# Parenthesis and presupposition in discourse

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Parentheses do not affect the semantic truth conditions of the host clause, but they do affect the discourse structure. We propose a maximally simple update system for the conversational context. Presuppositions are treated as past requests for the interlocutor's consent. Parentheticals act like overt presuppositions, unless they are linearly last in the utterance, in which case they can be taken as a current update request. This has consequences for the interlocutor's ability to target a parenthetical message. We predict that sentence-final parentheses, and in particular attributive appositives, can be generically addressed, but medial ones only by a specific response. We also discuss why certain non-clausal parentheses, including identifying appositions, behave differently.

Keywords: appositions, discourse, parenthesis, presuppositions, relative clauses, truth

#### 1. Introduction

We outline an informal model of collaborative conversation and monologues that helps to explain how assertions, conventional presuppositions, and parentheses are related in terms of their pragmatic import.\* In particular, we highlight the behaviour of appositive constructions. The proposed analysis provides a simpler and more adequate alternative to current ideas about a specialised non-at-issue semantics for parentheses.

Section 2 presents some background and the general model. Section 3 shows how it correctly predicts the similarities and dissimilarities between parentheses and presuppositions. Section 4 argues that not all appositives are propositional, which has consequences for their pragmatics. Section 5 concludes the paper.

We must indicate that we cannot discuss every aspect of our model in detail due to space constraints, but we try to outline everything required to convey the basic idea. We also want to point out that our model bears essential parallels to Koev (2013), who discusses appositives from a formal semantic perspective.<sup>1</sup>

### 2. A structured discourse

#### **2.1** Background and definitions

When people talk, they collaboratively build a *structured discourse*. With each propositional utterance, the *context* is being updated. A conversational contribution is felicitous if it contains new information of some kind, and is non-contradictory with respect to the context.

More formally, the context can abstractly be considered the set of all possible worlds of thought at a particular point in time:  $W_t$  (cf. Stalnaker 1978). A felicitous change of context implies 'world reduction' from  $W_1$  to  $W_2$ :

- (1) a.  $W_2$  is a strict subset of  $W_1$ ;
  - b.  $W_2$  contains only those possible worlds in which is u true.

Each contribution to the discourse in a particular situation is a *request* to update the context. The structured discourse (SD) is the public record that lists in chronological order all successful past requests as well as the current request that is on the table:

- (2) At conversational time t,
  - a. the *current request* is the propositional explicature of the most recent utterance;
  - b. a past request is a non-current request;
  - c. a *successful* past request has not been rejected, and is part of the SD.

We assume that a request will successfully alter the context *unless* it is rejected by the interlocutor. That is, conversation is cooperative by default. In our model, the SD corresponds to what one could call the *explicit* (conversational, public) common ground, crucially without making any recourse to private beliefs, or beliefs about other people's beliefs (see also §2.3).

If in a dialogue an update request constitutes a direct question, it must be answered immediately. The answer will then be the next current request, which can be accepted or rejected by the first speaker. Generally, one can reply to requests with *generic* or *specific* responses. Specific responses are bespoke, as in (3a), while generic responses may target any proposal. The latter are necessarily deictic (cf. Krifka 2013 and references therein). This indexical quality is either inherent (3b), or engendered by an anaphor such as *that* (3c).

(3) Speaker 1: David baked a cake.

Speaker 2:

a. David did NOT bake a cake.
b. Yes / no / okay / whatever.
c. That's not true!
(specific response)
(generic response)
(generic response)

As will become clear, generic responses can only target the current request (or set of requests), contrary to specific ones.

### **2.2** Simple scenarios: approval and opposition

Let us now apply the model outlined in §2.1 to simple interactions between speakers A and B, say Amy and Bob.

(4) A:  $[\alpha$  David baked a cake.]

B:  $[\beta \text{ Okay/yes.}]$ 

Amy's utterance  $\alpha$  is a request to reduce the context to only those worlds in which *David baked a cake* is true. Whether Bob simply remains silent, nods, or verbally approves  $\alpha$  by uttering  $\beta$ , the SD – represented by chevrons here – will become (5):

(5) (David baked a cake)

A more indirect response is illustrated in (6):

(6) B:  $[\beta' \text{ Good for him!}]$ 

Here,  $\beta'$  does not simply confirm  $\alpha$ , but invokes a new request (it is good for David that he baked a cake), from which it can also be inferred that  $\alpha$  is accepted because the felicity of  $\beta'$ is contingent upon  $\alpha$ 's truth. The SD changes to (7):

# (David baked a cake, it is good for David that he baked a cake)

Now the most current request is the underlined one, corresponding to the explicature of  $\beta'$ . Automatically,  $\alpha$ 's status is converted to a successful past request.

