are famous. It is moreover difficult to see how in this case this involves an *unsurprising* assumption (since professors are not generally famous), and so it is that Schlenker's ARC proposal makes a prediction with respect to (41). Since it *is* possible to add an unsurprising assumption to the context about some specific professor, it is predicted that *a professor* in (41) is interpreted as a wide-scope indefinite. It appears that this is indeed the only available reading. In other words, an account involving flexible attachment could account for the difference between (40) and (41) by only imposing translucency on appositive relative clauses, but not on nominal appositives. Such an approach could perhaps also prove useful for contrasts such as the one in (42), from Klein (1977) (as cited in Heringa 2012).[9]

(42) a. There was a bird, a wild swan, in the air.
b. #There was a bird, which was a wild swan, in the air.

Note, however, that translucency does not generally enforce a specific reading on an embedded indefinite. Compare, for instance, (41) to (43). Here, a narrow scope reading is available for the indefinite *and* the appositive relative clause. This is because here it is perfectly possible to add to the context an assumption like *all students are required to fill in form B35*. Of course, given the universal nature of this assumption, the ARC does not *restrict* the conditional.

(43) If a student, who by the way is required to comply with all Statutory Policies, asks for legal advice, it is best practice to contact the school lawyer.

A similar example is (44).

(44) I wonder whether a presupposition, which by definition is part of the common ground, can ever be forcefully denied.

The indefinite *a presupposition* has narrow scope in the example. The appositive relative clause is locally interpreted, but not restrictive. That is, the ARC is interpreted to hold universally of presuppositions.

### 4.3 Conclusion

The general picture emerging from the discussion so far is that indefinites more easily resist a scopeless interpretation for appositives they anchor than non-indefinites do. While nominal appositives anchored by an indefinite appear to be unconstrained in the ability to be interpreted in situ, appositive relative clauses can only do so when they are translucent in the sense of Schlenker.

[9] An anonymous reviewer notes however that (i-b) improves if the ARC is not a predicate, as in *There was a bird, which we later learned was a wild swan, in the air.*

There exist further cases where appositives anchored by indefinites break with run of the mill properties of apposition. Take appositives marked by *in particular*:

(45) A reptile, in particular a snake, is a dangerous animal.

Importantly, (45) does not express *that reptiles are in particular snakes*. Instead, the appositive seems to combine with the VP: *a snake is a particularly dangerous animal*.[10] Note that such appositives are typically involved in generic statements, including conditionals with indefinite-containing if-clauses. Here is a variation on the Wang et al. example with *in particular*:

(46) If a professor, in particular a famous one, writes a book, he will make a lot of money.

Obviously, the low attachment strategy we used above will not work here. It is not at all clear what to do with *in particular* in the appositive conjunct:

(47) *If* [ [ *a professor*$_i$ *writes a book* ] AND [ *he*$_i$ *is in particular famous* ] ] [ *he*$_i$ *will make a lot of money* ]

An analysis needs to do justice to the fact that *in particular* has a degree function in such examples. In (46), *in particular* seems to express that famous professors make (even) more money after writing a book than other professors, just like (45) states that snakes are (even) more dangerous than other reptiles. For the case of (46), there is no attachment site that gives the correct interpretation. What is needed instead is to reconstruct the whole conditional, as in (48).

(48) [ *If a professor writes a book, he will make a lot of money* ] *AND* [ *particularly* [ *If a famous*$_{focus}$ *professor writes a book, he will make a lot of money* ] ]

Obviously, no similar interpretation strategy is available for the Wang et al. conditional (49-a). This is because (49-a) does not entail (49-b).

(49) a. If a professor, a famous one, publishes a book, he will make a lot of money.
b. If a professor publishes a book, he will make a lot of money.

The upshot is that appositives can express various relations to indefinite anchors. These can for instance be inclusive, as in (46) or restrictive as in (49-a). It appears then that there is no *one* analysis for appositives, but that we should try to explain the relation between certain kinds of appositives and certain kinds of relations with the anchor. Whilst restrictive patterns of projection can be explained quite straightforwardly using the semantic and syntactic component of the proposal in Schlenker 2010a, the flexible attachment inherent in that

[10] Similar observations move Heringa (2012) to exclude such cases from his discussion of appositive constructions.

proposal is limited to only a subclass of anchors. In other words, the puzzle put forward by Wang et al. (2005) remains, but as this final section has shown it turns out to be part of a much more general puzzle involving the various ways in which indefinites may relate appositively.

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