

# Pseudoclefts

by

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## Abstract

This thesis proposes syntactic and semantic analyses for the two kinds of pseudoclefts, predicational and specificational. I suggest that although the two are syntactically quite different they are similar in their semantics. Predicational pseudoclefts are analyzed as predicational copular clauses with a free relative subject and a predicative counterweight. In contrast, I adopt a deletion-based approach to specificational pseudoclefts, in which the pre-copular constituent is left-dislocated and the counterweight is a fragment of what is underlyingly a full clause. Semantically, I propose that the *wh*-clause in predicational pseudoclefts denotes an individual, while in specificational pseudoclefts it denotes a question. The analyses of both *wh*-clauses involve the maximal informativity operator,  $MAX_{INF}$ . In the former,  $MAX_{INF}$  operates over predicates and in the latter it operates over sets of propositions. The overall aim of this thesis is to account for the differences between predicational and specificational pseudoclefts while also highlighting their similarities in an intuitively satisfying manner.

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# Chapter 1

## Introduction

Pseudoclefts are focus constructions consisting of a *wh*-clause, a copula, and a post-copular XP which can be of a variety of categories (McCawley 1998:9; Culicover and Jackendoff, 2005:250). Consider the examples below due to Ross (2004):

1. a) What I found was [<sub>DP</sub> a grape].  
b) What we were doing was [<sub>VP</sub> moving the piano].  
b) Where he lives is [<sub>PP</sub> in Krum]  
d) What we have always been is [<sub>AP</sub> kind to apes].  
e) What I said was [<sub>CP</sub>(that) you were spotty].

The bracketed constituents in (1a-e) are considered to be in ‘focus position’ (Akma-jian, 1979; Higgins, 1979; others). Since only constituents can occur in this position<sup>1</sup> (Higgins 1979:41; Ross, 2004), pseudoclefts are sometimes used as a diagnostic for constituency (Haegeman and Gueron 1999: 50; Carnie, 2005: 98-99; Tallerman, 2005: 156-158) or for argumenthood (Hedberg and DeArmond, 2009; Needham and Toivonen, 2011).

Pseudoclefts present an interesting puzzle for a number of reasons. There are two different kinds –predicational (2) and specificational (3)– and the two display different syntactic and semantic properties.

2. What John<sub>i</sub> does is important to him<sub>i</sub>. (den Dikken, 2006:314)
3. What John<sub>i</sub> does is important to himself<sub>i</sub>.

The structure of specificational pseudoclefts in particular has been claimed to be “shrouded in mystery” (Radford, 1988:493) and still “remains elusive” (Bošković, 1997:236), in part due to the fact that these pseudoclefts display connectivity, as illustrated in (3), whereas predicational pseudoclefts such as (2) do not.

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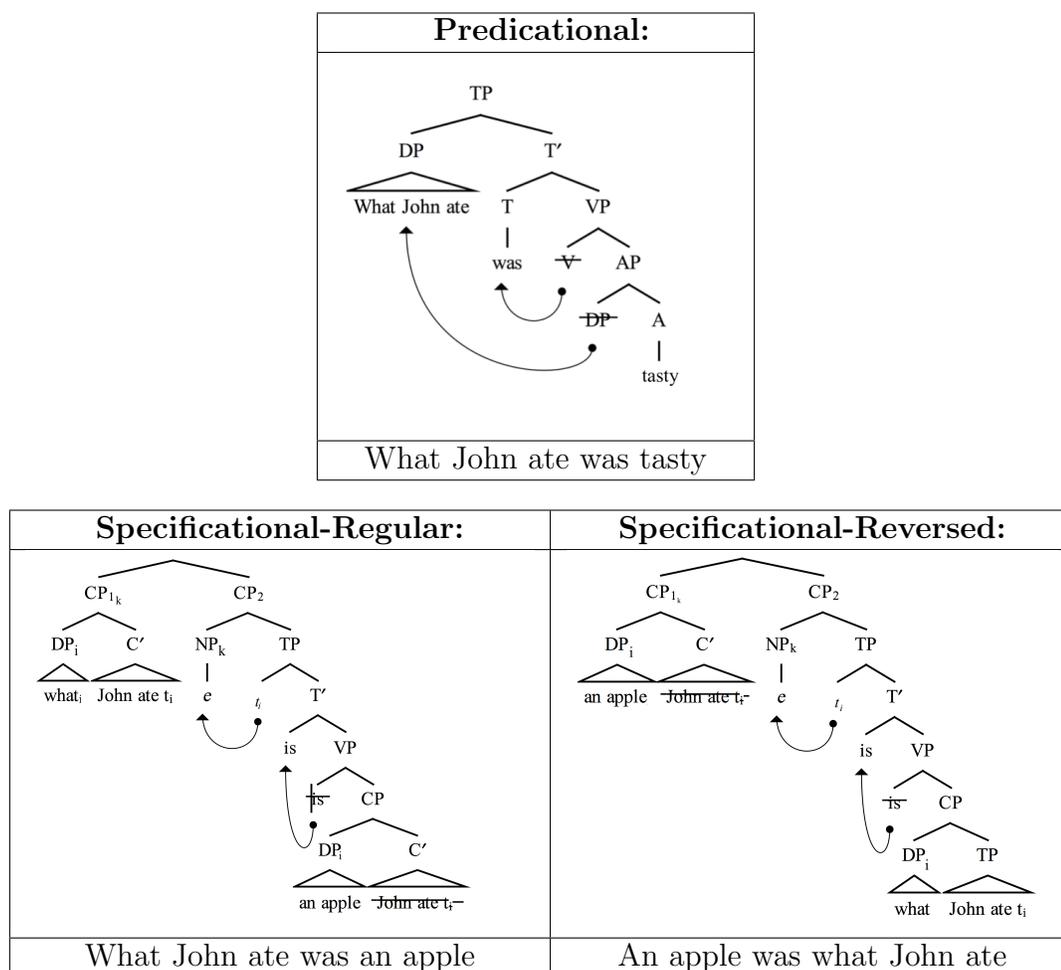
<sup>1</sup>This is illustrated by following examples:

- i. \*What Mary gave was John a book. (Higgins 1797:41)
- ii. \*What Jack threw was the wrappings into the waste basket. (McCawley 1988:..)

In this thesis I will explore the syntax and semantics of both predicational (2) and specificational (3) pseudoclefts in English. Chapter 2 begins with a review of the predicational-specificational distinction, identifying some of the syntactic and semantic differences between the two kind of pseudoclefts. In Chapter 3 I will provide a brief background on the notion of focus and focus constructions. Chapter 4 is a critical summary of the literature which divides the various analyses of specificational pseudoclefts into three broad approaches: reconstruction-bases, deletion-based and revisionist

In Chapters 5 and 6 I develop the syntactic analyses for predicational and specificational pseudoclefts. I will argue that the former are predicational copular clauses with a free relative subject, whereas the latter are bi-clausal structures in which the pre-copular constituent is left-dislocated and the counterweight is a CP optionally reduced by ellipsis. Further, I suggest that the *wh*-clause in specificational pseudoclefts is an embedded interrogative, not a free relative. The structures are illustrated below in Figure 1.

Figure 1



Given the syntactic assumptions above, in Chapter 7 I present semantic analyses for predicational and specificational pseudoclefts in order to make sense of how the

*wh*-clause can combine with a predicate in some cases (in predicational pseudoclefts), and with a proposition in others (in specificational pseudoclefts). I suggest that in the former, the *wh*-clause denotes an entity and the copula is vacuous, while in the latter the *wh*-clause denotes a question and the copula denotes identity. Both analyses will make use of a maximality operator,  $MAX_{INF}$ , which in predicational pseudoclefts operates over sets of individuals, and in specificational pseudoclefts over sets of propositions. The general  $MAX_{INF}$  template that can be used across different semantic types is presented below:

**General  $MAX_{INF}$ :**

$$MAX_{INF}(\phi_{\langle s, \langle \alpha, t \rangle \rangle}) = \text{the unique } x_\alpha \text{ such that } \phi(w)(x) = 1 \text{ and } \forall y_\alpha : [\phi(w)(y) = 1 \rightarrow \lambda w. \phi(w)(x) \text{ entails } \lambda w. \phi(w)(y)]$$

This template highlights that both constructions are closely related, with the difference reducing to one of semantic types: the type of  $\alpha$  in the input to  $MAX_{INF}$ . The resulting paraphrase for the predication pseudocleft in Figure 1 is “the maximal thing that John ate is tasty”, while the resulting paraphrase for specificational pseudoclefts is “the most informative true answer to the question ‘what John ate’ is ‘John ate an apple’”.

Note that this thesis will focus mainly on pseudoclefts in English, though I will provide cross-linguistic data when applicable. Additionally, I restrict the discussion of English pseudoclefts to those in which the *wh*-element is *what*. Many speakers accept pseudoclefts with *wh*-elements other than *what* (Bachenko, 1976; Higgins 1979) such as (4a-e), however others outright reject them (Declerck 1988:41). Examples (4a-d) are due to Higgins (1979:2), while (4e) is due to Bachenko (1976:9):

4. a) **Who** told me about it was Jane.
- b) **Where** he spends his summers is in Chester.
- c) **How** he cut his face was by trying to eat while shaving.
- d) **Why** they did it was to impress Mary.
- e) **When** they will leave is in August.

I will focus on *what* pseudoclefts, as they seem to be the typical case.

# Chapter 2

## Predication, Specification and Focus

This chapter will begin with a summary of the differences between the two kinds of pseudoclefts, predicational and specificational. Subsequently, I will provide a brief background on focus in general before going on to discuss how it relates to the predicational-specificational distinction in pseudoclefts. Those already familiar with this distinction can skip ahead to chapter 3.

### 2.1 Specification vs Predication

As mentioned in Chapter 1, the two kinds of pseudoclefts display differences regarding various syntactic and semantic properties. The aim of this chapter is to get acquainted with the specificational-predicational distinction in pseudoclefts, beginning with a rough discussion of some interpretive differences between the two.

The taxonomy proposed in Higgins (1979: 204-293) distinguishes four types of copular clauses: predicational (10), specificational (11), equative (12), identificational (13). This thesis will not address latter two types, however examples of all four are presented below:

10. The hat is big.
11. The director of *Anatomy of a Murder* is Otto Preminger.
12. Cicero is Tully.
13. That (woman) is Sylvia.

In predicational copular clauses like (10), the pre-copular element *the hat* is referential and the post-copular element *big* is a predicate which describes a property of that referent (Collins, 2002: 37; Declerck, 1984: 252). Intuitively, a predicational clause is one that says something *about* the referent. In contrast, the meaning of a specificational clause such as (11) has been characterized as having ‘a semantic gap’ for which the post-copular element provides the value (Akmajian, 1979:19; Declerck,

1984: 252). Such clauses are used to specify who or what someone or something is, *not* to say anything *about* that person or entity (Mikkelsen, 2011:1809).

Following Akmajian (1979), we can say of (11) that the subject phrase introduces a variable (the  $x$  such that  $x$  directed *Anatomy of a Murder*), and the counterweight provides the value for that variable. Importantly, Higgins notes that Akmajian’s use of the term ‘variable’ is not meant in a formal mathematical sense; it is just used to give an “intuitively satisfying” (Higgins, 1979:95) understanding of the function of a specificational clause.

With respect to pseudoclefts, the predicational-specificational distinction is perhaps most clearly illustrated in cases of ambiguity, as a single pseudocleft can sometimes be ambiguous between a predicational or a specificational reading (Bachenko, 1976; Halupka-Rešetar, 2012:14). Consider the examples in (14-15), due to den Dikken (2006:304) and Bachenko (1976:6), respectively.

14. [*What John does not eat*] *is* [*food for the dog*].
- a. John feeds the things he does not eat (i.e. his leftovers) to the dog.
  - b. John does not eat the following thing(s): dog food.
15. [*What the message contained*] *was* [*a secret*].
- a. It was not known what the message contained.
  - b. The message contained a secret.

The paraphrases in (a) illustrate a predicational interpretation, while those in (b) show the specificational interpretation. The post-copular constituents in (14) *food for the dog* and (15) *a secret* are known as ‘counterweights’ and they perform a different function depending on whether the pseudocleft is interpreted specifically or predicationally.

In a predicational pseudocleft the counterweight is interpreted as a predicate and thus describes a property that is ascribed to the referent of the *wh*-clause (Bachenko 1976; Bošković 1997; den Dikken et al. 2000; Higgins, 1979). In contrast, in a specificational pseudocleft the *wh*-clause is interpreted as the heading of a list, and the counterweight provides the listed items (Akmajian 1979; Declerck 1984:252; den Dikken et al. 2000, den Dikken 2006; Higgins, 1979:154). As further illustration, consider the following example due to Higgins (1979:5):

16. [*What John is*] *is* [*silly*].
- a. John is an  $x$ .  $x$ -hood/being an  $x$  is silly.
  - b. John is silly.

In the predicational paraphrase in (16a),  $x$  is some unstated property about John, and (16a) is saying that this unstated property  $x$  is what is ‘silly’. This paraphrase makes clear that the counterweight of a predication pseudocleft, in this case ‘*silly*’, is a property of a property of *John*. In contrast, in the specificational reading ‘*silly*’

is being predicated of John directly (Higgins 1979:5).

In sum, if a pseudocleft roughly has a template such as (17), the interpretation of predicational and specificational pseudoclefts is shown in (a) and (b), respectively:

17. [What John ate  $x$ ] was [ $y$ ].
- a. Predicational:  $Y(x)$
  - b. Specificational:  $\exists x$  (EAT ( $j,x$ ) &  $x=y$ )

This is oversimplified and ultimately inconsistent with what I will conclude in this thesis, in particular with respect to the specificational reading. However, the intention is simply to get a handle on the basic idea. For a more precise proposal of interpretative differences between the two kinds of pseudoclefts see Chapter 7.

## 2.2 Distinguishing Properties

The following subsections will outline various differences between predicational (PPC) and specificational (SPC) pseudoclefts in order to clarify this distinction and to establish the important role it will play in any proper analysis of pseudoclefts. A summary of the differences is presented in Figure 2:

Figure 2

	Predicational PC	Specificational PC
Reversible	×	✓
Connectivity	×	✓
Relationship to QAPs	×	✓
Pause/List Intonation	×	✓
Referential Counterweight	×	✓
Copular Restrictions	×	✓
Subject-Aux Inversion	✓	×
Raising	✓	×

Again, I wish to emphasize that the aim of this chapter is simply to get acquainted with the difference between the two kinds of pseudoclefts— I will not offer an explanation for why predicational and specificational pseudoclefts do or do not have the particular syntactic and semantic properties listed here. It is also important to note that in collecting the various properties listed above I have simply used the existing judgements in the literature. Some of these judgements are revisited in Chapter 5, which is also where an analysis is proposed to account for why the two kinds of pseudoclefts have the particular properties that they do.

### 2.2.1 Reversibility

Specificational pseudoclefts such as (18) are reversible, whereas predicational ones (19) are not (Bošković 1997:261; Collins 2002:37; Declerck 1988:40; den Dikken et al.

2000; den Dikken 2006; Heycock and Kroch 1999; Moro 1997).

18. a) What John is **is** important to himself. (SPC/\*PPC)  
 b) Important to himself **is** what John is.  
 19. a) What John ate **is** disgusting. (\*SPC/PPC)  
 b) \*Disgusting **is** what John ate.

Accordingly, the predicational reading of an otherwise ambiguous pseudocleft such as (20) is ruled out when the order of the pre- and post-copular constituents is flipped:

20. a) What Heather is **is** important. (SPC/PPC)  
 b) Important **is** what Heather is. (SPC/\*PPC)

The differences in ordering in specificational pseudoclefts such as (18) are typically termed ‘regular’ (18a) and ‘reverse’ (18b). I will return to this in more detail Chapter 5.

### 2.2.2 Connectivity

Connectivity refers to the phenomenon in which “an element is present or interpreted in a way that is normally associated with a certain syntactic configuration seemingly without that configuration obtaining” (Mikkelsen, 2011:1817). With respect to pseudoclefts, only specificational ones display connectivity effects while predicational ones do not (Bachenko 1976; Bošković 1997:235; Culicover and Jackendoff, 2005:205; Declerck 1988:51; den Dikken et al. 2000; den Dikken 2006; Heycock and Kroch 1999; Higgins 1979:14; Mikkelsen 2011:1806; Zwicky, 1986:115).

Three kinds of connectivity effects<sup>1</sup> involving c-command are illustrated in the specificational pseudoclefts below: binding theory connectivity (21), bound variable connectivity (22), and negative polarity item (NPI) connectivity (23). In each case, the licensing of an element (anaphor/pronoun, NPI etc.) in the post-copular phrase requires a particular configuration with its antecedent, and even though the relevant c-command configuration appears to be absent the element nevertheless behaves as if the condition has been met.<sup>2</sup>

21. i. What Mary<sub>i</sub> was was proud of herself<sub>i/\*j</sub> (McCawley, 1998:59)  
 ii. What Mary<sub>i</sub> was was proud of her<sub>\*i/j</sub> (McCawley, 1998:59)  
 iii. What he<sub>\*i/j</sub> did next was wash Harvey<sub>i</sub>. (Mikkelsen, 2011:1817)  
 22. What [every tennis player]<sub>i</sub> loves is his<sub>i</sub> racket. (Mikkelsen, 2011:1817)

<sup>1</sup>Connectivity effects involving quantifier shift have also been observed– Hankamer (1974:223) notes that a quantifier appears to be able to move from the variable part into the focus, as in *what the little bastards did was all get in the tub at the same time*.

<sup>2</sup>Blom and Daalder (1977:56-56) note that while specificational pseudoclefts in Dutch typically display Principle A connectivity, this connectivity breaks down if the counterweight is the anaphor by itself– the Dutch counterpart of *What John did was wash himself* is acceptable, whereas the counterpart of *What John washed was himself* in Dutch would be starred.

What [no student]<sub>i</sub> enjoys is his<sub>i</sub> finals. (Schenker 2003:160)

23. (They found a lot of interesting things at the house, but) what they didn't find was any photos from his childhood. (Mikkelsen, 2011:1817)

Principle A connectivity is illustrated in (21.i), where the reflexive pronoun *herself* appears not to be locally c-commanded by its antecedent *Mary*, yet (21.i) is still grammatical. Indeed, (21.ii) shows that *Mary* in fact cannot be co-indexed with the pronoun *her* instead of the reflexive. This is surprising, since looking at the surface structures of (21.i-ii) would seem predict the opposite pattern: given that *Mary* in the *wh*-clause does not locally c-command the element in question, the pronoun *her* in (21.ii) 'should' be the grammatical one, while the reflexive in (21.i) should be unacceptable. The same pattern is observed with the variable binding connectivity in (22) and the NPI connectivity in (23): an element (variable or NPI) in the counterweight appears to be bound or licensed by a non-c-commanding element in the *wh*-clause.

Additionally, Case connectivity effects (24) have been observed in German, where the counterweight in a specificational pseudocleft is Case dependent on the verb in the *wh*-clause (Bošković, 1997:251; den Dikken et al., 2000; Iatridou and Varlokosta 1998).<sup>3</sup> This is illustrated by the accusative Case on the counterweight in the pseudocleft in (24) due to Iatridou and Varlokosta (1998:6).

24. Was Hans essen wollte war **einen** Apfel.  
 what Hans eat wanted was an-ACC apple  
 'What Hans wanted to eat was an apple.' (SPC/\*PPC)

The connectivity effects observed in the specificational pseudoclefts in (21-24) are not found in predicational ones (Schlenker 2003:161). For example, the predicational pseudocleft in (25a) has the predicted Principle A violation that was missing from (21.i), as well as the absence of a Principle B violation that surprisingly was incurred in (21.ii). Examples (26.b-c) are due to Schlenker (2003:161)

25. a) What Liam<sub>i</sub> does is special to him<sub>i</sub>/\*himself<sub>i</sub>. (\*SPC/PPC)  
 b) What John<sub>i</sub> likes is important to him<sub>i</sub>/\*himself<sub>i</sub>. (\*SPC/PPC)  
 c) What he<sub>i</sub> likes is important to John<sub>i</sub>. (\*SPC/PPC)

Regarding Case connectivity, den Dikken et al. (2000:73) note that a predicational pseudocleft such as (26) cannot have accusative marking on the counterweight.

<sup>3</sup>Den Dikken et al. (2000) note that Case connectivity is not as rigid binding connectivity: either nominative or accusative is acceptable in the counterweight of the specificational pseudocleft in (i).

- i. Was er schon immer kaufen wollte, ist ein/einen Audi  
 what he PRT always buy wanted is a-NOM/a-ACC Audi.  
 'What he always wanted to buy is an Audi'.

26. Was er schon immer kaufen wollte, scheint ein/\*einen Audi zu sein.  
 what he PRT always buy wanted seems a-NOM/\*a-ACC Audi to be  
 ‘What he always wanted to buy seems to be an Audi’. (\*SPC/PPC)

Connectivity can thus disambiguate an otherwise ambiguous pseudocleft (27) by singling out either the predicational reading (27a) or the specificational one (27b) (Schlenker, 2003: 161).

27. What John<sub>i</sub> is is important. (SPC/PPC)  
 a) What John<sub>i</sub> is is important **to him<sub>i</sub>**. (\*SPC/PPC)  
 b) What John<sub>i</sub> is is important **to himself<sub>i</sub>**. (SPC/\*PPC)

### 2.2.3 QAP Connections

In specificational pseudoclefts such as (28), the pre- and post-copular constituent must be well-formed as a question and answer pair (QAP) (Culicover and Jackendoff 2005; den Dikken et al., 2000; den Dikken 2006; Heycock and Kroch, 1999; Higgins 1979:54; McCawley, 1999; Ross, 1972, 1999, 2004; Schlenker, 2003; Seuren, 1985:297). On the other hand, predicational pseudoclefts (29) are not subject to this requirement, nor do they have the intuitive feeling of being self-answering questions (Declerck, 1988:35).

28. What Amy did was buy a pear (SPC/\*PPC)  
 Q: What did Amy do?  
 A: **Buy a pear = SPC**
29. What Amy bought was expensive (\*SPC/PPC)  
 Q: What did Amy buy?  
 A: **\*Expensive = PPC**

Indeed, Higgins (1979:86) notes that specificational pseudoclefts “have arisen, historically, by analogy to question-answer pairs”. Several authors (den Dikken et al., 2000; Ross, 1972; Schlenker, 2003) have taken up this suggestion, analyzing a specificational pseudocleft as a QAP in which the question-denoting element precedes the copula and its answer follows. For further detail see deletion-based analyses in section 4.2.

It is possible that the generalization is in fact stronger— that predicational pseudoclefts are *never* well-formed as question-answer pairs. I have so far not been able to think of a predicational pseudocleft that is an acceptable QAP.<sup>4</sup> For example, if we

<sup>4</sup>The only possible exception I can think of is pseudoclefts involving a *wh*-clause on either side of the copula, as in (32-33).

32. i) What he did was what she told him.  
 ii) What did he do?– What she told him.
33. i) What she told him was what he did.  
 ii) What did she tell him?– What he did.

take a pseudocleft that is ambiguous such as (30), that ambiguity does not survive when the pseudocleft is reformulated as a QAP— only the specificational reading is available:

30. What Jane bought is a donut and a croissant. (SPC/PPC)

i. **PPC**: Jane bought a cronut.

ii. **SPC**: Jane bought the following: a donut, a croissant.

31. Q: What did Jane buy?

A: A donut and a croissant ( $\neq$  a cronut)

While the predicational interpretation of the pseudocleft in (30) expresses that Jane bought a cronut, the answer in (31) cannot be used to mean this. It can only mean that Jane bought two items, a donut and a croissant.

In addition, it has been claimed that specificational pseudoclefts such as (34) have exactly the same presuppositions as QAPs (35), in particular that both carry the presupposition of existence.

34. **A**: What did John get?

**B**: A book.

35. What John got was a book. (SPC/\*PPC)

The examples in (34-35) are due to Declerck (1988:6), who argues that (34A) presupposes that John got something and that (35) does as well (see Declerck 1988:14-18 for further discussion). Based on the claim that (35) allegedly carries this presupposition, Faraci (1971) and Grimes (1975:341) have argued that *wh*-clause of specificational pseudoclefts should be analyzed as a question (see Chapter 6 for further discussion regarding the status of the pseudocleft's *wh*-clause). However, in some

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These examples are confusing for a number of reasons, one of which is that the predicational and specificational interpretations are hard to keep apart. In a predication reading, the meaning is roughly “she told him to do X and he did X”. In contrast, a specificational reading would be something like “he did X, and she told him *that* he did X”.