Opposition to Amy's request can be similarly direct or indirect, as (8) illustrates. Here, Bob's expression of  $\beta$  in provides direct rejection of Amy's request. If Bob expresses  $\beta'$ , he files his own request (it is impossible that David baked a cake). Because this request cannot felicitously apply to a context in which David baked a cake is true, Amy is indirectly informed that her original request has been rejected.

[ $\alpha$  David baked a cake.] (8) A:

> B: [8 No.]

> > $[\beta]$  That's impossible!

Again these different types of opposition engender dissimilar SDs. After Amy's statement in (8), the SD is as represented in (9), where the current request corresponds to  $\alpha$ . Bob's simple oppositional utterance of  $\beta$  does not extend the SD, but reduces the SD to an empty set: Amy's past request α is unsuccessful and hence removed from the SD. It did not succeed to change the conversational context, and can be assumed to be deposited into a 'bin' of rejected requests; see (10a). Bob's more elaborate response  $\beta'$  leads to rejection of  $\alpha$  as well as a new request entering the SD; see (10b).

#### (9) (David baked a cake)

(10) a.

BIN: (David baked a cake)

(It's impossible that David baked a cake) b.

BIN: (David baked a cake)

If necessary, rejected requests from the bin can be reused in certain forms of conversation, including debates or quarrels.

## **2.3** Monologues and presuppositions

Conversations are not built on turn-taking alone. Thus, we must show how (partial) monologues such as (11) are handled by the model.

#### [ $\alpha$ David baked a cake.] [ $\beta$ It's a Battenberg.] (11) A:

After filing the request in  $\alpha$ , Amy can simply continue talking by stating  $\beta$ , thus changing the SD from (12a) into (12b). In this particular case, the felicity of β happens to be contingent upon the truth of  $\alpha$ .

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  - (12) a. (David baked a cake)
    - b. (David baked a cake, it's a Battenberg)

Of course the interlocutor might have interfered or be asked to do so immediately after  $\alpha$ :

- (13) A: What's wrong Bob? Don't you believe that David baked a cake?
  - B: Yes! Please continue... / No, I don't...

This would essentially bring us back the situation described in the previous subsection – but a tangential dialogue as in (13) is by no means necessary, and  $\alpha$  can become a past request that is unattended but still successful.

Now consider an utterance like (14) in an all-new context:

### (14) A: David hates his job.

The request directly corresponding to (14) aims to reduce the context to only those worlds in which *David has a job* and *David hates his job* are true. Because reduction of the context is incremental, this request – if successful – triggers reduction of the context twice. According to the definitions in (1), the only available order of reduction is this:

(15) STEP 1: reduction to those worlds in *David has a job* is true. STEP 2: reduction to those worlds in *David hates his job* is true.

By virtue of expressing (14) then, Amy files two independent requests to update the context. The first, (David has a job), is not explicitly uttered, while the second, (David hates his job) is. We will refer to the former type of requests as *presuppositions*. Like all requests, both are catalogued in the SD. Thus, (14) engenders *two* requests simultaneously. These enter the SD as an ordered tuple that reflects the order in which reduction of the context must proceed:

#### (16) (David has a job, David hates his job)

In accordance with the definitions in (1) and (2), the presuppositional request in (16) necessarily enters the SD as an unattended and consequently successful 'past' request, instantaneously followed by the current request.

Importantly, monologues like (11) and utterances like (14) share a commonality. In both, a complex SD that contains both a past and current request can be formed during one speaker's turn. However, (11) and (14) also display an important difference. The creation of the SD in (12) spanned two distinct points in conversational time. Amy uttered  $\alpha$ , and then  $\beta$ . Both were, at different points in time, the SD's current request. The creation of the complex SD in (16), however, occurs at a single point in time. The presupposition is never a current request to which the interlocutor can respond. This explains why it is *imposed* upon the discourse (cf. AnderBois et al. 2013): it updates the context simply by being triggered.

As the discussion above makes clear, our conception of presupposition includes accommodation phenomena.<sup>2</sup> It makes no recourse to speakers' private beliefs, which are extraneous to the composition of the SD and to the reduction of the conversational context more generally. Presuppositions in our terms are necessarily implied requests that a speaker has publicly filed, while private beliefs are not. Thus, in our model, *David has a job* in (14) triggers a presuppositional request in an all-new context regardless of whether Amy and/or Bob privately believe that the content of this request is true already. Of course, if *David has a job* is already contained within the SD when Amy utters (14), only the surface proposition of

(14) is invoked as a new request; whether the presupposition is also perceived as a refiled reminder depends on the situation and the conversational history.

#### Parentheses and the structured discourse

Parentheses, including appositives, constitute requests distinct from the host. We propose that they jointly enter the SD as a tuple whose order depends upon the linear position of the parenthesis within the utterance:

(17) If a host  $\alpha$  fully linearly precedes a parenthetical  $\beta$  in the utterance, the ordered request is  $\langle \alpha, \beta \rangle$ , otherwise it is  $\langle \beta, \alpha \rangle$ .

The rationale behind this rule is very simple: the propositional explicature that is completed first enters the SD first.

To exemplify, (18a) generates the SD in (19a), while (18b) results in (19b). The parentheses in (18) are the italicised appositive relative clauses. In both cases, the host is John got a promotion.

- John got a promotion, which is great. (18) a.
  - b. John, who is my neighbour, got a promotion.
- (19) a. (John got a promotion, that John got a promotion is great)
  - (John is my neighbour, John got a promotion) b.

As we can see, utterance-final parentheticals are comparable to subsequent requests in a monologue. Intermediate or utterance-initial parentheticals precede the request corresponding to the host in the SD. Therefore, such parentheticals compare to presuppositions: they are never the current request, and are hence imposed upon the discourse.

#### 3. Assertions, presuppositions, and appositives

Having outlined our model, we use it to explore the differences and similarities between regular assertions, presuppositions and parentheses (appositives in particular, but the results straightforwardly generalise). Several of the issues at stake have been discussed also in Potts (2005), Nouwen (2007), AnderBois et al. (2013), and Koev (2013), among others.

In our approach, utterances containing appositives pattern like assertions that comprise two-utterance monologues. But they are also similar to presuppositions in one important respect: they create complex SDs at a single point in conversational time. As noted, the appositive is imposed upon the context in (19b); by contrast, if the appositive is sentencefinal, it seems that it is the host that is imposed upon the context, as in (19a).

Let us first turn to responses in a dialogue. We already suggested in §2 that generic responses can only address the current request. If this is true, we predict a number of things at once: as past requests in the SD, presuppositions (20a), intermediate appositives (20b), the hosts of final appositives (20c), and initial assertions in two-utterance monologues (20d) cannot be targeted in a generic fashion (21):

- (20) A:
  - a) David hates his job.  $(=>_{presup.} [David has a job]_i)$
  - b) David, [who's a psychologist]<sub>i</sub>, hates his job.
  - c) [David hit Sally]<sub>i</sub>, who then hit him back.
  - d) [David has a job]<sub>i</sub>. He hates it.
- (21) B: #That<sub>i</sub>'s not true!

(i.e., It is not true that David (a/d) has a job / (b) is a psychologist / (c) hit Sally.)

By contrast, it is always possible to go back to a past request in the SD by means of a *specific* response. For instance, B could answer *But David does not have a job in the first place!* to (20a/d).

The opposite prediction is also borne out, namely that, as current requests, assertions containing a presupposition (22a), final appositives (22b) and final assertions of monologues (22c) can be targeted by generic responses, as in (23).

- (22) A:
  - a. [David hates his job]<sub>i</sub>. (=><sub>presup.</sub> David has a job)
  - b. David hit Sally, [who then hit him back]<sub>i</sub>.
  - c. David has a job. [He hates it]<sub>i</sub>.
- (23) B: That<sub>i</sub>'s not true!

(i.e., It is not true that (a/c) David hates his job / (b) Sally then hit David back.)

Secondly, consider how *questions* must be answered. As past requests that are at no point in conversational time current in the SD, presuppositions and initial appositives cannot answer questions. So the fact that (25a) and (25b) in some way contain the answer to (24) is insufficient, since the answer is never directly on the table. But even being current in the SD at some point is not enough: the answer must immediately follow the question. Therefore, final appositives (25c) and final assertions of complex monologues (25d) cannot answer questions, either. Only a direct assertion (25e), possibly the start of a monologue, can be used as an answer, as it is at some point in time a current request in the SD, immediately following the question.