To begin, I'm not even sure that both readings really are equally available for (32) and (33). It seems to me that the predicational reading, “she told him to do X and he did X”, is available for both (32i) and (33i), though much more readily in the former. Indeed, the pseudocleft in (32i) is the only one that translates into a QAP which preserves the predicational reading. The QAP version of (33i) can only be specificational.

On the other hand, the specificational reading “he did X, and she told him *that* he did X” is definitely available for (33i) and less so for (32i), possibly even unavailable. I am hesitant to say that a specificational reading of (32i) is completely ruled out, because I think once a set of alternatives is made salient and accent is placed on ‘*did*’, then the specificational reading becomes more accessible—there are three relevant alternatives: John did something, he said something, he ate something.... “Mary didn't tell him what he SAID, *What he DID was what she told him*”. I am not sure that a specificational reading is available for the QAP version of the pseudocleft in (32i).

In any case, it seems that (32) could be an example of a predicational pseudocleft that is an acceptable QAP. The possibility of predicational pseudoclefts being well-formed as QAPs is a question that I leave open for future research

cases it is not clear that either a question such as (34A) or a pseudocleft such as (35) even has an existence presupposition. Consider question-answer dialogue in (36) due to Rooth (1985:11):

36. **A:** Who did John introduce Bill to?  
**B:** John introduces Bill to SUE.

Jackendoff (1972) rejects the claim that (36.A) presupposes that John introduced Bill to someone, noting that it is possible to respond to (36.A) by saying *John introduced Bill to NOBODY*, which has the same focal properties but explicitly denies the alleged presupposition. I address the issue of presuppositions in predicational and specificational pseudoclefts in section 7.4.1.

### 2.2.4 List Intonation

Many have noted that variable-value specification is similar to enumerating items on a list (Declerck 1988; Hartmann 2006:8; Higgins 1976:95). Indeed, having a list interpretation is arguably one of the “quintessential properties” (den Dikken, 2006:307) of specificational pseudoclefts. This often leads to specificational pseudoclefts (34) being read with list intonation, characterized by a pause after *be* (Declerck, 1988:5; Declerck, 1984:252). This pause is said to have the same effect as a colon in writing (Declerck, 1984: 263). In contrast, pausing after the copula is not acceptable in a predicational pseudocleft such as (38).

37. What I bought was: a new shirt and a pair of pants. (SPC/\*PPC)  
 38. \*What I bought was: ugly and expensive. (\*SPC/PPC)

Moreover, enumerating items on a list has been connected to providing an answer to a question (Declerck 1988:6-7): in a question that has narrow scope the *wh*-word functions as a variable for a value that must be specified.

### 2.2.5 Copular Restrictions\*

Specificational pseudoclefts have more restrictions on the copula than predicational ones<sup>5</sup> (Bošković 1997; Declerck, 1984, 1988:77; den Dikken et al., 2000; den Dikken, 2006; Ross, 2000).

First, it has been claimed the copula of a specificational pseudocleft cannot convey “straight negation of the predicate” (den Dikken, 2006: 334), it can only convey a contrastive interpretation (Bošković 1997:264; Declerck 1988: 166; den Dikken, 2006: 334; Hartmann, 2006:9; Higgins 1979:207). When the copula of a specificational pseudocleft such as (39a) is negated, it cannot therefore express “John isn’t proud of

<sup>5</sup>Until this point, the majority of the the properties listed for predicational and specificational pseudoclefts have been relatively uncontroversial. The majority of the literature agrees, for example, that predicational pseudoclefts are not reversible and do not display connectivity effects. In contrast, from here on many of the restrictions for specificational pseudoclefts are still highly debated. I will flag the subsections that may be more controversial by annotating them with the \* symbol.

himself”. Rather, it must mean something like “the thing that John is isn’t proud of himself, it’s ashamed of himself”. In contrast, the predicational pseudocleft in (40) can convey straight negation. Examples (39.a) and (40) are due to den Dikken (2006:324), while (39.b) is taken from Ross (2000).

39. a) #What John is isn’t proud of himself. (SPC/\*PPC)  
 b) # What they should do isn’t pat the cat. (SPC/\*PPC)  
 40. What John is isn’t important to him. (\*SPC/PPP)

Another restriction on the copula of a specificational pseudocleft is that it cannot contract with the pre-copular constituent (41), whereas in a predicational pseudocleft (42) it can (Declerck, 1988:73; den Dikken et al. 2000; den Dikken 2006:325). Examples are taken from Kaisse (1979: 708-709).

41. \*What I want’s an avocado. (SPC/\*PPC)  
 42. What I eat’s important to me. (\*SPC/PPC)

A third restriction on specificational pseudoclefts is that the copula must show tense harmony with the *wh*-clause (Akmajian 1979:168; Bošković 1997:266; den Dikken et al. 2000; den Dikken 2006:321; Higgins 1979:201; Halupka-Rešetar, 2012). In contrast, tense can vary in predicational sentences (Hartmann, 2011). This contrast is illustrated by (43-44) due to Higgins (1979:202).

43. What John used to be **was**/\***is** very rude. (SPC/\*PPC)  
 44. What John used to be **is**/**was** important to him. (\*SPC/PPC)

It has further been argued that the copula of a specificational pseudocleft must obligatorily show singular agreement (Declerck, 1988: 80; Halupka-Rešetar, 2012), whereas in predicational pseudoclefts the copula can be singular or plural. Again, this is not uncontroversial, and even Declerck acknowledges that ‘obligatory singular agreement’ is probably too strict. The specificational pseudocleft (45a) is taken from Halupka-Rešetar (2012), while (46) is taken from Declerck (1988:80)

45. a) What he is **is**/\***are** proud. (SPC/\*PPC)  
 b) What they are **is**/\***are** important to themselves. (SPC/\*PPC)  
 46. a) What you have bought **is** fake jewels. (SPC/PPC)  
 b) What you have bought **are** fake jewels. (\*SPC/PPC)

A fourth restriction on specificational pseudoclefts is that sentential adverbs cannot occur to the right of the copula as in (47.a) due to Higgins (1979:205), whereas in a predicational pseudocleft (47.b) they can (Bošković 1997:264; den Dikken et al., 2000; Higgins 1979:205).

47. a) \*What John is **is** probably rich. (SPC/\*PPC)

b) What John eats **is** probably healthy. (\*SPC/PPC)

Finally, the copula of a specificational pseudocleft such as (48) cannot be repeated before each element listed in the counterweight, while in a predicational pseudocleft it can (Declerck 1988: 76):

48. What I saw **was** [a man and a horse]. (PPC/SPC)

49. What I saw **was** [a man] and **was** [a horse]. (PPC/\*SPC)

### 2.2.6 Referentiality of the Counterweight

As mentioned in section 2.1, in predicational pseudoclefts the counterweight is a predicate which takes the *wh*-clause as its argument (Bachenko 1976:20). Accordingly, the counterweight of a predicational pseudocleft does not refer (Declerck 1988:65). In contrast, in a specificational pseudocleft the counterweight is (or at least *can be*<sup>6</sup>) an R-expression (den Dikken 2006:297-299; Declerck 1984:10).

The observation that the referentiality of the counterweight differs according to the type of pseudocleft has implications for definiteness, such that pseudoclefts with definite counterweights are often interpreted specificationally. In contrast, indefinite counterweights are equally likely to be specificational or predicational.

50. What Fiona forgot was [**the** cake]. (SPC/\*PPC)

51. What Fiona forgot was [**a** cake]. (SPC/PPC)

The observation that definite counterweights are typically specificational is likely due to the requirement that the counterweight of a predicational pseudocleft is type  $\langle e, t \rangle$ . This is compatible with indefinite counterweights, but less so with counterweights that are definite, as they are usually type *e*. However, in cases where a definite can be construed as type  $\langle e, t \rangle$  such as (52), then the counterweight of a predicational pseudocleft can indeed be definite (Declerck 1988:92).

52. What John bought is [**the** bomb]. (PPC/SPC)

**PPC:** John bought an Audi and the Audi is ‘the bomb’.

**SPC:** John bought the bomb.

It is therefore not necessarily accurate to claim, as some have suggested, that definite counterweights are always indicative of specificational pseudoclefts: (52) reveals that the more important generalization is actually the ability to be a predicate (see Declerck (1984:263-265) for further discussion about definiteness and specificational pseudoclefts).

<sup>6</sup>This is assuming we are dealing with a nominal counterweight. In a pseudocleft with an AP counterweight such as *What John is is important*, ‘important’ is not an R-expression in either predicational or specificational reading.

### 2.2.7 Raising\*

The *wh*-clause of a predicational pseudocleft (53) can undergo raising, while that of a specificational pseudocleft (54) cannot (Bošković 1997:245-246; Declerck 1988; den Dikken et al. 2000; den Dikken 2006; Heycock and Kroch 1999; Halupka-Rešetar, 2012; Higgins 1979:7):

53. [What John bought] seems to be expensive.  
**PPC:** What John bought is expensive.
54. a) \*[What John bought] seems to be the groceries.  
**SPC:** What John bought was the groceries.
- b) \*[What John is] seems to be proud. (Halupka-Rešetar, 2012)  
**SPC:** What John is is proud.

In contrast, others suggest that in fact raising the *wh*-clause of a specificational pseudocleft is acceptable (Halvorsen,1978:34):

55. [What John wants] seems to be never to be left alone. (SPC/\*PPC)  
**SPC:** What John wants is never to be left alone.

### 2.2.8 Subject-Auxiliary Inversion\*

Subject-auxiliary inversion is only possible with predicational pseudoclefts (56), not specificational ones (57) (Bošković 1997:247; den Dikken et al. 2000; den Dikken 2006; Halupka-Rešetar, 2012:14; Higgins 1979:193):<sup>7</sup>

56. Is what Mary bought expensive? (\*SPC/PPC)
57. \*Is what Mary bought that T-shirt? (SPC/\*PPC)

## 2.3 Summary: Predication vs Specification

In sum, this chapter has presented several empirical observations regarding the properties of predicational vs. specificational pseudoclefts in order to clarify their semantic and syntactic differences. A summary is presented in the table below:

Figure 2

<sup>7</sup>Higgins notes that whatever constraint blocks subject-auxiliary inversion in specificational pseudoclefts cannot simply be a constraint on movement, as these pseudoclefts are ungrammatical in embedded questions as well (c.f. *\*He doesnt know whether what John is is tall*). Thus, for Higgins the explanation for the impossibility of *\*Is what John is tall?* lies in “the presuppositional or discourse function of specificational sentences” (1979:217).

	Predicational PC	Specificational PC
Reversible	×	✓
Connectivity	×	✓
QAP	×	✓
Pause/List Intonation	×	✓
Referential Counterweight	×	✓
Copular Restrictions	×	✓
Subject-Aux Inversion	✓	×
Raising	✓	×

I would like to emphasize again that I do not in this chapter propose any explanation for why the two kinds of pseudoclefts have the properties they do. Second, Recall that I borrowed directly the grammaticality judgements above from the literature—some of them<sup>8</sup> are more disputed than others and were flagged accordingly. They will be revisited later in Chapter 5.

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<sup>8</sup>In particular, some of the copular tense and number restrictions, as well as inversion examples such as *Is what Mary did cut her hair?*, and raising examples such as *Who he saw seemed to be the killer.*

# Chapter 3

## Focus

Now that the distinction between predicational and specificational pseudoclefts has been more firmly established, we will turn to the notion of focus— in particular, what it means to say that a pseudocleft is a ‘focus construction’. This chapter will begin by providing a brief background on focus in general before moving on to discuss focus in pseudoclefts specifically.

Descriptively, ‘focus’ refers to a part of an utterance being in some way emphasized or discourse-salient (Howell, Rooth and Wagner, 2017). It is often signalled prosodically, where the focus phrase receives pitch accent (Rooth, 1985:18; Selkirk, 1984; A-accent for Jackendoff, 1972). Consider the dialogue below taken from Howell et al. (2017) in which *Sara* in (58.B) is said to be ‘focused’ while *ate the sushi* in (58.B) is not focused.

58. A: You ate the sushi.

B: No, *Sara* ate the sushi.

One thing that Speaker A makes it salient is that someone ate the sushi, but at the time of B’s utterance it is not yet salient who. The sequence *ate the sushi* in A’s utterance licenses a reduction in prominence on *ate the sushi* in (58.B) and *Sara* receives pitch accent (Howell et al., 2014). Other languages that behave like English in accentuating the focused constituent are Hungarian<sup>1</sup> and Romance languages (Szendri, 2001, 2004; Truckenbrodt, 2006; Ladd, 2008; Krifka, 2008; Zimmermann and Onea, 2011). However, different prosodic strategies to mark focus are found in different languages, for example phonological phrasing in Chichewa (Kanerva, 1990).

It is important to note that even in English simply associating focus with pitch

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<sup>1</sup>In addition to prosodic accentuation, focus in Hungarian has a syntactic reflex where the focused constituent must appear in the preverbal position (É. Kiss, 1998). This is illustrated in (59):

59. Tegnap este [MARINAK]<sub>F</sub> mutattam **be** Petert.  
last night Mary-DAT introduced.I PERF Peter-ACC

‘It was to Mary that I introduced Peter last night.’ (É. Kiss, 1998:247)

Here, *Mary* is in focus and appears pre-verbally. In neutral sentences the perfective particle *be* occupies this position, while here it appears after the verb.

accent is oversimplifying matters, however it will suffice for our discussion here. For a more a detailed description of the phonological effects of focus and its interaction with intonation contours in English see Chomsky (1971), Selkirk (1984), and also Prince (1983).

### 3.1 Focus as Contrast

Different theories of focus of course have different views about the relationship between an utterance and the discourse. Two prominent analyses are that of Rooth (1985, 1992, 1996) which places emphasis on contrastive focus, and that of Schwarzschild (1999) which emphasizes the notion of givenness/newness. In the former view, focus indicates the “presence of alternatives that are relevant for the interpretation of linguistic expressions” (Krifka, 2008:247). In the latter, it expresses the newly introduced information in a sentence relative to the discourse (Coen, 2008:4; Ladd 2008:219; Rochement, 2013:38).

Both Rooth’s and Schwarzschild’s analyses postulate a ‘focus skeleton’, which is a semantic object with variables in place of the focused phrase. Returning to the example in (58), the focus skeleton would be something like ‘X ate the sushi.’

58. A: You ate the sushi.

B: No, *Sara* ate the sushi.

For Rooth, the ‘focus semantic value’ is the set of propositions which is generated by replacing the focus phrase with alternatives of the same type (Rooth 1992:76) . In the case of (58.B) ‘[Sara]<sub>F</sub> ate the sushi’, this derives a focus semantic value such as {‘Juan ate the sushi,’ ‘The server ate the sushi,’ ‘The woman at the next table at the sushi,’ ... } (Howell et al., 2017). On the other hand, Schwarzschild (1999) would derive the proposition ‘Someone ate the sushi’ by existentially quantifying over the focused phrase ‘Sara’ in (58B).

In the following paragraphs I will briefly summarize some the details of Rooth’s analysis<sup>2</sup>, as that will be the one assumed in this thesis. For the sake of space I will not go into any further detail regarding Schwarzschild (1999). To begin, consider the QAP in (60) and (61) due to Rooth (1992:84):

60. Q: Who cut Bill down to size?

A1: MARY<sub>F</sub> cut Bill down to size.

A2: #Mary cut BILL<sub>F</sub> down to size.

61. Q: Who did Mary cut down to size?

A1: #MARY<sub>F</sub> cut Bill down to size.

A2: Mary cut BILL<sub>F</sub> down to size.

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<sup>2</sup>I will only discuss Rooth’s analysis as it applies to question-answer pairs, leaving aside his treatment of scalar implicatures, contrasting phrases and focusing adverbs.

The A1 and A2 answers in (60-61) are identical except for focus. Crucially, they are not interchangeable in discourse, as A1 can only be felicitously used to answer the question in (60), and A2 can only be felicitously used in answer to the question in (61).

Recall that Rooth’s basic idea is that the function of focus is to evoke alternatives. Each expression thus has two different semantic values: its ordinary semantic value, and its ‘focus semantic value’ which consists of a set of alternatives.<sup>3</sup> In a question-answer paradigm, the relevant alternative set is based on Hamblin’s (1973) semantics of questions in which a question determines a set of possible answers (Rooth 1992:84). The set of potential answers to (60) and (61) are shown below:

Figure 3

(60) Who cut Bill down to size?	(61) Who did Mary cut down to size?
Monique cut Bill down to size	Mary cut Boris down to size
Michiko cut Bill down to size	Mary cut Björn down to size
...	...

Skipping over the mechanics of how they are built up compositionally, the focus semantic value of (A1) will be the set of propositions of the form “x cut Bill down to size” (i.e., those in the left column of Figure 3), while the focus semantic value of (A2) will be the set of propositions of the form “Mary cut x down to size” (i.e those in the right column). Importantly, the propositions on the left side the table are only potential answers to (60), not (61). Similarly, those on the right are only potential answers to (61), not (60). Consider again the QAP in (60), repeated below:

60. Q: Who cut Bill down to size?

A1: MARY<sub>F</sub> cut Bill down to size.

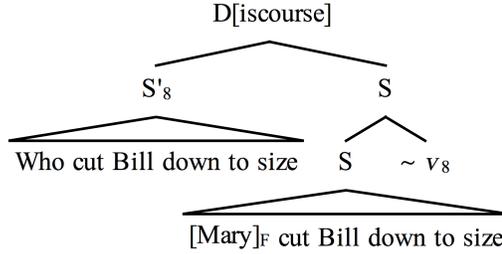
As an answer to (60), the function of focus in (A1) is to express contrast between the asserted answer (*Mary cut Bill down to size*) and other potential answers (in left column of Figure 3: *Monique cut Bill down to size*, *Michiko cut Bill down to size*...) (Rooth 1992:84).

The focus interpretation operator<sup>4</sup>  $\sim$  introduces a presupposed alternative set: roughly it says that whenever there is a sentence with something focused in it, it is presupposed that the context contains some relevant set of alternatives (Rooth 1996:278). In a QAP,  $\sim$  takes scope over the answer. The discourse tree in Figure 4 is taken from Rooth (1996:279) and illustrates the QAP in (60):

Figure 4

<sup>3</sup>The ordinary semantic value of  $\alpha$  is represented as  $[[\alpha]]^o$ , while the focus semantic value of  $\alpha$  is represented as  $[[\alpha]]^f$ .

<sup>4</sup>Where  $\phi$  is a syntactic phrase and C is a syntactically covert semantic variable,  $\phi \sim C$  introduces the presupposition that C is a subset of  $[[\phi]]^f$  containing  $[[\phi]]^o$  and at least one other element (Rooth,1996:279).



The variable introduced by focus interpretation is  $v_8$ , which takes as its value an alternative set. As mentioned above, this alternative set is identified as the semantic value of a question: a set of potential answers including both true and false answers. As Figure 3 illustrates, for (60) this could be {Mary cut Bill down to size, Monique cut Bill down to size, Michiko cut Bill down to size}. The variable  $v_8$  is anaphoric to this set, and the presupposition is satisfied that the set denoted by  $v_8$  is a set of propositions of the form ‘x cut Bill down to size’ which contains “Mary cut Bill down to size” and at least one more proposition.

Rooth formulates the following question-answer constraint<sup>5</sup>: the (ordinary) semantic value of a question is a subset of the focus semantic value of its answer. This is illustrated below for the QAP in (60), where the (ordinary) semantic value of the question in (60) is shown in (62) and the focus semantic value of its answer (A1) is shown in (63).

62.  $\{\lambda x [\text{cut-down-to-size}(x, \mathbf{b})] : x \in E \wedge \text{person}(x)\}$

63. a set of propositions of the form ‘x cut Bill down to size’

Both the semantic value of ‘*Who cut Bill down to size*’ (shown in 62) and the focus semantic value of ‘*MARY cut Bill down to size*’ (shown in 63) are sets of propositions of the form ‘x cut Bill down to size’. The focus semantic value shown in (63) is a superset of (62), since it includes instances of  $x$  which are not people. The requirement that  $x$  be a person in (62) was supplied by the pronoun ‘*who*’ (Rooth, 1996). Thus, the QAP in (60) is well-formed: (62-63) shows us that the semantic value of the question in (60) is a subset of the focus semantic value of the answer (A1):

60. Q: Who cut Bill down to size?

A1: MARY<sub>F</sub> cut Bill down to size.

<sup>5</sup>Question-answer constraint: in a question-answer pair  $\langle \psi, \alpha \rangle$ ,  $[[\psi]]^o \subseteq [[\alpha]]^f$ . The more general principle for interpreting focus at the level of a phrase  $\alpha$  is in (i):

(i) (*contrasting set*)  $\Gamma \subseteq [[\alpha]]^f$

(*contrasting individual*)  $\gamma \in [[\alpha]]^f$

$\Gamma$  is a variable with the type of a set of objects matching  $\alpha$  in type, and  $\gamma$  is a variable matching  $\alpha$  in type.

In contrast, in an answer like (A2) “*Mary cut BILL down to size*” the focus semantic value is the set of propositions of the form ‘Mary cut x down to size’. Accordingly, (A2) is not an appropriate answer to the question in (60), since  $[[60]]^o$  is *not* a subset of  $[[A2]]^f$ .

In sum, this chapter has presented a rough sketch of Rooth’s theory of focus, which I adopted mostly without argument or defense. For the purpose of this thesis about pseudoclefts, we will assume with Rooth (who in turn follows Jackendoff 1972 and Selkirk 1984) that focus is a feature that is marked on syntactic phrases (Rooth, 1985:10), that pitch accent is the phonological reflex of this focus feature in English (Rooth, 1985:19) and that focus is related to the notion of contrast within a set of alternative elements (Rooth, 1992:113).

### 3.1.1 Briefly: Support for contrast over new-given

Though we are following Rooth in assuming a contrast-based view of focus for our treatment of pseudoclefts, others have argued pseudoclefts should be viewed in terms of new-old information (Declerck, 1988:12; Prince, 1978:88). In such proposals, the claim is that the counterweight (i.e. the focal item) represents new information, while the *wh*-clause usually<sup>6</sup> represents old information (Declerck 1984: 253). The copula then is simply a link between the old information in the *wh*-clause and the new information counterweight (Halupka-Rešetar, 2012).

In terms of specificational copular clauses in general (of which specificational pseudoclefts are often considered a subclass), Birner (1996) and Mikkelsen (2004) have argued that the distinction between new and old information is needed for a proper analysis of focus. In particular, constraints that refer to newness/givenness are necessary for specificational clauses that are reversed (cf. *The culprit is John.*). In such clauses, they suggest the relevant restriction is that the pre-copular element must not be newer in the discourse than the post-copular element (Birner, 1996:90; Mikkelsen, 2004:225).

Extending the above analyses of reversed specificational clauses directly to reversed specificational *pseudoclefts* such as (64) would mean that pre-copular constituent ‘*those sunglasses*’ must be discourse-older than the post-copular constituent ‘*what I want for my birthday*’:

64. Those sunglasses are [what I want for my birthday].

Instead, we will be following Hartmann, Hegedüs and Surányi (2013) who maintain that the relevant notion in reversed specificational pseudoclefts is contrast: for

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<sup>6</sup>For Prince (1978:88) the *wh*-clause in specificational pseudoclefts always presents given information. In response, Declerck (1988:266) points out that in inverted specificational pseudoclefts it is the *wh*-clause rather than the counterweight that conveys the new information:

Q: Why do you like Paris so much?

A1: Because that is [where I met my future wife].

A2: \*Because [where I met my future wife] is that.

Like Declerck, den Dikken (2006) suggests that while there is a strong tendency for the *wh*-clause to convey old information, this is not absolute.

pseudoclefts in German (66) and English (64-65) in which the *wh*-clause follows the copula, the restriction is that the pre-copular element obligatorily requires contrastive interpretation.

65. [His best speech ever] is what John contributed to the conference.
66. [Die Kosten] sind was sie kritisch sieht. (nicht das Konzept)  
The costs-ACC are what she critically sees. (not the concept-ACC)

Further support that the relevant notion of focus in specificational clauses is indeed ‘contrast’, not the difference between new and old information, comes from Rochemont (2010). *It*-clefts are typically considered to be specificational focus constructions (Declerck 1984 1988; den Dikken et al. 2006; Hartmann, 2011; Rooth, 1985:210), and Rochemont presents evidence that in *it*-clefts *both* the cleft clause and the clefted constituent can contain given and new material.<sup>7</sup> This finding is in conflict with a new-given analysis of focus, which predicts that the clefted constituent –since it is the focused item– should contain only new information, while the cleft clause should only convey information that is old.