- (24) A: Does David have a job?
- (25) B:
  - a. # David hates his job. (=>presup. David has a job)
  - b. # David, who has a job, hates it.
  - c. # I'm proud of David, who has a job.
  - d. # I'm proud of David. He has a job.
  - e. He does. (I'm proud of him.)

Thirdly, we turn to the issue of *contingency* and *coherence*. Presuppositions and the assertions that contain the lexemes that trigger them display a relationship of contingency. That is, the veracity of the assertion is contingent upon the truth of the presupposition. The situation is different for (i) initial appositives and their hosts and (ii) the initial and final assertion of a two-utterance monologue. Our model allows that contingency pertains between those, but it needs not. This is illustrated in (26) and (27):

- (26) a. David, who baked a cake, then iced it. (host contingent on appositive)
  - (host not contingent on appositive) David, who's a nice guy, baked a cake. b.
- David baked a cake. He then iced it. (final ass. contingent on initial one) (27) a.
  - (final ass. not contingent on initial one) David baked a cake. He's a nice guy. b.

Recall that in Bob's second response in (8), he indirectly opposes Amy by filing a request that engenders the SD in (10b). Bob is motivated to file this request because he wants to build a context in which David baked a cake is false, which is contrary to what Amy wants. One expects that this situation cannot pertain with monologues and appositive constructions, however, as the speaker cannot be motivated to indirectly oppose a request that she herself has filed. Such a situation is understood as incoherent, as (28) and (29) show:<sup>3</sup>

- (28) # David is a bachelor. He's a married man.
- (29) a. # Joel is married to Jack, who's a bachelor.
  - b. # David, who's a bachelor, is a married man.

Finally, we turn to the issue of *pluggability*. Potts (2005: 35) notes that responses as in (30) are unnatural, while (31) is natural. For him, this means that presuppositions are pluggable, i.e., can be part of a belief context, while appositives are not.

- Fred thinks that David, who has a job, baked a cake.
  - B: ? Fred thinks that David is unemployed!
- Fred thinks that David hates his job. (31) A:
  - David is unemployed! B:

But what is being compared here exactly? Common to both cases is that Bob's response opposes a request that he has inferred from Amy's utterance. Consider the SDs:

- (32) SD after (30A): (D has a job, F thinks D baked a cake) SD after (30B): (D has a job, F thinks D baked a cake, F thinks D is unemployed)
- (33) SD after (31A): (F thinks D has a job, F thinks D hates his job) SD after (31B): (F thinks D has a job, F thinks D hates his job, D is unemployed)

Judging by his answer in (30), Bob has optionally inferred the additional request (F thinks D has a job) from the apposition – which he is then opposing. In (31), the additional inference with which he disagrees is (D has a job). It is important to see that neither is part of the respective SD, which contains only obligatory/inevitable explicatures. Thus, the SDs themselves do not explain the contrast between (30) and (31). However, what we can say is that Bob's response in (30) is unnatural, contrary to the one in (31), because his motivation for uttering it cannot be reconstructed. Why is that? Consider (31) first. If Fred thinks that David hates his job, it is not implausible that David has a job in the first place. Therefore (D has a job could well be part of the implied context. Hence, opposing this potential implication (which might be wrong) is sensible. In (30), however, the most plausible explanation for why David has a job is certainly not that Fred thinks that he has one. Therefore, Bob has no reason to infer an additional implied request (F thinks D has a job) from Amy's utterance in (30A) – which he then explicitly opposes. It seems to us that this is why Bob's response in (30) sounds unnatural: it is an irrelevant response that violates Grice's (1975) Maxim of Relation.

Similar abductive reasoning explains why Bob's response to Amy's monologue in (34) sounds unnatural:

- (34) A: David has a job. Fred thinks that David baked a cake.
  - B: ? Fred thinks that David is unemployed!

In contrast, the examples in (35) and (36), modified from Harris & Potts (2009), do sound natural:

- (35) A: Sue is extremely sceptical of doctors. Dentists, [ $\alpha$  who are only in it for the money], are not to be trusted at all.
  - B: She doesn't think that dentists only in it for the money!
- (36) A: Sue is extremely sceptical of doctors. [ $_{\alpha}$  Dentists are only in it for the money]. They are not to be trusted at all.
  - B: She doesn't think that dentists are only in it for the money!

In these scenarios, Bob supposes – as the reader does – that Amy utilises *erlebte Rede* (free indirect speech), whereby she occupies the perspective of her protagonist, Sue. Thus, the motivation is clear for why Bob optionally infers the request (Sue thinks that dentists are only in it for the money), which he opposes. Consequently, the Maxim of Relation is not violated.

# 4. Appositives that do not invoke requests

As mentioned in §2.1, requests necessarily contain propositional content. With respect to appositives, the conclusion that they are either independent clauses or engender a propositional explicature when concatenated with their anchor has received wide-spread support in the last two decades.<sup>4</sup>

Heringa & De Vries (2008) formalise the notion that appositions can be divided into two types: *identificational* and *attributive*. At its simplest, identificational appositions provide alternative descriptions of referents denoted by their anchors, while attributive appositions predicate properties of them.

- (37) a. The Big Apple, *New York*, is huge city. (identificational)
  - b. The Big Apple, *a magical place*, is a huge city. (attributive)

Following the literature, we will assume that attributive appositions are indeed propositional (e.g., for (37b),  $\{it/which\}$  is a magical place). However, identificational ones may be different. Griffiths (in prep.) claims that they are coordinated with their anchors, where the relationship that pertains between the two conjuncts is one of equivalence (i.e. co-reference) or set-membership ( $\alpha \supseteq \beta$ ), cf. (38):

- (38) a. Two plays, namely *Hamlet and Macbeth*, are on the theatre tonight. (co-reference)
  - b. The students, {including / excluding} Sally, failed the exam. (set-member)

There are a number of arguments in support of this analysis, three of which are summarised here. First, identificational appositions of any category, not just noun phrases, are permitted, provided that semantic balance is achieved between conjuncts; see (39). Second, across-theboard extraction and right-node-raising is permitted, just as with regular coordination; see (40). Third, c-command dependencies can be established across the appositional boundary, again provided that it takes place in an ATB-fashion. This is shown in (41) with NPI licensing and quantifier binding.

- No philatelist, no stamp collector, would willingly sell her Perot Provisional. (39) a.
  - Ben drew a stereometric, i.e. *three dimensional*, representation. b.
  - Brendan confusticates, that is to say *perplexes*, Swantje. c.
  - The wind blows abaft, or behind, the boat. d.
- [Which country]<sub>1</sub> do you hate the motorways of  $t_1$ , or as the Americans say the (40) a. 'highways' of  $t_1$ , the most?
  - John met the sovereign of, i.e. the ruler of, England. b.
- (41) a) Paul hasn't received penny-one, *anything*, from his bank.
  - Every competitor on the cookery TV programme was told that his entry, that is b) to say his jam roly-poly with custard, was too stodgy.

If correct, the non-propositional status of identificational appositions has consequences for the discourse. Namely, we would predict that they cannot be requests in the SD.

This prediction is borne out. For instance, nominal identificational appositions that are sentence-final cannot be targeted by a generic response:

- David visited The Big Apple, i.e. [New York]<sub>i</sub>. (42) A:
  - B: #That<sub>i</sub>'s not true!

(i.e., It is not true that the Big Apple is New York.)

If, however, both the anchor and the identificational apposition happen to be inherently clausal, the situation changes, as expected:

- (43) A: We've won the lottery, in other words [we don't need to go to work anymore]<sub>i</sub>.
  - B: That<sub>i</sub>'s not true!

(i.e., It is not true that we don't need to go to work anymore.)

Furthermore, because they do not engender requests, nominal identificational appositions can be interpreted as plugged, in accordance with Simons et al.'s (2010) generalisation. The examples in (44a/b) are modified from Wang et al. (2005) and Geurts (1997), respectively.

- Mary wants to marry an Italian, (that is) a rich one. (44) a.
  - If a child is christened Bambi and Disney Inc. find out about it, they will sue b. Bambi, that is to say the child's, parents.

In (44a), for instance, the *de dicto* reading (that Mary is unacquainted with the rich Italian that she wants to marry) is retrievable.

### 5. Conclusion

To summarise, we argued that speakers build a structured discourse, which contains successful past requests to alter the context of possible worlds, as well as the current propositional request. Unlike subsequent assertions, parentheses and presuppositions enter the SD in tandem with their host. Their behaviour follows when we take a number of factors into account: the order of the requests in the SD, the shift from current to past requests, matters of contingency, etc. Thus, we manage to explain the similarities and differences between a variety of construction types rather straightforwardly as discourse phenomena.