## 3.2 Focus in Pseudoclefts

One reason a pseudocleft is considered to be a focus *construction* is that focus is expressed structurally: pseudoclefts have a fixed information structure in which the *wh*-clause expresses the ground and the counterweight is the ‘focal item’ (Akmajian, 1979; Higgins 1979:8; Halupka-Rešetar, 2012; Prince, 1978). While canonical sentences with regular intonation are typically ambiguous with regard to focus, the function of a pseudocleft is to disambiguate the focus interpretation (Halupka-Rešetar, 2012; Prince, 1978). Consider the examples below due to Halupka-Rešetar (2012).

67. John hit Fido.
68. a) What John hit was Fido.  
b) What John did was hit Fido.  
c) What happened was that John hit Fido.

In the non-cleft in (67) there is no restriction on what gets f-marked: [John hit [FIDO]<sub>F</sub>], [John [hit FIDO]<sub>F</sub>] etc. As a reader, simply looking at (67) will not tell you which of these is intended, you would have to make a guess. In contrast, the pseudoclefts in (68a-c) are unambiguous in that the counterweight is the item that must be focused: [FIDO]<sub>F</sub> in (68a), [hit FIDO]<sub>F</sub> in (68b) and [John hit FIDO]<sub>F</sub> in

<sup>7</sup>Rochemont (2013) argues that English grammar in fact distinguishes *both* notions of focus: focus-as-alternatives and focus-as-new. For empirical arguments in favour of this see Rochemont (2013) and Kiss (1998).

(68c).<sup>8</sup>

In each pseudocleft in (68), the *wh*-clause denotes the ground, which is an open proposition the speaker assumes is a salient member of the hearer’s belief set, while the focus denotes the ‘value’ of the ‘variable’ (in the sense of Akmajian 1979 discussed in section 2.1) that the speaker intends the hearer to add to their belief set (Halupka-Rešetar, 2012). Accordingly, a speaker who utters (68.a) is assuming that the hearer holds a belief that John hit something, and intends the hearer to add to their belief set that the value of that ‘something’ is Fido. However, a speaker who utters (68.b) assumes only that the hearer believes that John did something, and intends the hearer to add to their belief set that the thing he did was hit Fido (Halupka-Rešetar, 2012).

Independently from pseudoclefts, focus in general has been tied to exhaustivity, though importantly the two are distinct: as Rooth (1992:96) notes, “an exhaustive listing is distinct from the semantics of intonational focus in English, although constructions with a semantics of this kind might trigger association with focus”. In line with this, it has been suggested both for pseudoclefts (Declerck 1984, 1988; den Dikken, 2006; others) and *it*-clefts (Hartmann, 2011; Kiss 1998) that the focused constituent expresses an exhaustive identification with contrast. This is illustrated in the German *it*-cleft due to Huber (2002), and the English pseudocleft in (70) due to den Dikken (2006).

69. Es war der Peter, den Paul ermordet hat.  
It is the-Nom Peter PRN.Acc.M.Sg Paul murdered has

(#Und übrigens auch der Fritz.)

(#And by-the-way also the-Nom Fritz)

‘It was Peter that Paul murdered. (# And by the way also Fritz.)’

70. What the car needs is a new battery (# among other things).

Regarding their prosody, pseudoclefts are consistent with the observation that focal items are prosodically accentuated. For example, Higgins notes that in pseudoclefts the focal item “always bears nuclear tone” (1978:8). Additionally, a prosodic property that is specific to pseudoclefts is that they are pronounced with a pause after the copula and before the focal item (Declerck, 1984:263; Ross 2004:5).

### 3.2.1 Focus: Specificational Pseudoclefts Only

In the following quote, Higgins (1979:1-2) states two defining characteristics of pseudoclefts:

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<sup>8</sup>It is important to note that in some cases the entire f-marked constituent will be accented, while in others only a subpart (Chomsky, 1971). For example, the sentence *John hit FIDO* with accent on ‘Fido’ is compatible with both [John hit [FIDO]<sub>F</sub>] and [John [hit FIDO]<sub>F</sub>]. Similarly, in some pseudoclefts (68b-c) only a subpart of the f-marked counterweight is accented. This is also true in *it*-clefts such as *It is [eating PEAS] that John objects to* (Rooth, 1985:210).

“(1) a semantic kinship to cleft sentences, and a consequent semi-formal requirement that pseudocleft sentences should have a bipartite form, looking like a broken up form of a simple sentence, with a “focal” constituent which in some sense is being emphasized, and a remainder; (2) a formal requirement that the sentence is a copular sentence having a subject that consists of a clause introduced by a *wh*-item, usually *what*, this subject clause constituting the remainder of the simple sentence, and a portion which follows the copula and constitutes the focal constituent, the constituent which is being emphasized”.

In light of these two properties, one might ask whether or not predicational ‘pseudoclefts’ should even be considered pseudoclefts at all. If we take Higgins’ characteristics (1) and (2) seriously, then predicational *wh*-sentences are not pseudoclefts. However, if we use the term pseudocleft to refer to the “superficial shape of the sentence” (Higgins 1979:2) –for example any sentence *wh*<be<XP– then predicational pseudoclefts are pseudoclefts after all. The following paragraphs will summarize some of the ways in which predicational and specificational pseudoclefts differ with respect to focus.

It is important to note that while *specificational* pseudoclefts have the focal properties listed above, *predicational* ones do not (Higgins, 1979). For example, we saw above the prosodic claim that (specificational) pseudoclefts can be pronounced with a pause after the copula (71a), and that counterweight must be accented (72a). However, neither of these claims are true of the predicational pseudoclefts in the (b) examples of (71-72):

- |  |            |
|--|------------|
| 71. a) What I bought was: a new shirt and a pair of pants. | (SPC/*PPC) |
| b) #What I bought was: ugly and expensive.                 | (*SPC/PPC) |
| 72. a) What John ate was {an APPLE/# an apple}.            | (SPC/*PPC) |
| b) What John ate was {DISGUSTING/disgusting}.              | (*SPC/PPC) |
| 73. a) What {#JOHN/John} ate was an apple.                 | (SPC/*PPC) |
| b) What {JOHN/John} ate was disgusting.                    | (*SPC/PPC) |

The contrast in (71a-b) illustrates that list intonation is unacceptable in predicational pseudoclefts like (71b) (Declerck, 1988:5; Declerck, 1984:252), though it is typical of specificational pseudoclefts such as (71a) (Declerck 1984:263; den Dikken, 2006:307; Higgins 1976:95; Ross, 2004:5). Moreover, (72-23a) indicates that in specificational pseudoclefts the counterweight always bears pitch accent (Heggie 1988; Heycock 2006; Mikkelsen 2004; others), whereas in predicational pseudoclefts (72-73b) the counterweight is not obligatorily accented (Hartmann 2011; Heycock and Kroch 2002:184). I suspect that one reason *f*-marking is constrained in specificational pseudoclefts might be connected to Rooth’s question-answer congruence requirements. In contrast, the (b) sentences of (72-73) suggest is that *f*-marking in predicational pseudoclefts is freer– it is not predetermined or restricted in some way by independent constraints.

From a pragmatic perspective, it has been suggested that predicational pseudoclefts differ from specificational ones regarding the distribution of new vs old information.<sup>9</sup> In specificational pseudoclefts, the *wh*-clause represents old information that “links up with material in the preceding context” (Declerck 1984: 253). Consider the specificational pseudocleft in (74) due to Mikkelsen (2011:1818).

74. What they didn’t find was any photos from his childhood.

Presumably, in order to utter (74) felicitously the speaker and addressee(s) would have to have already been talking about some people (*‘they/them’*) who were looking for or finding things. One consequence of this ‘linking’ requirement is that specificational pseudoclefts will typically sound odd out of context, since it is “a natural fact that we don’t tell someone the answer to a question unless we assume it is something they already have in mind” (Declerck, 1988:9). In line with this, Mikkelsen actually prefaces the specificational pseudocleft in (74) with “*They found a lot of interesting things at the house, but...*”.

On the other hand, the *wh*-clause of a predicational pseudocleft is not felt to link up with the preceding context in the same manner (Declerck, 1984: 253). Consider the predicational pseudocleft in (75a):

75. a) What John cooked was delicious.

b) What John cooked was roast beef.

Clearly, there is a trivial sense in which (75a) must also ‘link up’ with the preceding context in some way, as it would sound odd out of the blue in a conversation about, for example, the weather or gas prices or any unrelated topic. But this isn’t something unique to pseudoclefts—changing *‘what John cooked’* in (75a) to *‘the roast beef’* still sounds just as odd. However, relative to the specificational pseudocleft in (75b), the claim is that (75a) does not require as strongly that the speakers were already thinking about what John cooked. The pragmatic conditions on predicational vs specificational pseudoclefts are probably more complex than I have presented here. I will return to this point in section 7.4.1.

Another important focal property that is unique to *specificational* pseudoclefts concerns their connections to question-answer pairs. As mentioned in section 2.2.3, many have noted that specificational pseudoclefts (76) are well-formed as QAPs and behave interpretively like self-answering questions (Culicover and Jackendoff 2005; den Dikken et al., 2000; den Dikken 2006; Heycock and Kroch, 1999; Higgins 1979:54; McCawley, 1999; Ross, 1972, 1999, 2004; Schlenker, 2003; Seuren, 1985:297). In contrast, predicational pseudoclefts (77) are not well-formed as QAPs, nor do they have the intuitive feeling of being self-answering questions (Declerck, 1988:35).

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<sup>9</sup>Although we are not assuming a newness-based analysis focus here, I do not deny that newness probably often aligns with focus. Again, see Rochement (2011) for a proposal of the relationship between focus-as-contrast and focus-as-newness.

76.				
a)	What John did	was	(John) read the newspaper.	
b)	What did John do?	–	(John) read the newspaper.	

(den Dikken 2006:311)

77.				
a)	What John bought	was	expensive.	
b)	What did John buy?	–	*expensive.	

Since a question-answer paradigm is generally taken to be a prototypical illustration of focus, the observation that specificational pseudoclefts behave essentially exactly like QAPs while predicational ones do not supports a characterization in which only the former are focus constructions.

Finally, den Dikken (2006) suggests that while exhaustivity implicatures arise in specificational pseudoclefts, in predicational ones they do not.<sup>10</sup> For the specificational pseudocleft in (78a), this means that ‘*an apple pie*’ is the only thing that Michael cooked. In contrast, the predicational pseudocleft in (78b) does not imply that the thing(s) that Michael cooked were only ‘*spicy*’ – they might also be crunchy or tasty or Italian etc.

78. a) What Michael cooked was an apple pie. (SPC/\*PPC)

b) What Michael cooked was spicy. (\*SPC/PPC)

Although exhaustive identification and focus are distinct notions, there are nevertheless connections between the two (see Rooth 1985:96). Accordingly, exhaustive identification seems to be another property which specificational pseudoclefts share with focus to exclusion of predicational ones.

### 3.3 Summary: Focus

In sum, I will be following Rooth in assuming a contrastive view of focus based on alternatives. A (specificational) pseudocleft is a focus *construction* because information structure is expressed structurally (as opposed to non-clefts in which focus is typically signalled prosodically). From this perspective, it seems that predicational and specificational pseudoclefts are actually quite different in a fundamental way: if the role of a focus construction is to emphasize a subpart of a corresponding simpler sentence, triggering certain prosodic reflexes, then only specificational pseudoclefts are ‘true’ focus constructions. Stopping here, one might come to the conclusion that predicational and specificational pseudoclefts are very different beasts. I will propose that this is indeed true with respect to their syntax. However, I propose in Chapter 7 semantic analyses in which the two are in some sense quite similar.

<sup>10</sup>I will argue in Chapter 7 that there is a maximality requirement in (the *wh*-clause of) both predicational and specificational pseudoclefts. Though this maximality is distinct from exhaustivity, it may play a role in the exhaustive feeling of specificational pseudoclefts (and indeed predicational pseudoclefts as well, though not in the way that den Dikken is referring to).

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Lastly, I want to acknowledge that my brief summary on the topic of focus has inevitably overlooked certain finer-grained details, and has neglected to include many alternative perspectives. The aim of this chapter was just to provide a rough enough background on focus that would suffice for our discussion of pseudoclefts, therefore things were explored fairly superficially. Within the work on information structure, focus has been “the most systematically and successfully studied” (Partee, 2009:2), while at the same time it has been said to be “notoriously hard” (Coen, 2008:4) to define, and many might (justifiably) point out that I did not do it full justice here. For more detail, the reader is encouraged to consult Krifka (2008) for an overview of various information structural notions including focus, topic, and givenness.

# Chapter 4

## Critical Summary

This chapter will review three broad kinds of approaches to that have been proposed for specificational pseudoclefts: (i) ‘reconstruction’-based analyses (Bošković, 1998; Heycock and Kroch, 1999), (ii) deletion-based analyses (den Dikken et al. 2000; den Dikken 2006; Schlenker 2003), and (iii) ‘revisionist’ approaches (Jacobson, 1994; Sharvit, 1990). As in Chapter 2, I will be taking the relevant grammaticality judgments directly from the literature, but recall that in some cases judgments may be controversial.

### 4.1 Reconstruction Analyses

In the semantic reconstruction proposals summarized below, connectivity in specificational pseudoclefts involves c-command that arises at (or post) LF via covert movement of the post-copular constituent. Though the particular details of the proposals differ, what these kinds of analyses have in common is that c-command does obtain at some later point in the derivation, but not at the surface.

#### 4.1.1 Heycock & Kroch (1999)

Heycock and Kroch propose an analysis of specificational pseudoclefts that relates them to specificational copular sentences in general. They propose that the surface syntactic form of a pseudocleft is converted into an LF representation similar to that of the pseudocleft’s simple clause paraphrase. This is accomplished via iota reduction, and it is at this post-LF stage that connectivity effects are accommodated (p.395).

To begin, Heycock and Kroch suggest that specificational clauses (and thus specificational pseudoclefts) form a subgroup of equative constructions,<sup>1</sup> in which the relationship between the two major constituents involves the equation of individuals, not predication.<sup>2</sup> The difference between specificational clauses and equational

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<sup>1</sup>See Heycock and Kroch (1999) for further discussion of the parallels between equational and specificational sentences which they present as motivation for their uniform treatment.

<sup>2</sup>Although Heycock and Kroch take predicative and equative (i.e. specificational) copular sentences to be distinct, they do not believe that the difference between the two stems from the copula

clauses is one of pragmatics: specificational clauses have a particular information structure in which the subject clause is the ground and the post-copular clause is the focus.

Regarding specificational *pseudoclefts*, Heycock and Kroch follow Partee (1986) and Guéron (1992, 1993) in arguing that a proper analysis involves iota reduction. In such analyses, the connectivity of a specificational pseudocleft is evaluated at “a quite abstract level of logical form” (Heycock and Kroch, 1999:388)– it is evaluated once iota reduction has applied and has rendered the pseudocleft in (79) identical to its simple clause paraphrase (80).

79. What Fiona bought was that ancient dictionary.

80. Fiona bought that ancient dictionary.

Following Jacobson (1995), Heycock and Kroch take the *wh*-clause in (80) to be a free relative with the semantic denotation of an individual. Thus the semantic representation of ‘what Fiona bought’ in (80) is  $\iota y[\text{Fiona bought } y]$ . Given their assumption that specificational clauses are equational, the representation of the entire pseudocleft is:  $\iota y[\text{Fiona bought } y] = \text{‘that ancient dictionary’}$ . The iota operator is then eliminated and the iota-bound variable is replaced with the counterweight of the pseudocleft, resulting in (81b):

81. a)  $[\iota x_{(e)}: \text{Fiona bought } x_{(e)}] = \text{that ancient dictionary} \rightarrow \iota\text{-conversion} \rightarrow \text{Fiona bought that ancient dictionary.}$

b) Fiona bought that ancient dictionary and  $(\forall z)(\text{Fiona bought } z \text{ iff } z \leq \text{‘that ancient dictionary’})$ .

Heycock and Kroch go on to note some conditions on iota reduction. First, they note that it is obligatory (see Heycock and Kroch 1999:389-390 for arguments). Moreover, they suggest iota reduction applies to all specificational sentences regardless of whether they feature a *wh*-clause. Thus, in addition to applying to *what Fiona bought* in (7), iota reduction will also apply to NPs such *Fiona’s purchase* in (82).

82. Fiona’s purchase was that ancient dictionary.

In critique of this analysis, den Dikken (2006) notes that since iota reduction is obligatorily performed for all specificational sentences regardless of linear order, then this predicts that connectivity effects in pseudoclefts should not be sensitive to the ordering *wh*-clause < XP vs. XP < *wh*-clause. There should be no difference in connectivity between a pseudocleft like (83) vs. one like (84).

83. What Fiona bought was that ancient dictionary.

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itself, for example it is not the case that the copula is ambiguous between predicative and equative. Instead, the copula is a semantically empty raising verb in all cases, and the difference between the two is due to the fact that there are two types of small clause. Heycock and Kroch follow Carnie (1995) in suggesting that an equative small clause involves some type of functional head which is not present in a predicative clause.

84. That ancient dictionary was what Fiona bought.

For Heycock and Kroch this uniform treatment is desirable, as they argue that “all the syntactic effects that show up in simple sentences are found equally robustly in pseudoclefts” (1999: 366). This claim is also in line with Culicover and Jackendoff (2005: 254). However, den Dikken (2006) and den Dikken et al. (2000) point out that in fact NPI connectivity in specificational pseudoclefts appears to be sensitive to the linear ordering, leading to the contrast in (85-86):

85. What nobody bought was [any wine].

86. \*[Any wine] was what nobody bought.

Furthermore, den Dikken critiques the lateness of iota reduction: for Heycock and Kroch it necessarily takes place quite late given that its effects are noticeable even across stretches of discourse, such as in question-answer pairs (Heycock and Kroch, 1999:390-391). Den Dikken notes that as a consequence of this lateness, it is problematic for Heycock and Kroch’s analysis that NPIs generally need to be c-commanded by their licensors at S-structure. However, it is important to note that den Dikken shares with Heycock and Kroch the intuition that whatever is taken to be responsible for connectivity in specificational pseudoclefts is the same mechanism responsible for the connectivity effects found in QAPs.

In sum, in Heycock and Kroch’s analysis the connectivity effects observed in a specificational pseudocleft are accounted for post-LF, where the simple clause paraphrase of a pseudocleft is reconstructed via iota reduction.

#### 4.1.2 Bošković (1997)

Bošković proposes a covert movement analysis for specificational pseudoclefts in which the counterweight is lowered into the *wh*-clause at logical form. This creates a simpler sentence out of its complex overt counterpart (1997:239).

With respect to predicational pseudoclefts, Bošković argues the *wh*-clause is a free relative and the counterweight is the predicate (1997:236). The free relative is generated within the maximal projection of the counterweight in order to be  $\theta$ -marked by it, then moves to spec-TP to receive Case (1997:260). The predicational pseudocleft in (87.i) thus receives the representation in (87.ii):

87. i. What John ate was disgusting.

ii. [what John ate]<sub>i</sub> was [<sub>AP</sub> *t<sub>i</sub>* disgusting]

Bošković proposes a different analysis for specificational pseudoclefts. He analyzes the *wh*-expression as a surface anaphor –not a referring expression or free relative– which is generated in spec-VP headed by the copula (1997:260). Consider the specificational pseudocleft in (88a) and its LF representation in (88d):

88. a) What she read was a book.

- b) [[What]<sub>i</sub> she read [~~what~~]<sub>i</sub>] was [a book]<sub>i</sub>.  
 c) [She read [a book]<sub>i</sub>] was [~~a book~~]<sub>i</sub>.  
 d) LF: She read a book.

Bošković argues that in order to get from (88a) to (88d) we need to lose ‘*what*’ and bring the counterweight ‘*a book*’ into the *wh*-clause. He proposes that both of these things are accomplished by the same operation: he analyzes ‘*what*’ as a surface anaphor in the sense of Hankamer and Sag (1976), and as a surface anaphor ‘*what*’ needs to be replaced with its linguistic antecedent at some level of representation. The antecedent of *what* is the counterweight, therefore at LF ‘*a book*’ replaces (the chain headed by) ‘*what*’ (p.252).

He leaves open exactly which copy of *what* the counterweight replaces– the lower copy left by movement or the higher copy. At one point he suggests that the counterweight “is located in the position of the initial trace of ‘*what*’” (footnote on p.252), though elsewhere he suggests that the counterweight “actually occupies the SS position of ‘*what*’” (p.252). The representation in (88) shows the counterweight moving to the lower copy of (the chain headed by) ‘*what*’, landing in complement position to the verb. Bošković suggests that nothing in his proposal rides on one view over the other.

For Bošković, the placement of ‘*what*’ is what satisfies the various dependency requirements on the counterweight– once ‘*what*’ has been replaced by the counterweight the relevant binding/licensing conditions are met. Consider the binding connectivity in (89):

89. a) What Jane<sub>i</sub> did was wash herself<sub>i</sub>.  
 b) [[What]<sub>k</sub> Jane<sub>i</sub> did [~~what~~]<sub>k</sub>] was [wash herself<sub>i</sub>]<sub>k</sub>.  
 c) [Jane<sub>i</sub> [washed herself<sub>i</sub>]<sub>k</sub>] was [~~wash herself<sub>i</sub>~~]<sub>k</sub>.  
 d) LF: Jane<sub>i</sub> washed herself<sub>i</sub>.

Connectivity is evaluated at LF once the simple clause paraphrase in (89d) has been obtained (p.237): once *herself* is lowered into the *wh*-clause, replacing *what*, it can now be appropriately bound by *Jane*.

Bošković argues his analysis can account for some of the restrictions on specificational pseudoclefts outlined in Chapter 2. For example, regarding the observation that the *wh*-clause of a specificational pseudocleft cannot undergo raising, Bošković claims that this is because A-moving the *wh*-clause in a specificational pseudocleft leaves a copy, and this copy causes problems when it comes time to replace ‘*what*’ with its antecedent.

Bošković states that “given a chain X, all members of that chain that are not involved in interpretation must be deleted at LF under identity with the remaining members of that chain” (p.245). The reason that raising the *wh*-clause in a specificational pseudocleft is problematic is because it results in non-identity among chain-members. Consider the ungrammatical example (90):

90. \*[What<sub>i</sub> John is t<sub>i</sub>] turns out [~~what<sub>i</sub> John is t<sub>i</sub>~~] to be [important to himself].

The specificational pseudocleft in (90) is ungrammatical because the movement of the counterweight ‘*important to himself*’ into the trace position in either one of the *wh*-clauses would result in the members of the chain ‘[What<sub>i</sub> John is t<sub>i</sub>]’ no longer being identical. Accordingly, LF deletion of redundant elements would fail (p.245-246).

Additionally, Bošković connects the restrictions on subject-auxiliary inversion (91), negation (92) and sentential adverbs (93), arguing that they reflect the broader generalization that the copula in specificational pseudoclefts is unable to undergo movement (p.264).

91. \*Is what John is proud?  
 92. \*What John is isn’t proud of himself.  
 93. \*What John is is probably proud.

The specificational pseudoclefts in (91-93) all involve movement of the copula: (91) involves V-to-T and T-to-C, (92) on a sentential negation reading involves V-movement across the negation, and (93) involves V-movement across the sentential adverb *probably*. Bošković suggests that the lack of movement of *be* follows from his claim that the *wh*-clause of a specificational pseudocleft is generated within the projection of the copula and has no IP projection (p.267). Thus, there is not an appropriate landing site for *be* to move to.

The structure for the pseudocleft *What John likes is this car* in (94) shows that the *wh*-clause is in spec-VP headed by the copula, and that the counterweight is adjoined to VP. The schematic representation for specificational pseudoclefts is shown in (95)

94. [<sub>VP</sub> [<sub>VP</sub> what John likes [<sub>V</sub> is]] this car]  
 95. [<sub>VP</sub>[<sub>VP</sub> wh-clause [<sub>V</sub> is]] counterweight]

Furthermore, Bošković connects the lack of an IP projection to the observation noted in Chapter 2 that the tense of the copula in a specificational pseudocleft is dependent on the tense inside the *wh*-clause (p. 266).

Finally, regarding the ability to flip the order of the *wh*-clause and counterweight in specificational but not predicational pseudoclefts, Bošković claims this difference is due to issues of Case assignment: in predicational pseudoclefts if the counterweight were to move to spec-IP (cf. \**Disgusting is what John likes*), then the free relative ‘*what John likes*’ would remain caseless (1997:261). In contrast, in specificational pseudoclefts the counterweight and *wh*-clause are not in thematic relation. They therefore do not have to be generated within the same maximal projection, and thus can be generated on different sides of the copula with no problem.

The difference between regular and reversed specificational pseudoclefts lies in the claim that only the latter have an IP projection. In support, Bošković notes that head movement of the copula *is* allowed in reversed specificational pseudoclefts such as (96), though it is banned in regular ones (91-93).

96. a) Is this car what John likes?  
 b) This car is not what John likes.  
 c) This car is undoubtedly what John likes.

Reverse specificational pseudoclefts are analyzed as having an IP projection, with the counterweight in spec-VP and the *wh*-clause adjoined to VP or possibly in complement position of the copula (p.269-270):

97. [<sub>IP</sub> counterweight<sub>i</sub> is<sub>j</sub> [<sub>VP</sub> *t<sub>i</sub>* *t<sub>j</sub>* *wh*-clause]].

In sum, for Bošković regular and reversed specificational pseudocleft are alike in that in both regular and reversed the pre-copular constituent –*wh*-clause and counterweight, respectively– originates in the specifier of the VP headed by the copula. Additionally, in both post-copular constituent is adjoined to VP. The main difference between the two is that reversed specificational pseudoclefts have an IP projection while regular pseudoclefts do not.

### 4.1.3 Summary: Reconstruction analyses

In sum, like Heycock and Kroch (1999), Bošković’s analysis creates a simpler sentence out of its complex overt counterpart. However, Bošković’s analysis differs from Heycock and Kroch’s in two important ways: (i) the covert operation proposed is different– for Heycock and Kroch it is iota reduction, for Bošković it is covert movement; and (ii) for Heycock and Kroch the pseudocleft is converted into the simpler sentence later in the derivation than it is for Bošković–beyond LF proper vs. at LF, respectively. Nevertheless, both analyses are grouped together under the ‘reconstruction’ approach as they share the proposal that connectivity in specificational pseudoclefts is facilitated by covert reconstruction.

Schlenker (2003:164) points out that one problem with reconstruction-based analyses is that the movement they postulate violates usual syntactic constraints, since it is not to a *c*-commanding position. Another potential problem with reconstruction-based analyses has to do with what is taken as a specificational pseudocleft’s ‘simple clause paraphrase’. As a reminder, for Bošković and Heycock & Kroch the paraphrase of a specificational pseudocleft such as (98a) is (98b):

98. a) What John ate is an apple.  
 b) John ate an apple.

If LF looks at a pseudocleft like (98a) and ‘sees’ (98b), then we might predict there to be no differences in meaning between the two. It could indeed be that the differences between (98a-b) are only pragmatic –which is what we would be forced to say if we adopt a reconstruction analysis– however the differences might also be semantic in nature. I will propose in Chapter 7 what I suggest is a more accurate ‘paraphrase’ of a pseudocleft, since at the level of LF I don’t want to say that *what John ate is an apple* and *John ate an apple* are the same.

## 4.2 Deletion analyses

In deletion-based approaches it is assumed that the post-copular constituent of a specificational pseudocleft is a full clause. Ellipsis can then optionally reduce the underlying full clause to a subpart which is what gets pronounced at the surface. In such proposals connectivity is mediated by elided material in the counterweight. Accordingly, one way in which deletion-based analyses differ from the ‘reconstruction’ approaches of Bošković (1997) and Heycock and Kroch (1999) is that the former maintain that specificational pseudoclefts remain biclausal throughout the derivation, whereas in the latter at some point the *wh*-clause and the counterweight are clause-mates.

One of the main pieces of evidence in support of deletion-based proposals is the observation that the post-copular constituent of a specificational pseudocleft can often be pronounced as a full clause (i.e. the optional ellipsis is not performed). This observation –and thus the motivation for deletion-based analyses in general– is typically credited to Ross (1972), who notes the following:

99. a) What I did then was [I called the grocer]. (Ross, 1972: 39)  
 b) What I did then was [call the grocer].
100. a) What they should try is [they should try Geritol].  
 b) What they should try is [Geritol].

Ross refers to the (a) examples as ‘undeleted pseudoclefts’, proposing that the (b) counterparts are derived via deletion from “the remote structure which also underlies” the (a) sentences (Ross, 2000). Such an approach is termed ‘the bisentential analysis’ (Ross, 2000), where the clauses on either side of the copula, i.e. the *wh*-clause and the counterweight, are related to each other as question and answer.

While some speakers report that undeleted pseudoclefts such as (99a-100a) are ungrammatical, it has been claimed that in fact “this construction type is extremely common in spoken English of all sociolinguistic levels, even though some who frequently use it will hotly deny that they do” (Seuren, 1985: 297). Some examples of undeleted pseudoclefts taken from Google are shown below:

101. a) What I want to do is I want to meet with caucus tomorrow.  
 b) What you need is you need me.  
 c) What I want is I want to get the pointer of javascript object itself.  
 d) What I would do was I would carry her to the dead pit while singing the dead pit song.  
 e) He’s in my freaking bathroom is what he is!  
 f) She hit the fucking wall, is what she did.  
 g) It’s like babysitting, is what it is.

I will be only be summarizing den Dikken et al. (2000), den Dikken (2006) and Schlenker (2003), but others who have also proposed deletion-based analyses are Clifton (1969), Emonds (1970), Peters and Bach (1968), and Seuren (1985).

### 4.2.1 Den Dikken, Meinunger & Wilder (2000)

In addition to the distinction between predicational and specificational pseudoclefts (102 vs 103), den Dikken et al. further divide specificational pseudoclefts into those of Type A (103a), ordered *wh*-clause < counterweight, and those of Type B (103b), ordered counterweight < *wh*-clause.

102. What John ate is disgusting. (PPC)
103. a) What John<sub>i</sub> is is important to himself<sub>i</sub>. (SPC-A)  
 b) Important<sub>i</sub> to himself is what John<sub>i</sub> is. (SPC-B)

The distinction between specificational Type A and Type B is motivated by their claim that only a subset of specificational pseudoclefts show the full range of connectivity effects. Specifically, only Type A specificational pseudoclefts show NPI connectivity. Since Type B specificational pseudoclefts are argued to exhibit different properties from Type A, den Dikken et al. propose that the two involve different syntactic derivations.

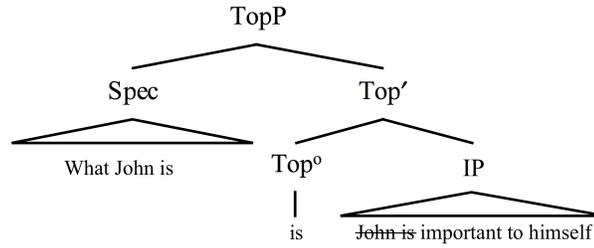
Regarding specificational Type A, such pseudoclefts are topic-comment constructions where the *wh*-clause is an (embedded) interrogative and the XP counterweight is a full IP. In this IP, non-focal items are deleted under identity to part of the *wh*-clause. In cases where the counterweight looks smaller than an IP it is simply because material around the focus has been elided. Thus, the representation for (103a) is actually (104):

103. a) What John is is important to himself.
104. What John is is ~~John~~ is important to himself.

In terms of the topic-comment structure of Type A, the topic head is the copula, the *wh*-clause in specifier position is the topic, and the IP in complement position is the comment. The proposed representation of the pseudocleft in (104) is shown in the bracket and tree structure below:

- 103.a) [<sub>TopP</sub> [<sub>CP</sub> what John<sub>i</sub> is *t*] [<sub>Top'</sub> [<sub>Top°</sub> is] [<sub>IP</sub> (John<sub>i</sub> is) important to himself<sub>i</sub>]]]

Figure 5



The tree and bracketed diagrams above illustrate den Dikken et al.’s proposal that the anaphor *himself* is bound inside the IP counterweight by the elided *John*, not by *John* in the *wh*-clause. This is also the case with NPI licensing<sup>3</sup>: [<sub>TopP</sub> [<sub>CP</sub> what John didn’t buy *t*] [<sub>Top′</sub> [<sub>Top°</sub> was] [<sub>IP</sub> (John **didn’t** buy) **any** wine]]].

For Type B, a different analysis is proposed as den Dikken et al. claim that they cannot be derived transformationally from their Type A counterparts. Instead, Type B specificational pseudoclefts feature a small clause structure (following Williams 1983) that includes the counterweight as the subject and the *wh*-clause as the underlying predicate. Type B specificational pseudoclefts are therefore structurally unrelated to Type A: the *wh*-clause is a free relative rather than an interrogative, and the counterweight XP is not an IP. Additionally, Type B is not a topic-comment construction, and crucially there is no ellipsis in Type B since there is no IP inside of which material could be deleted. The Type B pseudocleft in (105) is represented as (106a), not as (106b), where the latter would be parallel to Type A.

105. Angry with himself is what John is. (den Dikken et al. 2000:45)

106. a) [<sub>AP</sub> angry with himself] is [<sub>SC</sub> *t*<sub>AP</sub> what John is]  
 b) ≠ [<sub>TopP</sub> [<sub>IP</sub> (John is) angry with himself] [<sub>Top′</sub> [<sub>Top°</sub> is] [<sub>CP</sub> what John is *t*<sub>i</sub>]]]

This lack of ellipsis in the counterweight account for the observation that Type B pseudoclefts do not display NPI connectivity (cf. *\*Any wine is what John didn’t buy*). However, Type B nevertheless display binding connectivity.

Den Dikken et al. note that Type A specificational pseudoclefts are essentially interpreted as self-answering questions, arguing that the topic-comment structure they propose captures the similarities between the two constructions. Regarding ellipsis, in both the counterweight of Type A and in the answer of a QAP ellipsis is optional (p.45-46). In addition, for ellipsis to be licensed it is subject to the same

<sup>3</sup>More accurately, only weak NPIs can occur in the counterweight of a Type A specificational pseudocleft. Den Dikken et al. connect the impossibility on strong NPIs in this context to a more general, QAP restriction. For example, *until* cannot be licensed in the counterweight of an Type A pseudocleft, nor can it be licensed in the answer to a question such as

Q: What didn’t John do?

A: \*leave until 6pm.

parallelism constraints: in both QAPs and Type A pseudoclefts the material to be deleted is required to be identical to an antecedent. Consequently, the ellipsis shown in the counterweight of (107a) is not licit, nor is it licit in the QAP version in (107b):

107. a) What John is is [~~John is important to himself~~].

b) Q: What is John? A: ~~John is important to himself~~.

The proposed ellipsis in (107) is not permitted as it is not recoverable. In addition to this recoverability requirement, den Dikken et al. propose a ‘maximality condition on ellipsis’, which states that ellipsis must be performed “to the maximal extent, i.e. up to –but not into– the focus constituent” (2000:47). This maximality condition ensures *buy* not *bought* in the counterweight of (108):

108. a) What John did was [~~John PAST~~ buy some wine].

b) \*What John did was [~~John PAST~~+buy (i.e. bought) some wine].

The specificational pseudocleft in (108) is VP-focused, therefore if one deletes material in the IP *John bought some wine* then it must be deleted all the way up until the start of the VP. Thus, ellipsis will target *John* in spec-IP as well as the head of IP with the tense value ‘past’. As a result, *buy* in VP will be uninflected.

Similarly, it appears that ellipsis must be performed “to the maximal extent” in QAPs. Culicover (2013), Culicover and Jackendoff (2005:252) and Higgins (1979:54) conclude that the same constraint blocking the verb of a VP-focused pseudocleft to be tensed holds for QAPs as well:

109. Q: What did John do?

A: Buy/\*bought some wine.

In light of the topic-comment structure they propose for Type A, den Dikken et al. discuss some restrictions to which Type A are subjected that Type B are not. They argue that subject-auxiliary inversion is impossible for Type A due to the ban on that T-to-C movement when the auxiliary must invert across a sentence-initial topic (cf. *To Mary, John will give the book* → *\*will to Mary, John give the book?*). Given that no CP can be built on top of a root TopP, there is thus no head position above TopP to which copula could raise (2000:63). In contrast, in Type B subject-auxiliary inversion is allegedly acceptable (*Is important to himself what John is?*). Moreover, they claim that the inability of building a CP on a TopP is also why Type A specificational pseudoclefts cannot occur with either raising and ECM verbs, whereas Type B can.

In sum, den Dikken et al. argue for a ‘dual’ analysis of specificational pseudoclefts in that the analysis of Type B involves predication, while that of Type A is non-predicational. Type A pseudoclefts ordered *wh*-clause < be < XP are topic-comment structures, the *wh*-clause is an interrogative in a left-peripheral topic position, and the counterweight is a full IP. On the other hand, Type B specificational pseudoclefts are actually predicative small clauses (cf. Williams 1983), in which the counterweight is the subject and the *wh*-clause is a free relative acting as the predicate:

Type A : [<sub>TopP</sub> [<sub>CP</sub> wh-question] [<sub>Top'</sub> be [<sub>IP</sub> 'value']]].

Type B : *be* [<sub>SC</sub>[<sub>XP#IP</sub>'value'] [*wh*-clause]]

One potential problem with this proposal is that ideally one would have a unified analysis of Type A and B specificational pseudoclefts, where (perhaps) they are both topic-comment constructions, both have the same type of *wh*-clause, and any differences in connectivity between them follow from independent principles. For example, a main difference between Type A and B that motivates den Dikken et al. to treat them distinctly is their behaviour with respect to NPI licensing: Type A allows NPIs in the counterweight whereas Type B does not. Instead of building this into something about a structure that is specific to Type B specificational pseudoclefts, it would be nice to connect the restriction on NPIs in Type B to a more general restriction that an NPI must appear linearly before its licenser on the surface.

### 4.2.2 Den Dikken (2006)

In a follow up to the above analysis, den Dikken (2006) further illustrates how the topic-comment structure of den Dikken et al.'s (2000) accounts for some of the restrictions on specificational pseudoclefts summarized in Chapter 2. He also defends in more detail the claim that the *wh*-clause in Type A pseudoclefts is an interrogative.

#### Differences between Specificational Type A and B:

First, den Dikken argues that –because of the unique properties of the copula of a topic head– the copula of Type A has more restrictions than that of Type B. In particular, though neither Type A nor Type B can occur with raising to subject verbs (p.335), they differ in that Type A cannot be embedded under ECM, but Type B sometimes can:

110. a) \*I consider [what John is important to himself]. (Type A)

b) ?I consider [important to himself what John is]. (Type B)

For den Dikken, this is because only Type A specificational pseudoclefts are a topic-comment structures, and in such structures no CP is able to be built above TopP. This restriction is also responsible for den Dikken's claim that subject-auxiliary inversion is banned in Type A, but allowed in Type B (p.339):

111. a) \*Is what John is important to himself? (Type A)

b) ?Is important to himself what John is? (Type B)

Another empirical observation that den Dikken argues is predicted by his topic-comment structure is that the copula of a Type A specificational pseudocleft such as (112) must show tense harmony with the tense in the *wh*-clause (p.321).

112. [What you are holding in your hand] **is**/\***was** a small brown butterfly.

For den Dikken, this is due to the unique nature of the copula in the head of TopP, which he claims does not have an independent tense head. Instead, *be* in Top<sup>o</sup> gets the same sense value as that inside the *wh*-clause as a reflex of spec-head agreement.

One problem with this is that Type B specificational pseudoclefts such as (113) also seem to require tense harmony:

113. A small brown butterfly **is**/**\*was** [what you are holding in your hand].

If tense harmony is explained as a reflex of the spec-head agreement in a topic-comment structure, then the tense harmony observed in Type B remains unaccounted for or must be treated as a coincidence, since Type B specificational pseudoclefts in den Dikken's proposal are structurally distinct from Type A (i.e. they are not topic-comment structures).

Den Dikken further cites two differences between Type A and Type B specificational pseudoclefts to support his claim that the two require distinct analyses: Type A does not allow negation (114.a) or sentential adverbs (114.b) to the right of the copula, while Type B (115a-b) allows both (p.334).

114. a) \*What John is **isn't** important to himself.  
 b) \*What John is is **probably** angry with himself.

115. a) Important to himself **isn't** what John is.  
 b) Important to himself is **probably** what John is.

Upon further examination this contrast does not seem so absolute: it is not so clear that a sentential adverb to the right of the copula in Type A pseudoclefts is as unacceptable as den Dikken suggests. Consider the Type A pseudocleft in (116a):

116. a) ?What John brought was **probably** the carrot cake. (Type A)  
 b) The carrot cake was probably what John bought. (Type B)

Not only does (116a) seem to be somewhat acceptable, it is at the least the case that (116a) and (116b) are likely on par.

One criticism of den Dikken et al. (2000) and den Dikken (2006) comes from Culicover and Jackendoff, who take issue the proposal that regular (Type A) and reversed (Type B) specificational pseudoclefts are structurally unrelated. Instead, Culicover and Jackendoff contend that there should be a uniform treatment of both. This is motivated in part by their claim that connectivity effects in specificational pseudoclefts are insensitive to ordering: “where **morphological** [my emphasis] connectivity effects occur, they occur regardless of the ordering of the focus and antecedent” (Culicover and Jackendoff 2005:254).

Building on this, Culicover and Jackendoff (2005) conclude that there can be no full clausal structure surrounding the focus in regular specificational pseudoclefts, as this would mean that this structure must also be present in reversed ones. They argue that such an assumption makes false predictions. Consider the contrast between regular (117) and reversed (118) specificational pseudoclefts below due to Culicover and Jackendoff (2005:254).

117. \*What she<sub>i</sub> heard on the radio was [the recording that Valentina<sub>i</sub> has just made].
118. [The recording that Valentina<sub>i</sub> had just made] was what she<sub>i</sub> heard on the radio.

Whereas (117) is ungrammatical, (118) is fine. If the focus ‘*the recording that Valentina<sub>i</sub> has just made*’ was part of a larger structure, then this larger structure should appear in both forms of the pseudocleft– we should have the following underlying forms:

117. \*What she<sub>i</sub> heard on the radio was [~~she heard on the radio~~ the recording that Valentina<sub>i</sub> has just made].
118. \*~~[She<sub>i</sub> heard on the radio~~ the recording that Valentina<sub>i</sub> had just made] was what she<sub>i</sub> heard on the radio.

If this were the correct analysis, then (118) should be ungrammatical along with (117). In response, den Dikken et al. proposed that the larger structure is present only in regular specificational pseudoclefts, however Culicover and Jackendoff argue there is no principled basis for assuming this difference. For den Dikken et al., the motivation behind a different treatment of regular and reversed specificational pseudoclefts comes from the fact that –contrary to Culicover and Jackendoff’s claims– they argue that connectivity in specificational pseudoclefts *is* indeed sensitive to ordering. In particular, NPI connectivity (which Culicover and Jackendoff do not address) only occurs in regular pseudoclefts, not reversed. It is precisely these differences in NPI connectivity that lead den Dikken to propose different analyses for the two types of specificational pseudocleft.

In sum, den Dikken presents the restrictions in (110-116) which hold only for Type A in order to support the proposed analysis in which Type A and Type B specificational pseudoclefts are quite different, with the former being the more restricted of the two due to their topic-comment structure. Taken together with the properties listed for *predicational* pseudoclefts in section 2, the lack of restriction on Type B specificational pseudoclefts suggests that they sometimes pattern with regular specificational pseudoclefts (i.e. Type A) and sometimes with predicational ones. This might suggest is that Type B specificational pseudoclefts hold an intermediate status somewhere between the two. What it does *not* tell us is that this needs to be built into to the structure of Type B itself, or if it can instead arise from independent restrictions. Again, it is important to note that some of the properties that Type B allegedly share with predicational pseudoclefts (such as subject-auxiliary inversion) are not as clear-cut as den Dikken suggests: for example, the claim that (119) should be acceptable but (120) is not:

119. ? Is eat an apple what John did?
120. ? Is what John did eat an apple?

I will revisit this point in section 5.2, where the restriction is re-interpreted and an alternative analysis is proposed.

**Type A *wh*-clause is an interrogative:**

As a reminder, den Dikken et al. (2000) conclude that the *wh*-clause of a Type A specificational pseudocleft is a hybrid type of question with properties of both root and embedded interrogatives. In contrast, the *wh*-clause of Type B is a free relative acting as a predicate. Den Dikken (2006) goes on to present evidence in favour of this proposal, citing various empirical observations which illustrate that the *wh*-clause of a Type A specificational pseudocleft patterns with other interrogatives, not with free relatives.

First, he claims that an advantage of an interrogative analysis is that it captures the interpretive connections that have been noted between specificational pseudoclefts and question-answer pairs (Akmajian 1979; Clifton 1969; Declerck 1988; Faraci 1971; Higgins 1979; Huddleston 1971; Ross 1972,1997,1999; Seuren 1985). In this view, Type A specificational pseudoclefts are essentially a self-answering questions, and they are subject to question-answer wellformedness conditions (see section 2.2.3).

Second, den Dikken acknowledges that while *-ever* is considered a hallmark of free relatives such (121), it is banned in interrogatives like (122). Crucially, *-ever* is also banned in the *wh*-clause of a Type A specificational pseudocleft such as (123a).

121. I'll eat whatever you cook. [FR]
122. a) \*I wonder [whatever you cooked]. [Embedded Q]  
 b) \*Whatever did you cook? [Matrix Q]
123. a) \*Whatever you cooked was roast chicken. [SPC-Type A]  
 b) \*Roast chicken was whatever you cooked. [SPC-Type B]

One issue with using the *-ever* ban to support a characterization of only Type A's *wh*-clause as a interrogative is that *-ever* is disallowed in Type B specificational pseudoclefts as well (123b). Thus, if (123a) is intended to reveal that the *wh*-clause of that pseudocleft in an interrogative, then the same conclusion should be drawn for (121b). However, since den Dikken analyzes the *wh*-clause in Type B as a free relative, there is no a priori reason that (123b) should be ungrammatical.

Some other pieces of evidence in support of an interrogative approach to Type A include the possibility of multiple *wh*-elements and the ability to topicalize inside the *wh*-clause. Both of these involve judgments that seem fairly controversial, and will not be summarized here. They are, however, discussed in detail in section 6.

Finally, den Dikken acknowledges that either way, an issue that remains for both a free relative or an interrogative approach is that the neither can account for the observation that the *wh*-clause of specificational pseudoclefts is typically restricted to *what*. He notes that he is “not aware of any approach to the syntax of the *wh*-clause of specificational pseudoclefts which has succeeded in accounting for the restrictions on the form of the *wh*-element” (p.379).

### 4.2.3 Schlenker (2003)

Like den Dikken et al. (2000) and Ross (1972), Schlenker argues that a specificational pseudocleft is a question-answer pair, where part of the answer is (optionally)

deleted. He uses Sharvit's (1999) term 'Question in Disguise Theories' for these kinds of approaches.

In support of his interrogative analysis of the *wh*-clause, Schlenker follows Ross (1985) who points out that embedded questions and pseudoclefts are governed by the same restrictions (p.168):<sup>4</sup>

124. a) I know/\*ate [what **else** she cooked].  
 b) [What **else** she is going to cook] is spaghetti flambé. (SPC)
125. a) I knew/\*ate [what **it was that** she cooked].  
 b) [What **it was that** she cooked] was a stewed eel. (SPC)
126. a) I \*know/ate [whatever she cooked].  
 b) \*[Whatever she cooked] might not be stuffed peas. (SPC)

Both embedded questions and pseudoclefts allow '*what else*' (124) and '*what it was that*' (125). In contrast, neither are allowed in free relatives, illustrated when the *wh*-clause is the complement of '*eat*' in the (a) sentences of (124-125). Conversely, (126) shows that both pseudoclefts and embedded questions disallow '*whatever*', while in free relatives '*whatever*' is acceptable (p.168).

Additionally, Schlenker cites French as evidence to support his claim that the "*wh*-clause" of specificational pseudoclefts denotes a proposition (i.e. is a full IP): in French *ça/c*' is obligatory both in pseudoclefts (127) and in identity sentences (128) that involve non-individual-denoting expressions (p.170).