In our model, imposition is not triggered by a semantic or pragmatic 'feature' borne by presuppositions and intermediate or utterance-initial parentheticals (as in AnderBois et al. 2013). Rather, presuppositions are imposed upon the discourse because concurrency in conversational time and constraints on how the SD is constructed demand it. Thus, we ascribe 'non-at-issueness' to a particular position in the SD, and subsume presuppositions, intermediate and utterance-initial parentheticals, and initial assertions in monologues under it. By doing this, we question the validity of the claim that certain parentheticals constitute a type of meaning distinct from presuppositions and assertive content, such as Potts' (2005) 'conventional implicature' meaning.

#### **Notes**

- (i) David, who iced a cake, baked it.
- (ii) David iced a cake. He baked it.

### References

AnderBois, Scott, Adrian Brasoveanu & Robert Henderson. 2013. At-issue proposals and appositive impositions in discourse. *Journal of Semantics* 30(4).

Cardoso, Adriana & Mark de Vries. 2010. Internal and External Heads in Appositive Constructions. Manuscript, University of Lisbon & University of Groningen.

Döring, Sandra. 2013. Parentheticals are - presumably - CPs. Manuscript, University of Leipzig.

Grice, Paul. 1975. Logic and conversation. In P. Cole & J. Morgan (eds.), *Syntax and Semantics 3: Speech acts*, 41–58. New York: Academic Press.

Geurts, Bart. 1997. Good news about the description theory of names. *Journal of Semantics* 14: 319-348.

Griffiths, James. in prep. *Topics in the structure and meaning of parenthesis*. PhD dissertation, University of Groningen.

Harris, Jesse & Christopher Potts. 2009. Perspective-shifting with appositives and expressives. *Linguistics and Philosophy* 32(6): 523-552.

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<sup>&</sup>lt;sup>1</sup> Koev (2013) does not discuss presuppositions. Aside from this, our approach contrasts with Koev's in that we treat the discourse as an objective public record of requests to alter the context, whereas he treats it as a record of speaker commitments.

<sup>&</sup>lt;sup>2</sup> The difference between 'accommodation' and 'true' presupposition is tangential to our purposes, and may in fact obscure the important characteristics they have in common, which we focus upon here.

<sup>&</sup>lt;sup>3</sup> Note that instances of apparently broken causality can sometimes be repaired to maintain coherence (cf. Kehler 2002). For instance, though baking a cake precedes the possibility of icing it, (i) and (ii) are acceptable. This may be due to the assumption of an implicit expression *first* or *previously* in the second assertion.

<sup>&</sup>lt;sup>4</sup> See Potts (2002, 2005), Heringa (2011), Döring (2013), and references therein. For a partially different view, see De Vries (2012), and Cardoso & De Vries (2010).

Heringa, Herman & Mark de Vries. 2008. Een semantische classificatie van apposities. Nederlandse Taalkunde 13, 60-87.

Heringa, Heringa. 2011. Appositional constructions. PhD dissertation, University of Groningen.

Kehler, Andrew. 2002. Coherence, Reference, and the Theory of Grammar. Stanford: CSLI.

Koev, Todor. 2013. Apposition and the Structure of Discourse. PhD thesis, Rutgers University.

Krifka, Manfred. 2013. Response particles as propositional anaphors. Proceedings of SALT 23: 1–18.

Nouwen, Rick. 2007. On Appositives and Dynamic Binding. Research on Language and Computation 5(1): 87-

Potts, Christopher. 2002. The lexical semantics of parenthetical-as and appositive-which. Syntax 5(1): 55–88.

Potts, Christopher. 2005. The Logic of Conventional Implicatures. Oxford: Oxford University Press.

Simons, Mandy, Judith Tonhauser, David Beaver & Craige Roberts. 2010. What projects and why. Proceedings of SALT 20. 309-327.

Stalnaker, Robert. 1978. Assertion. In P. Cole (ed.), Syntax and Semantics 9: Pragmatics, 315–32. New York: Academic Press.

Vries, Mark de. 2012. Parenthetical main clauses - or not? On appositives and quasi-relatives. In Lobke Aelbrecht, Liliane Haegeman & Rachel Nye (eds.), Main Clause Phenomena: New Horizons, 177-201. Amsterdam: John Benjamins.

Wang, Linton, Reese, Brian & Eric McCready. 2005. The projection problem of nominal appositives. Snippets 10: 13-14.

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