127. Ce qu'il<sub>i</sub> aimait, \*(c')était lui-même<sub>i</sub>.  
 it that he liked, it was himself  
 'What he liked was himself'. (SPC)
128. Être vieux, \*(c')est être oublié.  
 to-be old, it is to-be forgotten  
 'To be old is to be forgotten.'

Example (128) shows us that, independently from pseudoclefts, non-individual-denoting elements in the pre-copular position of an identity sentence must be left-dislocated and followed by *ça* (p.171). Since this holds for pseudoclefts such as (127) as well, it suggests that the pre-copular element in a pseudocleft is also non-individual denoting.

Turning now to the post-copular constituent, Schlenker argues that the counterweight is an elided answer even in languages like French, were in general it is not possible for the answer to surface in un-elided form (p.172). This restriction is illustrated by the specificational pseudoclefts in (129):

129. a) Ce qu'il<sub>i</sub> est, c'est (\*il est) fier de lui<sub>i</sub>.  
 it that he is, it is (he is) proud of him(self)  
 'What he is is (he is) proud of himself.'

---

<sup>4</sup>These kind of similarities are addressed in detail in section 6. The judgements can vary a lot, and Schlenker acknowledges that the generalizations he cites in (124-126) may not be entirely correct.

- b) Ce qu'il refuse, c'est (**\*il refuse**) de faire le moindre mal à  
 it that he refuses, it is (he refuses) to do the slightest harm to  
 quiconque.  
 anyone

'What he refuses is (he refuses) to cause any harm to anyone.'

Nevertheless, he suggests that Ross's argument can be maintained by appealing to propositional anaphora: instead of directly equating the pre-copular element with the post-copular clause, Schlenker equates it with a deictic DP which itself refers to a proposition. In this context, un-elided forms are permitted:

130. a) Ce qu'il<sub>i</sub> est, c'est **ceci**: (**il est**) fier de lui<sub>i</sub>.  
 it that he is, it is this: (he is) proud of him(self)

'What he is is this: he is proud of himself.'

- b) Ce qu'il refuse, c'est **ceci**: (**il refuse**) de faire le moindre mal à  
 it that he refuses, it is this: (he refuses) to do the slightest harm to  
 quiconque.  
 anyone

What he refuses is this: (he refuses) to cause any harm to anyone.

The (a) and (b) sentences in (129-130) have the same semantics, the only difference being that in (130) they "wear their clausal nature on their sleeves" (p.173). The sentences in (130) therefore support Schlenker's claim that the counterweight of a pseudocleft is propositional. Furthermore, he notes one situation in French where the counterweight of a specificational pseudocleft can appear un-elided: in the case of VP-focused pseudoclefts such as (131).

131. Ce que j'ai fait, c'est (que j'ai) fermé la fenêtre.  
 it that I have done, it is (that I have) closed the window

'What I did was I closed the window.'

He speculates that the reason the counterweight in (131) can be un-elided might be because it does not lead to a repetition of the VP in the pre-copular position.

In sum, while ellipsis in the 'answer' part of a pseudoclefts is often obligatory (as we saw in most of the French examples above), in question-answer pairs it is only optional. Schlenker argues that this should not be taken as evidence against his proposal, since independently from pseudoclefts there are cases like (132) in which a relatively clear question  $-[ce\ qu'il\ aimait]$  as the complement of *se demander*– is equated with an answer that has obligatory ellipsis (p.176):

132. Je me suis longtemps demandé [ce qu'il<sub>i</sub> aimait]<sub>k</sub>, et j'ai finalement  
 I me am long asked [it that he<sub>i</sub> liked]<sub>k</sub> and I have finally  
 appris que c<sub>k</sub>'était lui-même<sub>i</sub>/**\*qu'il s'aimait lui-même<sub>i</sub>**.  
 learned that this<sub>k</sub> was himself<sub>i</sub>/**\*that he liked himself<sub>i</sub>**

'For a long time I have been wondering what he liked, and have finally learned that it was himself/**\*that he liked himself.**'

He concludes that while the obligatoriness of ellipsis is still a mystery, it is one that exists independently from pseudoclefts.

Regarding their semantics, Schlenker proposes that specificational pseudoclefts are question-answer pairs, where the *wh*-clause is the question-denoting element, the counterweight is its answer, and the copula denotes identity (p.183). The representation of the counterweight in a pseudocleft like (133a) is shown in (133b):<sup>5</sup>

133. a) ‘[What John likes] is [John likes [himself]<sub>F</sub>]’

b) [[John likes [himself]<sub>F</sub>]] = {w! : {x: John likes x in w!} = {John}}

In terms of the *wh*-clause, Schlenker argues that we cannot adopt Karttunen’s (1977) semantics for questions because this would lead to a type mismatch (p.183): the counterweight is a single proposition, but the *wh*-clause would be a set of propositions, since for Karttunen the denotation of a question *Q* in a world *w* is the set of true answers to *Q* in *w*.<sup>6</sup> Instead, Schlenker adopts the semantics for questions of Groenendijk and Stokhof (1997), where the extension of a question is a single proposition (not a set of propositions): the denotation of a question [[*Q*]](*w*) is the unique exhaustive true answer to *Q* in *w*.

Returning to the pseudocleft in (133a), suppose that in a world *w* John likes John and nothing else. The value of ‘what does John like’ in *w* will be the true answer ‘John likes John’. This is illustrated in (134) taken from Schlenker (p.185):

134. [[what does John like?]](*w*) = {w! : {x: John likes x in w!} = {John}}

All the pieces are now in place to get the meaning of (133a) ‘What John likes is himself’, repeated below as (135). The pre- and post-copular constituents each denote a proposition, and the identity copula equates the two.

135. a) ‘[What John likes] is [John likes [himself]<sub>F</sub>]’

**Counterweight:** [[John likes [himself]<sub>F</sub>]] = {w! : {x: John likes x in w!} = {John}}

**Wh-clause:** [[What John likes]](*w*) = {w! : {x: John likes x in w!} = {x: John likes x in w!}}

b) [[What John<sub>i</sub> likes is John likes himself<sub>i</sub>]](*w*) = 1 iff  
 {w! : {x: John likes x in w!} = {x: John likes x in w!}} = {w! : {x: John likes x in w!} = {John}}

<sup>5</sup>I am skipping over some of Schlenker’s assumptions regarding focus.

<sup>6</sup>Schlenker says that Groenendijk and Stokhof semantics of questions is “a more elegant solution” (p.184) to characterizing the *wh*- clause. I suggest that in fact a Karttunen (1977) semantics is superior: it can be implemented in such a way that not only avoids a type mismatch, but also brings out the similarities between specificational and predicational pseudoclefts. Both of these things are achieved with the maximal informativity operator *MAX<sub>INF</sub>*. This is fleshed out in section 7.2.

Further, Schlenker acknowledges that Heim (1994) and Beck and Rullmann (1999) point out that a version of the Karttunen approach is superior to Groenendijk and Stokhof as it can better account for the range of exhaustive readings of questions.

In words, (135) is true in  $w$  as long as John likes John and nothing else in  $w$  (p.187).

Schlenker's proposal is similar to Heycock and Kroch (1999) in that both assume that the copula of specificational pseudoclefts is equational. However, it is unlike Heycock and Kroch in that he analyzes the *wh*-clause as an embedded question (Schlenker 2003: 168), not a free relative. Conversely, Schlenker's proposal is similar to den Dikken et al. (2000) in that both see the *wh*-clause as a question. However, it is unlike den Dikken et al. because Schlenker suggests that the copula denotes identity, while for den Dikken et al. it is neither an identity nor a predicational copula (it is just an inflectional element that spells out the head of the functional projection, 'Topic Phrase').

In defense of his proposal, Schlenker addresses the claim that 'anti-connectivity' effects are evidence against a deletion-based analysis of specificational pseudoclefts. Anti-connectivity refers to cases where, for example, an anaphor is licensed in a pseudocleft but not in its simple clause counterpart (Sharvit 1999). This is illustrated in (136) taken from Schlenker (2003:203)

136. a) ?What John<sub>i</sub> thinks that Mary likes is himself<sub>i</sub>.  
 b) \*John<sub>i</sub> thinks that Mary likes himself<sub>i</sub>.

Some have suggested that anti-connectivity effects such as (136a) are problematic for reconstruction and deletion-based analyses, since both accounts rely on (136b) being present in some way to mediate the connectivity effects of (136a). Schlenker argues that in fact anti-connectivity effects work in *favour* of deletion-based analyses, since the same facts hold of question-answer pairs such as (137) (p.157). This is expected in deletion-based approaches in which specificational pseudoclefts are directly analyzed as question-answer pairs.

137. What does John think that Mary likes? – Himself.

Differences in connectivity between pseudoclefts and their simple clause paraphrases also exist in cases involving quantifier scope (Eisner, 1995; Meinunger, 1997): scope connectivity does not hold in pseudoclefts such as (139), but in simple clauses (138) it does.

138. Some student admires every teacher.

Reading 1:  $[\exists x: x \text{ a student}] [\forall y: y \text{ a teacher}] (x \text{ admires } y)$

Reading 2:  $[\forall y: y \text{ a teacher}] [\exists x: x \text{ a student}] (x \text{ admires } y)$

139. What some student admires is every teacher.

Reading 1:  $[\exists x: x \text{ a student}] [\forall y: y \text{ a teacher}] (x \text{ admires } y)$

\*Reading 2:  $[\forall y: y \text{ a teacher}] [\exists x: x \text{ a student}] (x \text{ admires } y)$

As before, the same effects hold with question-answer pairs (Cecchetto 2000, 2001):

140. What does some student admire? – Every teacher

Reading 1:  $[\exists x: x \text{ a student}] [\forall y: y \text{ a teacher}] (x \text{ admires } y)$

\*Reading 2:  $[\forall y: y \text{ a teacher}] [\exists x: x \text{ a student}] (x \text{ admires } y)$

Schlenker thus concludes that anti-connectivity effects do not argue against deletion-based approaches, they actually strengthen the generalization that specificational pseudoclefts behave like question-answer pairs. See Schlenker (2003: §5) for further discussion of anti-connectivity.

Finally, I briefly mention that Schlenker extends his question-in-disguise analysis to account for connectivity in DPs such as (141):

141. His worry is himself.

He argues that when such connectivity effects arise, the DP has an additional argument position and is interpreted as a ‘concealed question’<sup>7</sup> in the sense of Heim (1979) (Schlenker, 2003:160). Thus, (141) receives the analysis in (142), where a concealed question is equated with an elided answer:

142.  $?x [\text{his} [\text{worry } x]] = [\text{his} [\text{worry himself}]]$

In the representation above, ‘?x’ is the question operator, and ‘worry’ is analyzed as a dyadic predicate. I will not discuss this in more detail here, for arguments see Schlenker (2003:191-197).

Lastly, Schlenker critiques den Dikken et al. (2000)’s analysis in which there are two distinct types of specificational pseudocleft. The contrast in (143) was presented by den Dikken et al. to support their claim that the two are indeed radically different:

143. a) What nobody bought was any wine.

b) \*Any wine was what nobody bought.

However, Schlenker maintains that there are several reasons to doubt that Type A (143a) and Type B (143b) pseudoclefts should be derived via entirely different mechanisms (p.211). First, from a conceptual standpoint it is highly uneconomical. Second, Schlenker does not agree with den Dikken et al.’s characterization of the facts: the (b) examples in (144-145) demonstrate that it is in fact possible to license an NPI in a Type B pseudocleft:

144. a) What he refused to do was to buy any wine.

b) To buy any wine was what he refused to do.

145. a) What he refuses is to cause any harm.

b) To cause any harm is what he refuses.

---

<sup>7</sup>An example of a concealed question is the DP *the capital of Italy* in (147):

147. John knows the capital of Italy.

The relevant reading of (147) does not assert that John knows Rome, it expressed that John knows that Rome is the capital of Italy.

Finally, even if we accept that Den Dikken et al. are correct that no NPI can occur in Type B, this impossibility does not necessarily imply that Type B pseudoclefts are not transformationally derived from Type A. In fact, it might even be expected for NPIs in Type B to be ungrammatical, since NPI licensing requires c-command at S-structure. This requirement would rule out ‘any wine’ in (143b).

In sum, Schlenker proposes to analyze a specificational pseudocleft as a question-answer pair in which the counterweight is a full clause with elided material. His analysis differs from den Dikken et al. mainly in its treatment of the copula (identity copula vs topic head), though it also differs in that Schlenker lays out a detailed proposal of the semantic composition of specificational pseudoclefts, something that is not addressed in detail in either den Dikken et al. (2000) or den Dikken (2006).

Returning to Ross’s original observation, pseudoclefts such as (146a) have what seem to be counterparts in which the counterweight is a full IP (146b):

146. a) What I did then was [call the grocer]. (Ross 1972, (39a))  
 b) What I did then was [I called the grocer]. (Ross 1972, (39b))

Schlenker notes that Ross’s examples above not only make it *plausible* that the counterweight is full IP, they also provide “... a conceptual argument against all competing accounts. Every theory must account for the existence of” pseudoclefts such as (146b) (Schlenker, 2003:164). Indeed, Sharvit, whose revisionist analysis will be presented in section 4.3, acknowledges that “it may be true that for these cases we need something like the question analysis” (Sharvit, 1999:320-321), but maintains that it cannot be extended to all cases.

#### 4.2.4 Summary: Deletion Analyses

In sum, the account of the connectivity effects in specificational pseudoclefts in deletion-based approaches is “beautifully simple” (Mikkelsen, 2011:1818)– the relevant elements in the counterweight are licensed exactly the way they normally are, but the syntactic licensing relationships are obscured by ellipsis.

Though the two proposal outlined above differ in many respects, what they have in common is an analysis in which the *wh*-clause is an interrogative and the counterweight is its answer. The latter is a full clause with optional ellipsis, the same kind of ellipsis that is in answer to a question in a QAP.

### 4.3 Revisionist Analyses

The analyses of Jacobson (1994) and Sharvit (1999) are ‘revisionist’ (to use Schlenker’s 2003 term) in that they reject mainstream assumptions about c-command as a requirement for binding, NPI licensing and other such dependencies. Under a revisionist analysis, connectivity in general (and thus in specificational pseudoclefts as well) results without syntactic c-command– binding and other dependencies are viewed as side effects of the semantic composition. Revisionist analyses are thus quite different from the previous two kinds of analyses we have seen: in reconstruction and deletion

based approaches, standard binding and NPI licensing theories are maintained, they are just not observable at the surface.

In a revisionist approach, a pseudocleft such as (148) is an identity sentence, and the structure is “what you see is what you get”:

148. What John<sub>i</sub> likes is himself<sub>i</sub>.

The lack of syntactic licensing in (148) between the anaphor *himself* and its antecedent *John* is real— the only reason that connectivity in (148) was a ‘problem’ in the first place was because we mistakenly assumed that Condition A really is a test for syntactic c-command. While this may be true in simple cases, it is not a general rule.

What the connectivity ‘puzzle’ in (148) tells us is not, for example, that there is some kind of hidden structure present (the analysis pursued by deletion-based approaches), rather it reveals that none of our c-command tests are foolproof. Revisionists thus conclude that we ought to abandon the tests: for them, c-command is not a necessary condition for anaphor/NPI licensing, variable binding, etc. Instead, revisionists such as Jacobson (1994) and Sharvit (1999) propose an account of Binding, Scope, and NPI licensing that involves a higher-order semantics rather than a structural condition like c-command. I will be focusing primarily on Sharvit’s (1999) analysis, which is based on the work of Jacobson (1994).

To begin, Sharvit notes that the proposed modifications to standard syntactic theory are independently motivated: we already know that for cases such as (149) that we must allow variables to be bound without appealing to c-command.

149. a) The picture of himself that every student bought was a nuisance to him.  
 b)  $[\forall x: x \text{ a student}]$  (the picture of  $x$  that  $x$  a bought was a nuisance to  $x$ )

The example above due to Sharvit (1999:303) illustrates that the quantifier ‘every student’ is allowed to bind outside of the relative clause. In order to do this, Sharvit appeals to quantification over functions. This mechanism is then extended to bound variables in specificational pseudoclefts such as (150):

150. What  $[\text{no student}]_i$  enjoys is his<sub>i</sub> finals.

a)  $\text{Max } (\lambda g_{(e,e)} [\text{Nat}'(g) \ \& \ \forall x (\text{student}'(x) \rightarrow \neg \text{enjoy}'(x, g(x)))] = \lambda y [\text{Max } (\lambda z [\text{finals } (z, y)])]$   
 b)  $[\iota f: f \text{ is a natural function} \ \& \ [\text{no } x: x \text{ a student}] \ x \text{ enjoys } f(x)] = [\lambda x \text{ the finals of } x]$

The pseudocleft in (150) is seen as equating a function  $f$  from students to things that they like with a function that associates each student to his finals. Sharvit’s original formalism is represented in (150a) and uses the maximality operator  $\text{Max}$ , while (150b) shows a simplified version due to Schlenker (2003:163).

Regarding binding theory, Sharvit gives a higher-order account of Condition A effects in specificational pseudoclefts such as (151), which are treated as a morphological by-product of semantic reflexivization. Sharvit’s original formalism (1999:313) is represented in (152a), while Schlenker’s (2003:163) simplified version is in (152b).

151. What [every man]<sub>i</sub> loved was himself<sub>i</sub>. (Sharvit 1999:313)

152. a)  $\text{Max } (\lambda g_{\langle e,e \rangle} [\text{Nat}'(g) \ \& \ \forall x (\text{man}'(x) \rightarrow \text{love}'(x, g(x)))] = \lambda x [x]$

b)  $[\iota f: f \text{ is a natural function } \& \text{ [every } x: x \text{ a man]} \ x \text{ loved } f(x)] = [\lambda x \ x]$

Sharvit follows Jacobson (1994) and others who propose that *himself* functions as an argument-reducing operator on transitive verbs: *himself* denotes the identity function of individuals and the output is the reflexive predicate in (153):

153.  $\text{HIMSELF}(\text{love}') \rightarrow \lambda x [\text{love}'(x,x)]$

In brief, the reflexivization process involves two steps: first, the predicate ‘love’ is converted into  $\lambda f_{\langle e,e \rangle} \lambda y [\text{love}'(y, f(y))]$  via type shifting. Second, the identity function is fed in to obtain  $\lambda y [\text{love}'(y, y)]$ . In this approach *himself* is the identity function—it is not a variable and does not need to be c-commanded by a ‘binder’. When this is paired with Jacobson’s analysis of functional relative clauses, this predicts the connectivity we observed in (151), repeated again below:

151. What [every man]<sub>i</sub> loved was himself<sub>i</sub> . (Sharvit 1999:313)

I will not walk through Condition B (154) or C (155) effects in detail here (see §4 of Sharvit 1999):

154. \*What John<sub>i</sub> is is a nuisance to him<sub>i</sub>.

155. \*What he<sub>i</sub> is is a nuisance to John<sub>i</sub>.

Roughly, Sharvit derives Condition C effects by appealing to Reinhart (1983), where Condition C is a reflex of the preference for bound readings over accidental coreference.<sup>8</sup> She accounts for Condition B effects by proposing that morphological reflexivization is applied whenever it is possible. Finally, Sharvit accounts for NPI licensing by suggesting that only downward-entailingness is necessary to license an NPI.

In sum, revisionist approaches argue that binding, NPI licensing and other dependencies can occur without syntactic c-command. The alternative analysis they propose relies instead on function equation. In terms of pseudoclefts, this means that the cases in (156) are not ‘connectivity puzzles’ at all: there is no c-command involved, and there doesn’t need to be.

156. a) What John<sub>i</sub> is is important to himself<sub>i</sub>.

b) What [ever boy]<sub>i</sub> did was hug his<sub>i</sub> mother.

c) What John didn’t buy was **any** wine.

One advantage of this kind of approach is that the syntactic abstraction is allowed to be minimal. However, one potential drawback is that it constitutes a “far-reaching revision of the foundations of the field” (Schenkler, 2003:159).

<sup>8</sup>“NP X and NP Y cannot corefer if replacing Y with a variable A-bound by X yields an interpretation which is indistinguishable from the coreferential interpretation” (Sharvit 1999:331)

## 4.4 Alternative Analyses

I would like to mention briefly some alternative analyses of (specificational) pseudoclefts which are not reviewed here. For some, the distinction between predicational and specificational pseudoclefts is semantic only (Bachenko, 1976; Declerck, 1988:4). The most detailed analysis of this kind is probably that of Bachenko (1976). She proposes a *wh*-trace hypothesis in which predicational and specificational pseudoclefts have the same syntactic structure, and the difference between them is determined at LF by a set of semantic relations that hold between the *wh*-element and the ‘predicate complement *X*’ (i.e. the counterweight). In particular, Bachenko posits two semantic rules, SRI and SR2, that optionally apply to a pseudocleft’s structure and assign two different *wh*/*X* relations: *X*(*y*) and *X* sp *y* for predicational and specificational interpretations, respectively (1976:79). A pseudocleft is ambiguous when both SRI and SR2 are able to apply, leading to both a *X*(*y*) and a *X* sp *y* interpretations being available.

Other non-transformational analyses have been proposed by Higgins (1979) and Blom and Daalder (1977). For Blom and Daalder (1977), connectivity is mediate in specificational pseudoclefts by a null subject PRO in the counterweight:

157. What John<sub>i</sub> should do is [PRO<sub>i</sub> protect himself]<sub>i</sub>].

Such an analysis runs into several problems. First, it predicts that the only contexts in which specificational pseudoclefts should show connectivity are those where the effects can be mediated by a PRO. For example, there is unlikely to be a PRO in nominal counterweights, but pseudoclefts such as (158) are nevertheless acceptable<sup>9</sup>:

158. Who John<sub>i</sub> hates is [himself]<sub>i</sub>].

Furthermore, it simply shifts the issue to a different area, since now we would need to establish how a subject PRO inside the counterweight could be controlled by a non *c*-commanding constituent of the *wh*-clause.

I will conclude with a brief summary of the extraction-based approaches for specificational pseudoclefts in Chomsky (1970, 1972) and Emonds (1970). Such analyses pick the focused element out of the *wh*-clause and move it to a post-copular position via rightward movement. These kinds of analyses have been criticized for their technical difficulties (see Culicover and Jackendoff 2005 and also Bošković 1997 for arguments).

In the extraction analysis first proposed by Chomsky (1970) the ‘value’-XP (i.e. the counterweight) of a specificational pseudocleft begins as a constituent of an NP-dominated clause base generated in subject position of the pseudocleft construction as a whole. It then raises to a post-copular position which is generated empty:

step 1: [<sub>S</sub> [<sub>NP</sub> it [<sub>S'</sub> that ...[<sub>XP</sub> ‘value’]... ] ] [<sub>VP</sub> be \_\_\_ ] ] → extraction →

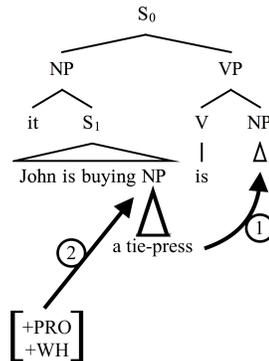
step 2: [<sub>S</sub> [<sub>NP</sub> it [<sub>S'</sub> that ...[+PRO,+WH]...]] [<sub>VP</sub> be [<sub>XP</sub> ‘value’]] ] → *wh*-fronting →

<sup>9</sup>Blom and Daalder argue that this prediction is actually confirmed in Dutch: the Dutch counterpart of (158) would be ungrammatical.

step 3: [s [NP it [s<sub>i</sub> [+PRO,+WH] (= what) ...\_\_... ]] [VP be [XP ‘value’]]]

The tree below (Chomsky,1970:197-198) illustrates the extraction analysis for the pseudocleft *What John is buying is a tie press*:

Figure 6



As mentioned, such an analysis encounters several issues, in particular with respect to cyclicity, as the extracted element is raised to a position which is not structurally superior to its extraction site, and in order for it to work one must allow for sideways movement. For other criticisms see Akmajian (1979: 51-52) and Blom and Daalder (1977: 59-60).

## 4.5 Summary: Critical Literature Review

In conclusion, this section has discussed three types of analyses of specificational pseudoclefts: (i) ‘reconstruction’-based (Bošković, 1998; Heycock and Kroch, 1999), (ii) deletion-based (den Dikken et al. 2000; den Dikken 2006; Schlenker 2003), and (iii) ‘revisionist’ (Jacobson, 1994; Sharvit, 1990). The table below has been adapted from Schlenker (2003:167) and summarizes roughly the various assumptions:

Figure 7

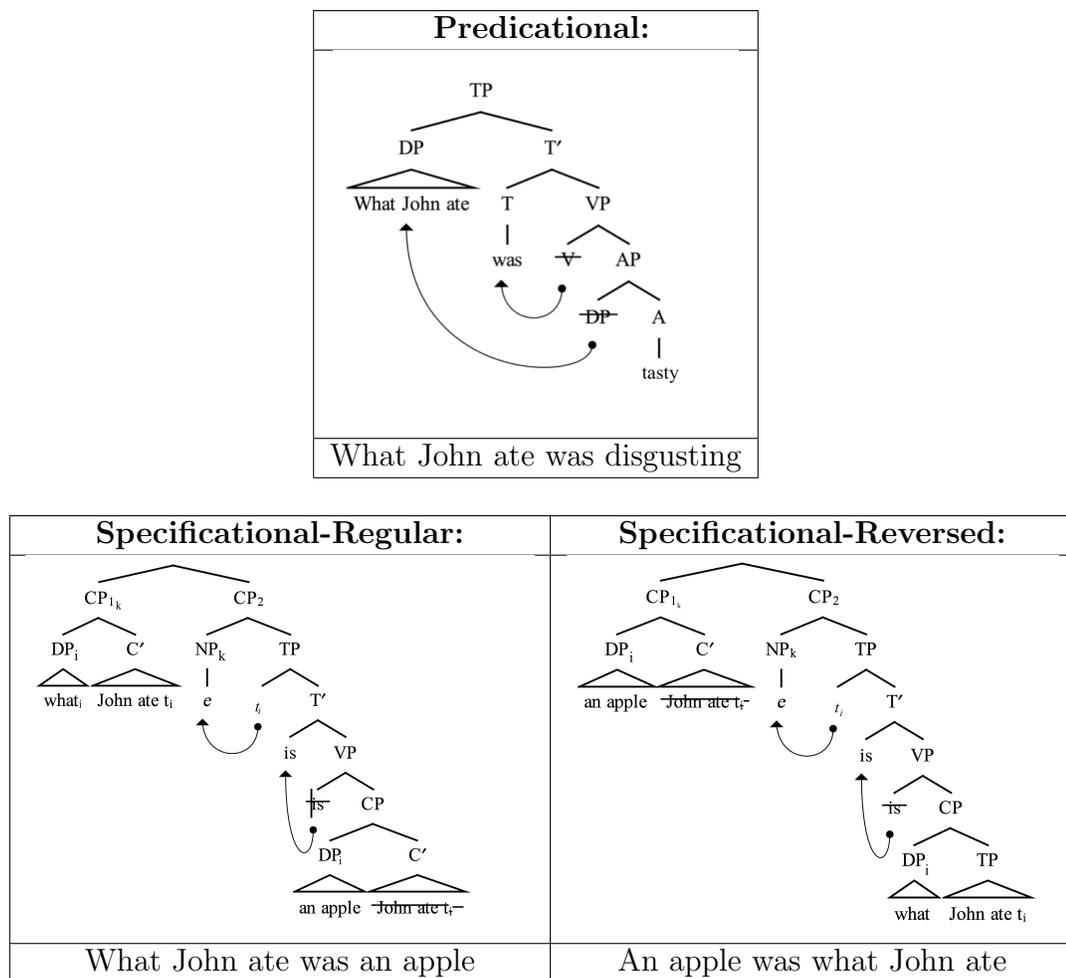
Approach	<i>What John likes</i>	<i>is</i>	<i>himself</i>
<b>Reconstruction:</b>	Entity	=	Entity
<b>Deletion:</b>	Question	=	Answer
<b>Revisionist:</b>	Function	=	Function

# Chapter 5

## The Syntax of Pseudoclefts

In this section I will outline the syntactic proposal of predicational and specificational pseudoclefts. The structures that I will propose are illustrated in Figure 8:

Figure 8



## 5.1 The Syntax of Predicational Pseudoclefts

Setting aside specificational pseudoclefts for the moment, I will begin by laying out the predicational proposal. Ultimately, I agree with Bošković that predicational pseudoclefts “have rather unremarkable syntax” (1997:236), though I will discuss in Chapter 7 that in terms of their semantics, predicational pseudoclefts are more interesting than Bošković suggests. Indeed, we will see in the proposed semantic analysis that in some ways predicational pseudoclefts are the less intuitive of the two. I set this aside for now.

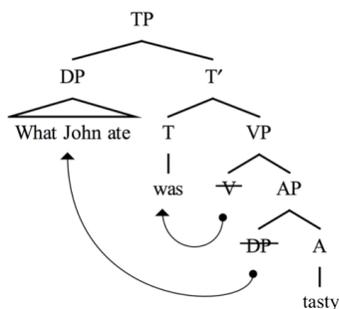
I follow Bachenko (1976) and Bošković (1999), Halupka-Rešetar (2012) and others in treating predicational pseudoclefts as regular predicational copular clauses. Syntactically, the only difference between (159) and a predicational pseudocleft such as (160) is that in the latter the subject is a complex DP –a free relative– as opposed to a garden variety DP such as *the apple*.

159. [The apple] is tasty.

160. [What John ate] is tasty.

Setting aside the internal structure of the FR for now, the proposed structure for (160) is the same structure that would be proposed for a regular predicational copular clause in (159):

Figure 8



This structure is intended to capture several of the properties of predicational pseudoclefts listed in Chapter 2. For example, the claim that the *wh*-clause of a predicational pseudocleft is referential is reflected in the above structure in that it is a free relative and an argument of the predicate *tasty* which  $\theta$ -marks it. The position the FR occupies is spec-TP, which is consistent with the observation that it can raise (161a), be embedded under ECM (161b) and undergo subject-auxiliary inversion (161c).

161. a) [What John ate] seems [~~What John ate~~] to be tasty.

b) I consider [what John ate to be tasty].

c) Is<sub>i</sub> what John ate t<sub>i</sub> tasty?

In addition, this structure also predicts that the tense of the copula in a predicational pseudocleft is not dependent on tense in the *wh*-clause— both (162a) and (162b) are acceptable:

162. a) [What John **cooked**] **was** tasty.

b) What John **cooked**] **is** tasty.

Similarly, this structure also accommodates the observation that predicational pseudoclefts can have straight negation interpretation (163) and sentential adverbs to the right of the copula (164):

163. [What John cooked] wasn't tasty.

164. [What John cooked] was probably tasty.

There is no special or exceptional explanation needed for (163-164), negation happens in the same way as in '*the apple is not disgusting*' and sentential adverbs are allowed in the same as they are in '*that apple is probably disgusting*'.

Finally, recall from Chapter 2 that two main ways predicational pseudoclefts differ from specificational ones are in terms of reversibility and connectivity. Regarding the former, the structure in Figure 8 offers an explanation for why predicational pseudoclefts are not reversible— only the free relative *wh*-clause is eligible to occupy spec-TP, the head of the AP predicate *disgusting* cannot (Halupka-Rešetar 2012). The same reasoning is behind *the apple is tasty*, but not *\*tasty is the apple*.

With respect to connectivity, the lack of connectivity in a predicational pseudoclefts such as (165) is straightforward: the counterweight is not a full clause, therefore *Liam* in the FR does not c-command *himself* and only the pronoun *him* is possible. An anaphor in its place would not be appropriately bound.

165. What Liam<sub>i</sub> does is important to him<sub>i</sub>/\*himself<sub>i</sub>.

Returning to status of the *wh*-clause, I agree with the majority of the literature that the *wh*-clause of a predicational pseudocleft is a free relative (Akmajian 1979; Bachenko 1976:4; Bošković 1997; Culicover and Jackendoff 2005:257; Halupka-Rešetar 2012; Heycock and Kroch 1999; Iatridrou and Varlokosta 1998:3; Radford 1988). Any connections to QAPs pertain to specificational pseudoclefts only. Recall from Chapter 2, specificational pseudoclefts are interpreted as focus constructions which specify the value of a 'variable' (Akmajian 1979:218; Bachenko 1976). This is not something that predicational pseudoclefts convey (Bachenko 1976; Bošković 1997; Declerck 1988; den Dikken et al. 2000; others). Rather, predicational pseudoclefts simply predicate a property of a 'variable' introduced by the free relative. They are not focus constructions and are not interpreted as raising and answering a question any more than a regular copular sentence such as '*That coat is expensive*' is felt to answer a question. Therefore analyzing the *wh*-clause of predicational pseudoclefts such as (166) as an interrogative doesn't really buy us anything the way it does for specificational pseudoclefts.

166. a) What I bought is ugly. (PPC/\*SPC)  
 b) What Amy does is important. (PPC/\*SPC)

Some evidence that supports a characterization of the *wh*-clause of a predicational pseudocleft as a free relative is that it patterns with other FRs in having similar restrictions. For example, (167) illustrates that both free relatives and the *wh*-clause of a predicational pseudocleft allow WH-*ever* (Declerck 1988:72; den Dikken et al. 2000; Iatridou and Varlokosta, 1999; Jacobson, 1995; Zwicky, 1986). The examples in (168) show that neither permit sluicing (Ross, 2004), and (169) shows that neither do they permit WH+*else* (Akmajian, 1979; den Dikken, 2006; Zwicky, 1986).

In the examples below, the predicational pseudoclefts are depicted in the (a) sentences, while the free relatives are in the (b) ones:

167. a) [What(ever) Mary bought] was expensive. (Dayal 1997:103)  
 b) I read [what(ever) John read].
168. a) Mary bought something, and \*what(ever) ~~she bought~~ was expensive.  
 b) John read something, and \*I read what(ever) ~~he read~~.
169. a) [What (\*else) Mary bought] was expensive.  
 b) I read [what (\*else) John read].

In addition to (167-169), there are other properties that the *wh*-clause of a predicational pseudocleft shares with free relatives. Some of them are outlined in Chapter 6, however I will not discuss them further here. For an overview of free relatives see Šimik (2017) and also section 6.1.

One interesting property of predicational pseudoclefts that I want to point out has to do with number agreement on the copula. We saw in section 2.2.5 that *specificational* pseudoclefts have been argued to be the more restrictive of the two when it comes to copular agreement (Bošković 1997; den Dikken et al., 2000; Declerck, 1988; Halupka-Rešetar, 2012). However, it seems that perhaps predicational pseudoclefts are stricter, as the copula of a predicational pseudocleft must be singular. Consider the pseudoclefts in (170) and (171):

170. What John ate **was**/\***were** revolting (\*SPC/PPC)  
 171. What John saw in the park **was**/**were** a man and a woman. (SPC/PPC)

In the unambiguously predicational pseudocleft in (170), plural agreement is not possible even if the free relative refers to something plural, for example if “what John ate” was multiple apples. In contrast, the pseudocleft in (171) is ambiguous: in a predicational reading John saw a centaur, while in the specificational reading he saw the following: a man, a woman. Importantly, this ambiguity only obtains when the copula is singular—when it is plural only the specificational reading is available: ‘*what John saw in the park were a man and a woman* cannot mean that John saw centaurs in the park.

To conclude, it seems that in fact the requirement for singular agreement on the

copula is stricter in predicational than in specificational pseudoclefts.<sup>1</sup> I suggest that this is connected to the claim that a *wh*-element as a subject<sup>2</sup> is always grammatically singular (Higgins, 1979:143; Zwicky, 1986:119). This is illustrated below by the (embedded) interrogatives in (172) and by the free relative in (173)

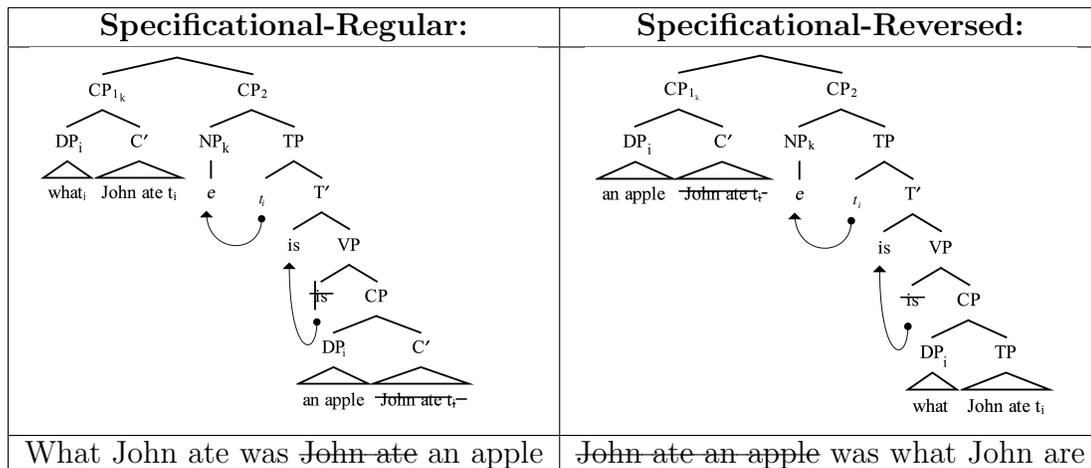
172. a) Who was/\*were making all that noise? (Higgins, 1979:143)  
 b) I wonder [what is/\*are exploding]. (Zwicky, 1986:119)  
 c) Who travels/\*travel far?
173. [What was/\*were in the rubbish] smelled awful. (Zwicky, 1986:119)

Even if *who* or *what* in (172-173) refer to plural entities, plural agreement is not possible.

## 5.2 The Syntax of Specificational Pseudoclefts

I will now lay out the specificational proposal, where I will argue that many of the properties of specificational pseudoclefts introduced in Chapter 2 can be seen as having a common source under the proposed analysis. I follow Schlenker (2003), Hartmann, Hegedüs & Surányi (2013) and others in suggesting that the pre-copular constituent is left-dislocated. I further suggest that this left-dislocation is connected to some of the properties unique to specificational pseudoclefts, such as list intonation, the restrictions subject-auxiliary inversion, and some of the variability in number agreement on the copula.

Figure 8



<sup>1</sup>There are cases in which plural agreement seems to be allowed in predicational pseudoclefts. For example, in the predicational reading of (i), in which Martha gave me suitcases full of money in order to bribe me:

- i. What Martha gave me **was/were** bribes.

I leave this question open for future research.

<sup>2</sup>When the *wh*-element is the object, plural agreement is fine (cf. Who are they? What are those?)

### 5.2.1 Left-dislocation of the pre-copular clause

I suggest that the pre-copular clause of a specificational pseudocleft is left-dislocated. In a regular specificational pseudocleft such as (174a) the pre-copular clause is the *wh*-clause, while in reversed specificational pseudoclefts (174b) the pre-copular clause is the counterweight. The left-dislocated constituents are shown below in brackets:

174. a) [What John did] is John bought a car. (Regular SPC)  
 b) [John bought a car] is what John did. (Reversed SPC)

In dislocations a constituent is linked to more than one position in a clause. For example, in the case of a *wh*-phrase in a question a constituent could be linked a thematic position (A-position) and a scope position (A'-position). Additionally, dislocation can also combine a thematic position with a position that is related to information structure such as focus (Bachenko, 1976).

A dislocated constituent can be at the left or the right periphery of a phrase or clause. An example of the former is shown in (175a) and the latter in (175b), both due to Bachenko (1976:89):

175. a) [John<sub>i</sub>] [he<sub>i</sub> never does anything right].  
 b) [We saw them<sub>i</sub> in class] [your cousins<sub>i</sub>].

I suggest that we can roughly adopt Ott's (2014) theory of left-dislocation in order to describe the kind of dislocation proposed in specificational pseudoclefts. Ott (2017) argues that once this theory is paired with a revised version of the Satellite Hypothesis (Alrenga, 2005; Koster 1978), it can correctly account for the dislocations in (175), but also more complex cases like those in (176):

176. a) Dat hij komt, **dat** is duidelijk.  
 that he comes that is clear  
 'That he will come is clear.' (Dutch)  
 b) That the Giants would lose, John never expected.

I will begin by summarizing the Satellite Hypothesis before addressing Ott's enriched version. I present his analysis to motivate my claim that the pre-copular constituent of a specificational pseudocleft is left-dislocated— as we will see in the coming paragraphs, there are many similarities between the properties observed of left-dislocations and those of specificational pseudoclefts. For this reason I think it is worthwhile to review Ott's (2017) proposal, even though it will turn out that his revised version of the Satellite hypothesis is actually more complex than what we will need to account for specificational pseudoclefts. Nevertheless, the general underlying assumption that the dislocated constituent is a surface fragment of what is underlyingly a full clause is the common root of both.

To begin, consider again the examples in (176). The Dutch example in (a) is due to Koster (1978) while (b) is taken from Alrenga (2005):

176. a) *Dat hij komt*, **dat** is duidelijk.  
 that he comes that is clear  
 ‘That he will come is clear.’ (Dutch)
- b) That the Giants would lose, John never expected.

Koster (1978) shows that sentential subjects such as ‘*dat hij komt*’ in (176a) have various properties in common with left-dislocated constituents. He thus concludes that sentential subjects, like left-dislocated constituents, are clause-external satellites which are linked to a clause-internal pronoun. This pronoun can be overt as in (176a), represented by the bolded instance of *dat*, or it can be covert. Alrenga (2005) extends Koster’s Satellite Hypothesis to include other clause-initial CPs, such as fronted complement clauses like ‘*that the Giants would lose*’ in (176b). I am omitting the mechanics of this version of the satellite hypothesis: various problems with it have been identified (see de Vries 2010), therefore I will hold off until I can present Ott’s updated version.

Importantly, and relevant to our discussion of pseudoclefts, one problem with this version of the Satellite Hypothesis is that it cannot account for connectivity effects as in (177), due to Takahashi (2010) and Moulton (2013):

177. a) That he<sub>i</sub>’ll end up looking like his father, every young man<sub>i</sub> expects.  
 b) That **anyone** would take offence, I did **not** expect.

The examples in (177) suggest that a variable (or an NPI) inside the satellite CP can be bound by a by an element inside the host clause which does not c-command it.<sup>3</sup> This is a problem for the Satellite Hypothesis as it is stated in Koster (1978) and Alrenga (2005), as the central claim is that a peripheral CP argument is extra-sentential: it is base-generated in a peripheral position and should not display connectivity.

Ott (2017) argues that we can maintain this claim *and* account for the connectivity in (177) by pairing the Satellite Hypothesis with his theory of left-dislocation (2014). In this theory, Ott proposes an elliptical approach to left-dislocation in which a dislocated constituent is a surface fragment of what is underlyingly a full clause. In this ‘Revised Satellite Hypothesis’, sentences such as (177) with an initial satellite CP are composed of two root clauses, CP<sub>1</sub> and CP<sub>2</sub>, in which CP<sub>1</sub> is elliptical and linearly precedes CP<sub>2</sub>. This is illustrated below, where the connectivity sentences in (177) receive the structures in (178):

178. a) [<sub>CP<sub>1</sub></sub> [<sub>CP<sub>Σ</sub></sub> that he<sub>i</sub>’ll end up... ]<sub>k</sub> [[every young man]<sub>i</sub> expects t<sub>Σ</sub>]] [<sub>CP<sub>2</sub></sub> (that<sub>k</sub>/Ø<sub>k</sub>) every young man expects t<sub>k</sub>]
- b) [<sub>CP<sub>1</sub></sub> [<sub>CP<sub>Σ</sub></sub> that anyone would take offence]<sub>i</sub> [I did not expect t<sub>Σ</sub>]] [<sub>CP<sub>2</sub></sub> (that<sub>i</sub>/Ø<sub>i</sub>) I did not expect t<sub>k</sub>]

As further illustration, the tree of (164a) is represented in Figure 9:

<sup>3</sup>Moulton (2013) explains the connectivity in (177) similar to the way Sharvit in section 4.3 explains connectivity in pseudoclefts: by rejecting c-command as a condition for binding/NPI licensing, instead viewing such dependencies as a side effect of the semantic composition.

Figure 9

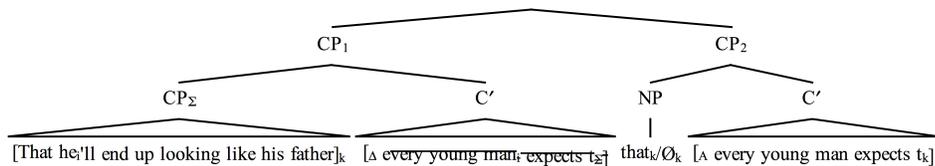


Figure 9 illustrates that bound variable connectivity is explained in that the pronoun *he* in  $CP_{\Sigma}$  is bound not by the quantifier phrase in  $CP_2$ , but by its counterpart inside  $CP_1$ . Since  $CP_1$  is underlying parallel to  $CP_2$ , the surface pattern in (177a) can be derived from (178a) by backward deletion. Note that Ott follows Merchant (2004) in assuming that an ellipsis remnant –the constituent [ $CP_{\Sigma}$  that  $he_i$ 'll end up... ] in (179) – A-moves to the edge of its clause in order to enable deletion of the constituent labelled  $\Delta$  at PF.

179. [ $CP_1$  [ $CP_{\Sigma}$  that  $he_i$ 'll end up... ]]<sub>k</sub> [[ $\Delta$  every young man]<sub>i</sub> expects  $t_{\Sigma}$ ]] [ $CP_2$  ( $that_k/\emptyset_k$ )  
[A every young man expects  $t_k$ ]]

Parallelism of  $CP_1$  and  $CP_2$  is a prerequisite for recoverability of deletion in  $CP_1$ : the deleted constituent  $\Delta$  is equivalent to the constituent labeled A in  $CP_2$  ( $\exists x$ .every young man expects x).

While  $CP_1$  is cataphorically linked to  $CP_2$  as a result of ellipsis, the two clauses are further linked in that the pronoun in  $CP_2$ , *that*/ $\emptyset$  in (179), anaphorically resumes the satellite  $CP_{\Sigma}$ .<sup>4</sup> The pronoun is an NP cognate of *that*, the same as in (180):

180. [Everyone here takes good care of their garden]<sub>i</sub>. At least  $that_i$ 's what they say.

As mentioned at the outset of this chapter, this proposal is actually more complex than we need to account for specificational pseudoclefts, where the proposed dislocated constituent is a single CP rather than  $CP_1$  with embedded  $CP_{\Sigma}$ . Therefore, Ott's (2014) theory of left-dislocation will suffice, in which a German example such as (181a) is analyzed as (181b):

181. a) Seinen<sub>i</sub> Garten, den pflegt [jeder Gärtner]<sub>i</sub>.  
his.acc garden it.acc tends every gardener  
'Every gardener tends his garden.'
- b) [ $CP_1$  [ $NP$  seinen Garten]<sub>i</sub> [~~pflegt jeder Gärtner  $t_i$ ]]] [ $CP_2$  den<sub>k</sub> [pflegt jeder Gärtner  $t_k$ ]]~~

<sup>4</sup>Ott proposes to view the ability to omit the *that* in  $CP_2$  as Topic Drop (see Ott §4.2 for arguments.)

As before, backward deletion of the constituent [*pflegt jeder Gärtner t<sub>i</sub>*] in CP1 is permitted on the condition that CP1 and CP2 are parallel. Ott notes that this kind of PF-deletion operation not specific to left-dislocations, it is also involved in the derivation of fragment answers to questions as in Merchant’s (2004) analysis of a QAP such as (182):

182. A: What does every gardener tend?

B: [<sub>CP</sub> Every gardener<sub>i</sub> tends his<sub>i</sub> garden] → *PF*

. [<sub>CP</sub> ~~Every gardener<sub>i</sub> tends his<sub>i</sub> garden~~].

Accordingly, Ott suggests there is “good evidence to analyze left-dislocated constituents as sentential fragments, on a par with other superficially non-sentential utterances whose properties nevertheless betray underlying clausal syntax” (2017:12). This claim is particularly fitting for specificational pseudoclefts: these pseudoclefts are already argued to pattern *interpretively* like QAPs, and the current proposal which adopts Ott’s theory of left-dislocation positions them alongside QAPs *derivationally* as well.

Ott’s theory of left-dislocation is more directly applicable to the proposed structure of *reversed* specificational pseudoclefts than regular ones.<sup>5</sup> in Ott (183) and in reversed pseudoclefts (184) the left-dislocated constituent is the full clause, CP1, inside of which material is deleted on the condition of parallelism with CP2. Note that for the pseudocleft structures proposed below in (184) and (185), I have followed Ott who in turn follows Merchant (2004) in assuming that an ellipsis remnant A-moves to the edge of its clause.

Simplifying somewhat in order to highlight the parallels with Ott’s left-dislocation example in (183), the structure of the reversed pseudocleft is presented in (184):

183. [<sub>CP1</sub> [<sub>NP</sub> his garden]<sub>i</sub> ~~every gardener tends t<sub>i</sub>~~] [<sub>CP2</sub> Ø<sub>k</sub>/that<sub>k</sub> [every gardener tends t<sub>k</sub>]]

184. [<sub>CP1</sub> [<sub>NP</sub> his garden]<sub>i</sub> ~~every gardener tends t<sub>i</sub>~~] [<sub>CP2</sub> Ø<sub>k</sub>/that<sub>k</sub> is [<sub>CP</sub> what<sub>i</sub> [every gardener tends t<sub>i</sub>]]].

Connectivity in both cases is actually resolved inside CP1, even though the direction of the ‘apparent’ connectivity is from CP2 into CP1 (i.e. an element in the dislocated CP1 looks like it is *bound by* something in CP2). The deletion involved is backward deletion.

In contrast, in regular specificational pseudoclefts such as (185) the kind of deletion proposed is forward deletion: the proposed left-dislocated clause is the *wh*-clause, CP1, and the counterweight CP2 is the full clause inside of which material can be elided:

<sup>5</sup>One way that Ott’s proposal is different from both regular and reversed pseudoclefts is that in LD structures such as (179) deletion is obligatory, while in specificational pseudocleft in English it is optional, at least for some speakers (though see Schlenker in section 4.2.3 who argues that in French deletion is also obligatory pseudoclefts).

185. [<sub>CP1</sub> what<sub>i</sub> [every gardener tends t<sub>i</sub>] [<sub>CP2</sub> Ø<sub>k</sub>/that<sub>k</sub> is [<sub>CP</sub> [<sub>NP</sub> his garden]<sub>i</sub> every gardener tends t<sub>i</sub>]

In (185) it is CP2, not CP1, that involves ellipsis– like (184), connectivity in (185) is really evaluated inside the counterweight, but here the counterweight is CP2. Accordingly, the ‘apparent’ direction of connectivity is from CP1 into CP2: an element in the dislocated CP1 looks like it *is binding* (not being bound by) something in CP2.

Even though it does not extend directly to both kinds of specificational pseudoclefts, I think that Ott’s theory of left-dislocation is useful as many of its claims can shed light on some of the properties of specificational pseudoclefts listed in Chapter 2. One part of Ott’s analysis that extends nicely to specificational pseudoclefts is that left-dislocations can be roughly understood as having a silent *that* after the dislocated clause. I show in (186-187) what this means when applied to specificational pseudoclefts.

186. a) What John did, (that) is John bought a car.  
 b) John bought a car, (that) is what John did.
187. a) What John wants for his birthday, (that) is John wants a pair of sunglasses.  
 b) John wants a pair of sunglasses, (that) is what John wants for his birthday

Although in English the *that* after the left-dislocated constituent is silent, in other languages it gets spelled out. Overt evidence for left-dislocation in specificational pseudoclefts is found in French (Moreau, 1970:334-335; Schlenker, 2003) and Hungarian (Hartmann, Hegedüs & Surányi, 2013), where the ‘silent’ *that -c*’ in the French examples in (188-189)– gets pronounced:

188. Ce que Mao dit, ??\*(c’)est qu’il fait froid.  
 ‘What Mao says, it’s that it’s cold.’ (Moreau 1970:334)
189. Ce qu’il<sub>i</sub> aimait, \*(c’)était lui-même<sub>i</sub>.  
 it that he liked, it was him-self  
 ‘What he liked was himself’. (Schlenker 2003:170)

The fact that *c’/ça* must be present leads Moreau and Schlenker to argue that a dislocated structure is obligatory in French. Hartmann, Hegedüs and Surányi (2013) provide similar examples in Hungarian involving the demonstrative *az*:

190. a) Akit a szintaxis érdekelt, ??(az) JÁNOS volt.  
 who-ACC the syntax-NOM interested.3SG (that) JOHN-NOM was  
 ‘Who was interested in syntax was John.’ (SPC)
- b) Akit a szintaxis érdekelt, (az) okos volt.  
 who-ACC the syntax-NOM interested.3SG (that) clever was  
 ‘Who was interested in syntax was smart.’ (PPC)

In specificational pseudoclefts such as (190a), *az* ‘that’ is strongly preferred, while in predicational pseudoclefts (190b) it is entirely optional. Hartmann et al. argue that *az* is a resumptive pronominal of the *wh*-clause which is in a topic position, while the fronted *wh*-clause is in a higher, left-dislocated position in the left periphery. Unfortunately, I haven’t yet come across any cross-linguistic data on reversed pseudoclefts to see if the same holds for them as well.

In English, evidence in support of the left-dislocation of the pre-copular constituent of specificational pseudoclefts comes from some of the properties listed in Chapter 2, specifically the pause/list intonation, the lack of subject-auxiliary inversion, and some of the variability in copular agreement. Most of these claims have been made for regular specificational pseudoclefts (those in which the proposed left-dislocated element is the *wh*-clause) rather than for reversed specificational pseudoclefts (those in which the proposed left-dislocated element is the counterweight). However, I suggest that these properties hold for the latter as well.<sup>6</sup>

Recall that the *wh*-clause of a regular ordered specificational pseudocleft (*wh*<be<CP) cannot undergo raising, nor can it be subject-auxiliary inverted, illustrated by the (a) sentences of (191) and (192), respectively. This also seems to be true of the pre-copular constituent of reversed specificational pseudoclefts (CP<be<*wh*), shown in the (b) sentences of (191-192). For simplicity I am omitting ellipsis:<sup>7</sup>

191. a) \*Is<sub>i</sub> [what John is] *t<sub>i</sub>* tall?  
       b) \*Is<sub>i</sub> [tall] *t<sub>i</sub>* what John is?  
 192. a) \*[What John is] seems [~~what John is~~] to be tall.  
       b) \*[Tall] seems [~~tall~~] to be what John is.

The unacceptability of subject-aux inversion holds true of left-dislocated elements generally, independent from pseudoclefts. Consider the examples in (193):

193. a) \*Did [that Joop got fired] surprise you? (de Vries 2010)  
       b) \*Did [that John showed up] please you? (Alrenga 2005:177)  
       c) \*Would [for the Giants to lose the World Series] really suck? (Alrenga 2005:177)

The patterning of pseudoclefts (170-171) with canonical left-dislocations in (172) supports a characterization in which the pre-copular constituent of a specificational pseudocleft, whether it be the *wh*-clause or the counterweight, is left dislocated.

<sup>6</sup>This is contrary to den Dikken et al. (2000) with respect to raising and subject-auxiliary inversion.

<sup>7</sup>With an un-elided counterweight this would look like:

- 191./ a) \*Is<sub>i</sub> [what John is] *t<sub>i</sub>* John is tall?  
       b) \*Is<sub>i</sub> [John is tall] *t<sub>i</sub>* what John is?  
 192./ a) \*[What John is] seems [~~what John is~~] to be John is tall.  
       b) \*[John is tall] seems [~~John is tall~~] to be what John is.

Additionally, experimental data supports the claim that the pre-copular constituent is peripheral in both regular and reversed pseudoclefts. I conducted a small study where I tested subject-auxiliary inversion and raising in both kinds of specificational pseudoclefts.<sup>8</sup> The acceptability judgements indicate that the two are relatively on par: on a scale of 1-7, the average rating for raising in regular specificational pseudoclefts was 3.4 (median 3), while in reversed the average was 3.3 (median 3). For subject-aux inversion, the average for regular specificational pseudoclefts was 3.6 (median 3) and for reversed it was 2.5 (median 2).

These findings contrast with den Dikken (2006), who claims that ECM and subject-auxiliary inversion are acceptable in reversed specificational pseudoclefts, but not in regular ones. This in part motivates his treatment of regular and reversed specificational pseudoclefts as being structurally unrelated.<sup>9</sup> For my own proposal, since I didn't actually find any significant differences with respect to raising or subject-auxiliary inversion in regular and reversed specificational pseudoclefts, I maintain that they can and should have a uniform analysis in which the counterweight is a full CP and whatever constituent occupies the pre-copular position (*wh*-clause or counterweight) is left-dislocated.

Another property of specificational pseudoclefts that follows from the hypothesis that the pre-copular constituent is left-dislocated is the preference for singular agreement on the copula. Recall from Chapter 2 that some have suggested the copula in a specificational pseudocleft must always have default 3rd person singular agreement (Declerck, 1988: 80; Halupka-Rešetar 2012). Some of the judgements that I collected in my own study suggest that the requirement for singular agreement in specificational pseudoclefts is not so strict. Although the preference for singular seems to hold, there are cases where plural agreement is fine too, such as (194). Note that in (194) the counterweight has been reduced by ellipsis.

194. a) What I ate **is/are** apples.  
 b) Apples **is/are** what I ate.

The preference for singular agreement in specificational pseudoclefts is brought out most clearly when ellipsis in the counterweight is not performed, as in (195):

195. a) What I ate **is/?\*are** [I ate apples].  
 b) [I ate apples] **is/?\*are** what I ate.

I suggest that the preference for singular agreement is connected to the proposed structure of clausal satellites in which the host clause's subject is a resumptive pronoun.

<sup>8</sup>See Appendix B for a list of stimuli.

<sup>9</sup>Though I did not test regular and reversed pseudoclefts in any ECM contexts, I would expect the judgements to be to similar to those of raising in which there was no difference between regular and reversed— both disallowed it. Once again, this is contrary to den Dikken's claim that reversed specificational pseudoclefts are sometimes acceptable in that context (2006:335):

- i. \*I consider [[what John is] important to himself]. (Regular)  
 ii. ?I consider [[important to himself] what John is]. (Reversed)

Thus, singular agreement is preferred because “what Infl agrees with in sentential subject constructions is not the CP but rather a null DP to which the CP is linked” (Alrenga 2005):

196. a) What I ate, (that) **is**/\***are** I ate apples.  
 b) I ate apples, (that) **is**/\***are** what I ate.

I further suggest that the contrast between (194) and (195) can be explained by appealing to the well-known phenomenon of illusory grammaticality (Bock, Carreiras, and Mesegue, 2012; Bock and Miller, 1991; Xian and Giannakidou, 2013). In (194) plural agreement on the copula is judged to be somewhat acceptable due to its proximity to the plural noun *apples*, the same way that the intervening plural noun “cabinets” in (197) leads to the illusory grammaticality of (197.b) in the example below due to Bock & Miller (1991):

197. a) [The key [to the cabinets]] **IS** ...  
 b) [The key [to the cabinets]] **ARE** ...

In sum, the copula of both both regular and reversed specificational pseudoclefts has a preference for singular agreement since it is agreeing with the (silent) resumptive pronoun *that*. This is due to the left-dislocated structure, rather than being due to any special property of copula of a specificational pseudocleft itself. Nevertheless, the copula can show some variability in number agreement particularly in cases where the counterweight is reduced by ellipsis.

Another piece of evidence for the proposed left-dislocation of the pre-copular constituent is the prosodic observation that specificational pseudoclefts are pronounced with a pause before the copula, represented by the commas in (198):

198. a) What I bought, is ~~I bought~~ a book.  
 b) ~~I bought~~ a book, is what I bought.

Although the pause in pronunciation has only been cited for regular specificational pseudoclefts such as (198a), I suggest that reversed ones (198b) can be pronounced with a pause before the copula as well, especially when the counterweight is un-elided.

In the current analysis, this characteristic pause follows from the claim that the pre-copular constituent is left-dislocated, as left-dislocations in general have been noted to be pronounced with a pause after the peripheral element:

199. a) Seinen<sub>i</sub> Garten, den pflegt [jeder Gärtner]<sub>i</sub>.  
 his.acc garden it.acc tends every gardener  
 ‘Every gardener tends his garden.’ (Vat, 1981)  
 b) That he<sub>i</sub>’ll end up looking like his father, every young man<sub>i</sub> expects.

The dislocated constituents in (199) are separated by a prosodic break between the satellite (ex. *that he’ll end up looking like his father*) and the host (ex. *every young man expects*) (Ott, 2017:11). Ott further suggests one reason why left-peripheral CPs are dislocated rather than fronted to Spec-C<sup>10</sup> could be due a “structural outsourcing

<sup>10</sup>That is, why can we only have (ii) but not (i) when a CP is at the left edge of a higher CP:

of CP-arguments” to accommodate this prosodic preference.

Previously, the ‘pausing’ in specificational pseudoclefts has gone unexplained: Ross notes “to me, the sentences seem to require a comma intonation immediately before the copula, an oddity I have no account for” (2004:5). Under an analysis in which the pre-copular element is left-dislocated, we now have a partial explanation: different clauses are ideally assigned to different intonation phrases.

Related to the use of commas to represent the pause in (198),<sup>11</sup> another piece of indirect evidence for left-dislocation comes from Hartmann et al. (2013), who, in their examples of predicational and specificational pseudoclefts in German, put a comma before the copula in the latter but not the former:

200. a) Wer ein solches T-shirt kauft ist dumm/ ein Trottel.  
 who a such T-shirt buys is stupid/a fool.  
 ‘Who buys such a T-shirt is stupid/a fool’ (PPC)
- b) Was ich gekauft habe, ist ein rotes T-shirt und eine blaue Hose.  
 what I have bought is a red T-shirt and a blue trousers (SPC)

Finally, I suggest that proposed left-dislocation of the pre-copular constituent is connected to the observation that the copula of specificational pseudoclefts cannot contract with the pre-copular constituent. This particular point is not something that I tested in my study, so I am just taking the judgements in the literature at face value. Assuming that they are correct, this means that the copula cannot contrast in specificational pseudoclefts such as (201-202).

201. a) What John did **is/\*’s** buy a new car.  
 b) Buy a new car **is/\*’s** what John did.
202. a) What John loves **is/\*’s** himself.  
 b) Himself **is/\*’s** what John loves.

It is possible that the unacceptability of contraction illustrated above is tied to the left-dislocation of the pre-copular clause, which is too peripheral to host the copula. Rather, the copula would have to contract with the silent *that* (cf. What John did,

- 
- i. \*<sub>[CP CP<sub>i</sub> ... t<sub>i</sub> ... ]</sub>  
 ii. [<sub>CP1</sub> CP ] [<sub>CP2</sub> ]

If we assume a strict matching of root clauses in syntax and intonation phrases in the prosodic representation (as in Gussenhoven 2004 *Align(S,  $\iota$ )* and Selkirk’s 2011 *Match(Clause,  $\iota$ )*), then (ii) allows the satellite and host clauses to map straightforwardly onto separate intonations phrases, as in: ([<sub>CP1</sub> CP<sub>[ $\sigma$   $\Delta$ ]] <sub>$\iota$ P</sub> ([<sub>CP2</sub> ... ]) <sub>$\iota$ P</sub> (Ott, 2017).</sub>

<sup>11</sup>As a personal anecdote, whenever I see specificational pseudoclefts written down (ex. in Google searches) I notice that they are often written with a comma before the copula, although I personally don’t feel that this is appropriate punctuation. In addition, in my own small study where I solicited acceptability judgements the pseudoclefts I included did not have any commas, but I got a few comments from participants saying that they had rated the sentences poorly as they were missing some punctuation. Since everything was done anonymously I could not follow up with anyone, so it’s not clear what they were referring to. However, if I had to guess I would speculate that it could be this.

(that)'s buy a new car).

Like the pause/list intonation above, the inability to contract has mainly been noted for regular specificational pseudoclefts (the (a) sentences above), though it is my impression that it holds for reversed ones as well. Furthermore, as with the preference for singular agreement, this restriction is especially brought out when the counterweight surfaces in un-elided form:

- 201/. a) What John did **is/\*'s** John bought a new car.  
 b) John bought a new car **is/\*'s** what John did.  
 202/. a) What John loves **is/\*'s** John loves himself.  
 b) John loves himself **is/\*'s** what John loves.

In sum, I suggest that the pre-copular constituent of a specificational pseudocleft is left-dislocated and behaves like a clausal satellite. When we adopt a left-dislocation account many pieces of the puzzle come together, as we are able to unify some of the seemingly unrelated properties of Chapter 2 as having a common source. These include restrictions on subject-auxiliary inversion, pausing/list intonation, variability in number agreement on the copula, and the inability to contract the copula to the pre-copular constituent. Additionally, we saw direct evidence for the left-dislocation of the pre-copular clause in the form of cross-linguistic data from French and Hungarian.

### 5.2.2 CP counterweight

I turn now to the second part of the proposal, where I follow den Dikken et al. (2000), den Dikken (2006), Ross (1972, 1985, 2004), Schlenker (2003) and others in analyzing the counterweight of specificational pseudoclefts as a full clause. My analysis differs from that of den Dikken et al. (2000) and Schlenker (2003), since I will be assuming that the clausal counterweight is a CP, not an IP. Regardless, all deletion-based approaches to the connectivity in specificational pseudoclefts maintain that normal binding and NPI licensing conditions are met inside the counterweight, they simply are sometimes obscured by ellipsis.

I want to further stress two main points of difference between my proposal and that of den Dikken et al.: (i) I suggest that the counterweight is a full clause in *both* regular and reversed specificational pseudoclefts, and (ii) I assume that the copula is not a special head of a functional Topic Phrase, rather it is a regular identity copula. Barring the CP/IP differences, Schlenker's analysis is essentially identical to the current syntactic proposal as far as I can tell. The main differences between the analysis presented here and Schlenker's analysis will become apparent in Chapter 7 in the semantic analysis.

To begin, I suggest that the puzzle of binding connectivity in specificational pseudoclefts can be resolved by material inside the CP counterweight. This holds both for the regular pseudoclefts in the (a) sentences and the reversed ones in the (b) sentences. The structures of the specificational pseudoclefts in (203) are illustrated in (204).

203. a) What John<sub>i</sub> is is important to himself<sub>i</sub>.  
 b) Important to himself<sub>i</sub> is what John<sub>i</sub> is.

204. a) What John<sub>i</sub> is is [<sub>CP</sub> John<sub>i</sub> is important to himself<sub>i</sub>].  
 b) [<sub>CP</sub> John<sub>i</sub> is important to himself<sub>i</sub>] is what John<sub>i</sub> is.

Recall from Chapter 2 that specificational pseudoclefts have the property of connectivity, where an element is licensed in the counterweight which has some form of dependency with an element in the *wh*-clause. What is special about specificational pseudoclefts is that the typical licensing conditions, usually a *c*-command requirement, are (apparently) not met. For example, when looking at the pseudocleft in (203a) the presence of the anaphor *himself* is surprising, as an anaphor needs to be bound, but *John* in the *wh*-clause is not an eligible binder because *John* does not overtly *c*-command *himself*. The same is true of the reversed pseudocleft in (203b).

A simplified version of the structure proposed for (203) is shown in (204). Under the proposed analysis in which the counterweight is a full clause (with the forms in (203) being derived via deletion) connectivity in specificational pseudoclefts is not unusual or exceptional after all. In (204a) *himself* is not bound by the non-commanding *John* in the *wh*-clause, rather it is bound covertly by the (optionally elided) *John* inside the counterweight. The exact same configuration obtains in (204b), the only difference being that the counterweight occurs before the copula while the *wh*-clause is post-copular. Connectivity is thus accounted for within the counterweight itself.

This assumption also gets us the right Condition B (205) and C (206) effects in specificational pseudoclefts.

205. a) \*What John<sub>i</sub> is is [<sub>CP</sub> John<sub>i</sub> is important to him<sub>i</sub>].  
 b) \* [<sub>CP</sub> John<sub>i</sub> is important to him<sub>i</sub>] is what John<sub>i</sub> is.

Here, *him* is ruled out in the counterweight of (205): principle B of binding theory states that a pronoun cannot be bound within its domain, but in (205) it is bound within its domain— by *John* inside the counterweight. Condition C effects are shown below:

206. a) \*What he<sub>i</sub> is is [<sub>CP</sub> he<sub>i</sub> is important to John<sub>i</sub>].  
 b) \* [<sub>CP</sub> he<sub>i</sub> is important to John<sub>i</sub>] is what he<sub>i</sub> is.

The unacceptability of (206) is explained in that *he* and *John* are coindexed, but principle C of binding theory states that R-expressions must always be free.

In terms of NPI licensing, this is where we may need to appeal to some independent principles to account for the behaviour of NPIs, particularly in reversed specificational pseudoclefts. For now, we will say that NPI connectivity in specificational pseudoclefts occurs in the same way as binding: since the counterweight is a full clause, the NPI is licensed within that clause by its licensor— not by the downward entailing item in the *wh*-clause. For example, the proposed structure of (207) due to Schlenker (2003) is in (208):

207. a) What he refused to do was to buy any wine.  
 b) To buy any wine was what he refused to do.
208. a) What he refused to do was [<sub>CP</sub> He refused to buy any wine].  
 b) [<sub>CP</sub> He refused to buy any wine] was what he refused to do.

The pseudoclefts in (207-208) are examples of NPI licensing that can be straightforwardly analyzed under the current proposal: *any* in both (208a) and (208b) is licensed by *refuse* inside the counterweight. However, there are other cases involving NPIs that are more complex in that they seem to suggest that NPIs cannot occur in reversed specificational pseudoclefts (209b), only in regular ones (209a):

209. a) What John didn't buy was any wine.  
 b) \*Any wine was what John didn't buy.

This kind of contrast is a problem for the current analysis in which *both* regular and reversed specificational pseudoclefts have a CP counterweight. Since connectivity is resolved in the same way in both regular and reversed (by material inside the counterweight), then there should be no differences in connectivity between the two kinds. Thus, (209b) is predicted to be grammatical just like (209a) is: negation inside the counterweight should license *any* in both cases. This is illustrated below in (210), which represents the un-elided structures of the pseudoclefts (209):

210. a) What John didn't buy was [<sub>CP</sub> John didn't buy any wine].  
 b) [<sub>CP</sub> John didn't buy any wine] was what John didn't buy.

If the proposed structures in (210) are indeed an accurate representation of the surface forms in (209), why then does negation in counterweight license the NPI in the (a) sentence, but not in the (b) one? I suggest that this point is not fatal to a deletion-based analysis for a number of reasons. First, there are examples such as (207-208) in which NPIs in regular and reversed pseudoclefts are acceptable, therefore any analysis will have to be able account for how, at least in some cases, NPIs can be licensed in both. On its own, deletion-based analyses may overgenerate, predicting that all NPIs should be acceptable in all kinds of specificational pseudoclefts. However, I suggest that this does not undermine the entire approach, since we can then appeal to independently motivated constraints in order to rule out the disallowed ones. I follow Schlenker in assuming that the relevant constraint is one that restricts NPIs in QAPs in general. Given that specificational pseudoclefts are essentially identical to QAPs, it is not surprising that they would be subject to QAP wellformedness conditions.

The sentences in (211) below illustrate the tendency that when the QAP version is well-formed, the specificational pseudoclefts (both regular and reversed) are well-formed as well. Conversely, (212) suggests that when the QAP is ill-formed, so too are both kinds of specificational pseudocleft:

211. What did John refuse to do?— ~~John refused to~~ buy any wine.  
 i. What John refused to do was ~~John refused to~~ buy any wine.  
 ii. ~~John refused to~~ buy any wine was what John refused to do.
212. \*What didn't John do?— ~~John didn't~~ leave until 6pm.  
 i. \*What John didn't do was ~~John didn't~~ leave until 6pm.

- ii. \*~~John didn't~~ leave until 6pm was what John didn't do.

If this generalization is on the right track, the puzzle then becomes why the regular specificational pseudocleft in (213i) should be acceptable, not why the reversed specificational pseudocleft is not:

213. ??\*What didn't John buy?— ~~John didn't buy~~ any wine.
- i. ? What John didn't buy was ~~John didn't buy~~ any wine.
- ii. ?\*~~John didn't buy~~ any wine was what John didn't buy.

I am not sure how to answer this, though I speculate that it has more to do with what is going on in the semantics of *wh*-clause/the question than what is happening in the counterweight/answer. I will argue in Chapter 7 that there is a maximality requirement built into the *wh*-clause, therefore it is possible that *what John didn't buy/what didn't John buy* is ruled out because it is a question that doesn't have an answer (Rullmann, 1995): there is no maximally informative proposition of the form *John didn't buy x* (Beck and Rullmann, 1999; Fox and Hackl, 2006).<sup>12</sup>

In sum, I think that cases such as (209b) do not necessarily undermine the current proposal in which the counterweight in both regular and reversed specificational pseudoclefts is a full clause. For den Dikken et al. (2000), (209b) does rule this out: they argue that only regular specificational pseudoclefts have a clausal counterweight, while reversed ones do not. That assumption hinges on their claim that NPIs are licensed in regular but not reversed pseudoclefts. This claim is problematic from both angles: (a) in cases such as (208) NPIs *are* licensed in reversed specificational pseudoclefts, and (b) in cases like (212) NPIs are *not* licensed in regular specificational pseudoclefts. In response to the latter, den Dikken et al. suggest that the impossibility of strong NPIs in regular pseudoclefts is connected to a more general principle banning strong NPIs in QAPs. I suggest that if we already know we must appeal to QAP constraints in order to account for the unacceptability of strong NPIs in specificational pseudoclefts, we can simply extend this a bit further to argue that *any* NPI (weak or strong) in a specificational pseudocleft is only permitted if the corresponding QAP is well-formed. This accounts for both (208) and (209) cases.

Turning now to the nature of ellipsis in the CP counterweight, Mikkelsen (2011:1822) points out that the counterweight of a specificational pseudocleft can vary in “size” and form the same way that an answer does in a QAP, and that this provides evidence for the syntactic presence of a full clause. Crucially, she goes on to suggest that “if such fragment answers are derived by ellipsis (Merchant 2004), it is natural to assume that the same ellipsis operations are at work” (Mikkelsen 2011:1822).

I suggest that what has previously been suggested about clausal ellipsis in dislocations (Ott 2014, following Merchant 2004) predicts the ellipsis we observe in

<sup>12</sup>This would place *what didn't John buy?* alongside other incoherent cases such as ‘*how much does John not weight?*’ and ‘*I have the amount of water that you don't*’ discussed in Fox and Hackl (2006). Note one difference between Fox and Hackl's examples and the question in (213)– *What didn't John buy?* is non-monotonic.

specificational pseudoclefts. In both regular specificational pseudoclefts, ellipsis is only licit on the condition of parallelism between CP1 and CP2:

214.  $[_{CP1} [_{NP} \text{an apple}] [_{\Delta} \text{John ate } t_i]]$  is  $[_{CP2} \text{what}_k [_A \text{John ate } t_k]]$ .

215.  $[_{CP1} \text{what}_k [_A \text{John ate } t_k]]$  is  $[_{CP2} [_{NP} \text{an apple}] [[_{\Delta} \text{John ate } t_i]]]$

In (214), CP1 is the full clause counterweight ‘ $[_{CP1} [_{NP} \text{an apple}] [[_{\Delta} \text{John ate } t_i]]$ ’. If deletion is performed, it will target  $[[_{\Delta} \text{John ate } t_i]$  and will be recoverable due to the parallel  $[[_A \text{John ate } t_i]$  in CP2. To use Merchant’s (2001) term, the deleted domain is ‘e-given’: under existential closure, the deleted constituent  $\Delta$  in CP1 of (214) is equivalent to the constituent labeled A in CP2,  $\exists x.\text{John ate } x$ . Recall that we are assuming that an ellipsis remnant such as *an apple* in (214) A-moves to the edge of its clause (CP1) in order to enable deletion of  $\Delta$ .

In (215), CP2 is the clausal counterweight ‘ $[_{CP1} [_{NP} \text{an apple}] [_{\Delta} \text{John ate } t_i]]$ ’. The same mechanism of deletion applies, except that in (215) the deletion domain in CP2 is anaphoric to the string in CP1, as opposed to (214) where it was cataphoric to the string CP2.

Regarding specificational pseudoclefts, den Dikken et al. outlined the ‘maximality condition on ellipsis’, stating that while ellipsis in the counterweight is optional, if it is performed it must be done so “up to, but not into, the focused constituent”. This accurately predicts restriction that the verb in the counterweight of a VP-focused pseudocleft cannot be tensed (Culicover 2013:153; Culicover and Jackendoff 2005:252; others). Consider (216-217) due to Culicover and Jackendoff (2005:252):

216. What I did was  $[\text{eat}/\text{*ate}/\text{*eating the bagel}]$ .

Since (216) is a VP-focused pseudocleft, if material in the counterweight is to be elided then it must be all the way up to edge of VP, thus wiping out ‘*T*’ in spec-TP and the tense value PAST in T. Returning to Mikkelsen’s point that same mechanism of ellipsis is at work in the counterweight of a pseudocleft and in the answer to a question, we find similar restrictions on the tense of the verb in QAPs :

217. Q: What did you do?

A:  $[\text{Eat}/\text{*ate}/\text{*eating the bagel}]$

Though this tense restriction in the VP of specificational pseudoclefts has been cited for regular specificational pseudoclefts such as (216), I suggest that it also holds for reversed specificational pseudoclefts as well, shown below:

218.  $[\text{Eat}/\text{*ate}/\text{*eating the bagel}]$  was what I did.

Recall that for den Dikken et al. regular specificational pseudoclefts have a clausal counterweight while reversed ones do not. If we were to follow den Dikken et al. in assuming that reversed specificational pseudoclefts like (218) do not involve ellipsis, then the fact that we observe the same restrictions in (216) and (218) must be coincidental: if we reasoned that *eat* in (216) is untensed because of ellipsis rules, then the identical observation that *eat* in (218) is also untensed must result from something

else, because in (218) ellipsis rules are not at work. In the current proposal, the similarities in restrictions between (216) and (218) are not a coincidence— they have a common source in that both regular and reversed specificational pseudoclefts have clausal counterweights which involve the same kind ellipsis that is in the answer to a question. Such ellipsis will end up targeting the tense node in both (216) and (218), leaving the verb in VP untensed.

Finally, I will address some of the predictions about scope connectivity in specificational pseudoclefts. Some researchers have noted that specificational pseudoclefts appear to display the same ambiguities with respect to scope readings as their “simple clause paraphrases” (Williams, 1994; Heycock and Kroch, 1999; den Dikken et al., 2000; Schlenker, 2003). For example, a specificational pseudocleft such as (219) can have both narrow and wide scope readings of the indefinite in the counterweight<sup>13</sup>, just like in the non-cleft in (220). These examples are due to Williams (1994) and are addressed in both Heycock and Kroch (1999:385) and den Dikken et al. (2000).

219. What every boy saw was [~~every boy saw~~ a friend of his].

i)  $[\forall y: y \text{ a boy}] [\exists x: x \text{ a friend}] (y \text{ saw } x)$

ii)  $[\exists x: x \text{ a friend}] [\forall y: y \text{ a boy}] (y \text{ saw } x)$

220. Every boy saw a friend of his.

i)  $[\forall y: y \text{ a boy}] [\exists x: x \text{ a friend}] (y \text{ saw } x)$

ii)  $[\exists x: x \text{ a friend}] [\forall y: y \text{ a boy}] (y \text{ saw } x)$

Both (219) and (220) can mean that every boy saw the same friend or that every boy saw a different friend. This kind of behaviour is predicted in the current approach, as the counterweight of (219) is a full clause which is identical to (220)— since the counterweight is where connectivity is evaluated, then the scope readings available for (220) should be identical to those in (219). This seems to hold true of reversed specificational pseudoclefts as well:

221. [~~every boy saw~~ a friend of his<sub>i</sub>] was what every boy<sub>i</sub> saw.

i)  $[\forall y: y \text{ a boy}] [\exists x: x \text{ a friend}] (y \text{ saw } x)$

ii)  $[\exists x: x \text{ a friend}] [\forall y: y \text{ a boy}] (y \text{ saw } x)$

However, Williams (1994:60) argues that in some cases scope connectivity is not in fact observed in specificational pseudoclefts. In particular, he notes examples such as (222), where the universal quantifier in the counterweight cannot take wide scope over the existential quantifier. Thus, the only available reading of the pseudoclefts in (222) is one where a single person is prepared to read the articles (den Dikken et al., 2000: 76-77), while (223) has both readings.

<sup>13</sup>Williams (1994) and Heycock and Kroch (1999) do not take the counterweight to be a full clause, therefore the manner in which they phrase the scope connectivity is that the indefinite in the counterweight can take narrow scope with respect to universal quantifier inside the *wh*-clause. In a deletion-based framework like the one we are adopting here, the indefinite takes scope over the universal inside the counterweight (i.e., within its own clause).

222. a) What someone is prepared to read is [~~someone is prepared to read~~ every article on linguistics].  
 b) ~~someone is prepared to read~~ every article on linguistics] is what someone is prepared to read.

- i)  $[\exists x: x \text{ a person}] [\forall y: y \text{ an article on linguistics}] (x \text{ read } y)$   
 \* ii)  $[\forall y: y \text{ an article on linguistics}] [\exists x: x \text{ a person}] (x \text{ read } y)$

223. Someone is prepared to read every article on linguistics.

- i)  $[\exists x: x \text{ a person}] [\forall y: y \text{ an article on linguistics}] (x \text{ read } y)$   
 ii)  $[\forall y: y \text{ an article on linguistics}] [\exists x: x \text{ a person}] (x \text{ read } y)$

Based on the contrast in (222-223), Williams concludes that there is no reconstruction into the *wh*-clause, and that the apparent case of scope reconstruction in (219) was simply a case of unselective binding in which the indefinite is construed as a function from its context to individuals (Williams 1994: 63). Though Williams does not use this point to argue against a deletion-based analysis, presumably he could: if the counterweight of the pseudocleft in (222) is identical to (223), then we would expect whatever scope readings are available for (223) to be available in (222) as well. This prediction is not borne out.

In response, I follow den Dikken et al. (2000) and Schlenker (2003) in maintaining that the lack of scope connectivity above is not fatal to deletion-based approaches: the unavailability of a wide scope reading for the universal quantifier in (222) stems from the fact that it is also unavailable in QAPs such as (224):

224. Q: What is someone prepared to read?

A: ~~Someone is prepared to read~~ every article on linguistics.

- a)  $[\exists x: x \text{ a person}] [\forall y: y \text{ an article on linguistics}] (x \text{ read } y)$   
 \* b)  $[\forall y: y \text{ an article on linguistics}] [\exists x: x \text{ a person}] (x \text{ read } y)$

At the crux of deletion-based analyses is that specificational pseudoclefts are taken to be question-answer pairs. It is therefore not surprising that they are subject to the same constraints, in particular, the parallelism constraint on questions and answers: since the indefinite in the *wh*-question in (224) is ‘scopally independent’ (den Dikken et al. 2000:77), parallelism requires that its counterpart in the answer be scopally independent as well. Similarly, given that the indefinite in the *wh*-clause of (222) is scopally independent, parallelism requires that its counterpart in the counterweight be independent as well. For an overview on quantifier scope in *wh*-questions see Dayal (2012).

On the topic of QAP restrictions being responsible for certain restrictions in specificational pseudoclefts, Seuren (1985:297) and Declerck (1988:87) suggest that the inability for some indefinite determiners to appear in the counterweight of specificational pseudoclefts stems from the parallel restriction in QAPs. This is exemplified via the unacceptability of *most*, *few* etc. in (225-226) below due to (Seuren 1985:297):

225. What Henry sold was a postcard/a few postcards/\*few postcards/\*most postcards. (SPC)

226. Q: What did Henry sell?

A: A postcard/a few postcards/\*few postcards/\*most postcards.

Finally, I would like to mention two restrictions on specificational pseudoclefts which are deliberately not predicted from the structure that has been proposed here. Some researchers have claimed that the copula of a specificational pseudocleft must show tense harmony with the tense in the *wh*-clause (see section 2.2.5). While some take this to be true and have accounted for it structurally (for example, no IP projection for Bošković or Halupka-Rešetar (2012), a special Topic Phrase with a unique copular head for den Dikken et al. 2000, etc.), I found that tense congruency was not necessarily as rigid as those above have suggested:

227. a) What I did **was** buy a house.

b) What I did **is** buy a house.

228. a) What I got for my birthday **was** a new hat.

b) What I got for my birthday **is** a new hat.

If tense harmony in specificational pseudoclefts is indeed obligatory as many have claimed (Akmajian 1979; Bošković 1997:266; Higgins 1976; den Dikken et al. 2000; den Dikken 2006), then the (b) sentences in (227-228) ought to be unacceptable. However, it seems like the (a) and (b) sentences are both acceptable, in the same way that either past or present tense on the copula of a *predicational* pseudocleft such as (229) is alright:

229. What I got for my birthday **is/was** beautiful (\*SPC/PPC)

I suggest that tense congruency is not obligatory in either specificational or predicational pseudoclefts. There is therefore nothing about specific tense restrictions that has informed the proposed structure of specificational pseudoclefts.

Additionally, it has been argued that a specificational pseudocleft such as (226) cannot have straight negation interpretation: (230) cannot express “John is not important to himself”. I suggest that this might be because in order to express it, *not* must be inside the counterweight as in (231):

230. What John is isn’t important to himself.

231. [What John is] is [John is **not** important to himself].

On the other hand, if (230) were represented as (232), where *not* negates the copular head of the entire pseudocleft, rather than the copula inside the counterweight, then it is straightforward why it should be able to express contrastive negation only:

232. [What John is] is not [John **is** important to himself].

If one tried to use (232) to convey straight negation, this does not work because the element that ‘*not*’ needs to be negating to get the intended meaning that John is unimportant to himself is inside the counterweight– the bolded copula in (228). As it stands, (232) roughly translates to “the most informative true answer to the question ‘what is John?’ is NOT the following: John is important to himself”.

I therefore think that in some sense a specificational pseudocleft can actually express direct negation, however only in cases where the counterweight is un-elided such as (231). I suspect that any other oddness in (231) is related its oddness as a QAP:<sup>14</sup>

233. Q: What is John?

A: \*??not important to himself.

### 5.3 Summary: Syntactic Proposal

In sum, in this chapter I have argued that in a predicational pseudocleft the pre-copular *wh*-clause is a free relative argument of the counterweight, which itself is a predicate. The pre-copular clause is not left-dislocated, nor is the counterweight a CP. As the argument of the counterweight, a predicational pseudocleft’s *wh*-clause is therefore not peripheral in the same way as the *wh*-clause of specificational pseudoclefts.

On the other hand, I have suggested that the pre-copular clause of a specificational pseudocleft is left-dislocated and that the counterweight is a full CP within which connectivity is accounted for by the usual principles. I have not yet adequately addressed the status of the *wh*-clause in specificational pseudoclefts. I will do this in the next chapter, but in brief I suggest that we can get the most mileage by analyzing the *wh*-clause as an embedded interrogative.

This analysis of specificational pseudoclefts can be grouped with the deletion-based approaches of section 4.2. The current proposal is basically identical to that of Schlenker (2003). The main differences between our proposals will become apparent in section 7.2 when I present the semantic proposal of specificational pseudoclefts. The current proposal also is broadly similar to den Dikken et al. (2000) and den Dikken (2006), but with several key differences: I assume that a full clause counterweight is present in both regular and reversed specificational pseudoclefts, and I assume that the copula is a regular identity copula, not the functional head of a Topic-Comment structure.

Regarding the two types of specificational pseudoclefts, regular and reversed, I have attempted to propose a uniform treatment of both. The latter has previously been neglected outright<sup>15</sup> or has been analyzed as structurally distinct from regular

<sup>14</sup>Declerck connect the inability of direct negation interpretations in specificational pseudoclefts to the existence presupposition carried by *wh*-clause both in questions and in specificational pseudoclefts. For him, (230) can only have contrastive negation because the presupposition of existence attached to *wh*-clause cannot be eliminated by making the sentence negative (1988:17-18)

<sup>15</sup>For example, Higgins states at the outset of his thesis that he will not be addressing pseudoclefts such as (i):

specificational pseudoclefts, as in den Dikken et al. (2000). In the unified analysis I propose, both varieties of specificational pseudoclefts have a left-dislocated precopular constituent and a full clause counterweight. In support of this, I have tried to show that either: (i) regular and reversed pseudoclefts are not different in terms the properties and restrictions they display, or (ii) if they are, the differences can be explained by appealing to independent principles.

As an example of (i), I found that in fact there were no significant differences in acceptability judgement for subject-aux inversion and raising in regular and reversed specificational pseudoclefts—speakers reject them in both. Furthermore, I found no significant differences in the ability to have a sentential adverb to the right of the copula—both allow it. As an example of (ii) I attempted to argue that, to the extent that there even are any differences in NPI licensing in regular and reversed specificational pseudoclefts, these differences can be explained by other constraints.

In support of a proposal in which the structure of a predicational pseudocleft is less complex than that of a specificational pseudocleft, I point to the cross-linguistic tendency that the latter are rarer than the former (den Dikken, 2006:299). Accordingly, some languages have predicational pseudoclefts with no specificational counterparts: in such languages a pseudocleft such as (234) would be predicational only, while in English it is ambiguous between a predicational and specificational reading.

234. What John is is silly.

- i. PPC: John is X. X-hood is silly.
- ii. SPC: John is silly.

Some languages that have been argued to behave like this in only allowing the (234i) reading are Kitchangana (Bantu) (Ross, 1999), Modern Greek, Italian, Catalan, Finnish, Bulgarian and Polish (Iatridou and Varlokosta, 1998).

One major advantage of a deletion-based approach to specificational pseudoclefts has to do with the connections between these pseudoclefts and QAPs. This connection is recognized in all three approaches outlined in Chapter 4—reconstruction-based, deletion-based and revisionist. As Mikkelsen (2011:1823) notes “strikingly, each of the three approaches to connectivity discussed above cites the existence of connectivity effects in question-answer pairs as evidence for their position”. In the current syntactic proposal, this connection is direct in that the *wh*-clause is analyzed as a question (at least semantically, but possibly syntactically as well) and the counterweight is its answer. The reason that connectivity in a specificational pseudoclefts is like that of a QAP is because specificational pseudoclefts are essentially self-answering questions. This is illustrated nicely in the following data from Japanese provided to me by Ai Taniguchi (p.c.). The pseudoclefts in (235) are specificational, whereas (236) is predicational:

235. a) taroo-ga tanonda mono-wa sushi -da  
Taro-NOM ordered thing TOP sushi COP

- 
- i. A donkey was what he bought. (Higgins 1979:4)

‘What Taro ordered is sushi’.

- b) taroo-ga **nani**-o tanonda **-ka** -to iu -to sushi -da  
 Taro-NOM WH-ACC ordered Q that say if sushi COP

‘What Taro ordered is sushi (lit. if you say what Taro ordered, it’s sushi)’

236. a) taroo-ga tanonda mono -wa oishii  
 Taro-NOM ordered thing TOP tasty

‘What Taro ordered is tasty’

- b) \*taroo-ga **nani**-o tanonda **-ka** -to iu -to oishii  
 Taro-NOM WH-ACC ordered Q that say if tasty

Intended: ‘What Taro ordered is tasty’.

In Japanese, a specificational pseudocleft such as (235) ‘What Taro ordered is sushi’ can be formed using the definite morpheme *mono* ‘thing’ as in (235a), but it can also be made using the question particle *-ka* and an accusative marked *wh*-element *nani*. Crucially, in a predicational pseudocleft such as (236) only *mono* can be used—the question particle *-ka* is not possible.

This dataset is nice because not only does it position specificational pseudoclefts alongside QAPs to the exclusion of predicational pseudoclefts, it also provides morphological evidence in support of the claim that the *wh*-clause of a specificational pseudocleft can be syntactically analyzed as an interrogative. In English, there is no morphological difference between the element used to form a free relative (*what*) and the element used to form an interrogative (*what*). Thus, there is no way to tell the difference between a free relative (237) and an embedded interrogative (238) out of context:

237. ....[what John ate]....

238. ....[what John ate]....

Accordingly, there is no morphological information in English that will tell us whether the *wh*-clause of a specificational pseudocleft is a FR or an embedded interrogative. In Japanese, however, the ability to use the question particle in the *wh*-clause in (235b) suggests that it can be an interrogative.<sup>16</sup> However, not all cross-linguistic examples of specificational pseudoclefts are consistent with the proposed analysis in the same way that Japanese is. Indeed, it is precisely the data from languages that use different morphological marking for FRs and interrogatives that constitute the main problem with a proposed analysis of the “*wh*”-clause as an interrogative. These issues are addressed in detail in section 6.3.

<sup>16</sup>The ability to use the definite morpheme *mono* ‘thing’ in (235a) suggests that it can also be a FR.

## Chapter 6

# The Specificational *wh*-clause: Interrogative or Free Relative?

The status of the *wh*-clause in specificational pseudoclefts in particular is relatively controversial. The first question we might ask is whether the *wh*-clause in pseudoclefts is a free relative or an interrogative (or something else). As a follow up, we might ask whether the *wh*-clause is the same in the two types of pseudoclefts, predicational and specificational, or if it differs depending on the type. In general, there are two dominant views:

**A. The *wh*-clause of both predicational and specificational pseudoclefts is a free relative**

Akmajian, 1979; Bachenko, 1976:4; Culicover and Jackendoff, 2005:257; Halupka-Rešetar 2012; Heycock and Kroch 1999; Iatridrou and Varlokosta 1998:3; Radford, 1988

**B. The *wh*-clause of a predicational pseudocleft is a free relative, but in a specificational pseudocleft it is an interrogative)**

den Dikken et al. 2000; den Dikken 2006; \*Faraci, 1971; \*Grimes 1975:341; \*McCawley 1998; \*Ross 1972; Schlenker 200

The reason some researchers listed under view B are starred is that I may have grouped them wrongly: they claim that the *wh*-clause is an interrogative in ‘pseudoclefts’, not specificational pseudoclefts specifically. The reason I am fairly confident that they can be grouped with view B is twofold. First, although they don’t explicitly make their claim for *specificational* pseudoclefts, they go on to defend it using specificational pseudoclefts only. Second, as mentioned in section 3.2.1, there is some debate around whether predicational pseudoclefts should even be considered ‘pseudoclefts’ at all. In line with this, some researchers use the term ‘pseudocleft’ to refer to specificational pseudoclefts only, whereas other continue to use it as a cover term for both predicational and specificational varieties. I assume that the starred researchers are using ‘pseudocleft’ in the narrow sense. If this is incorrect, then they would fall

under a new category, group C, in which the *wh*-clause of both predicational and specificational pseudoclefts is analyzed as an interrogative.

In terms of my own proposal, I tentatively follow den Dikken et al. (2000), den Dikken (2006), and Schlenker (2003) in analyzing the *wh*-clause of a specificational pseudocleft as an interrogative. I acknowledge that there are several issues with this claim, however in the coming subsections I hope to demonstrate that we can get a lot of the properties of the *wh*-clause to follow if we assume that it is an interrogative. In addition, an analysis in which the *wh*-clause is syntactically interrogative can more neatly couple with the proposed semantic analysis in Chapter 7.

I will begin with a brief background on FRs before presenting evidence in favour of view B, the interrogative analysis. The pro-interrogative evidence is summarized below in Figure 10:

Figure 10

	FR	Q	SPC
Infinitival	×	✓	✓
<i>-ever</i>	✓	×	×
Multiplicity	×	✓	✓
QAPs	×	✓	✓
Sluicing	×	✓	✓
Clefting	×	✓	✓

I will subsequently explore some of the main challenges to this view: cross-linguistic evidence that suggests the *wh*-clause of a specificational pseudocleft is a free relative.

## 6.1 Background: Free Relatives

A free relative is an unheaded relative clause which has properties in common with both CPs and DPs— it is a *wh*-clause that patterns syntactically like a nominal (Bresnan and Grimshaw, 1978; Cooper, 1983:93; Jacobson 1995:451; Ott, 2011; Šimík, 2017). Consider the FRs in the (a) sentences and their paraphrases in the (b) sentences due to Šimík (2017):

241. a) [What Adam presented] sounded plausible.  
 b) [The proposal(s) that Adam presented] sounded plausible.
242. a) The director will nominate [whichever student the teacher selected].  
 b) The director will nominate [the student that the teacher selected].

Comparing the (a) and (b) sentences illustrates that FRs are DP-like in distribution: they can occur in DP positions as subjects, complements, and adjuncts (Ott, 2011:184). On the other hand, (242) illustrates how FRs are CP-like in form (Ott, 2011; Jacobson 1995): both the FR in (243a) and the embedded interrogative in (243b) require *wh*-movement of *what* from the object to *eat* to a left-peripheral position in the clause.

243. a) (I eat) [<sub>FR</sub> what<sub>i</sub> you cook t<sub>i</sub>]. (Ott, 2011:186)  
 b) (I wonder) [<sub>Q</sub> what<sub>i</sub> you cook t<sub>i</sub>]. (Ott, 2011:186)

The *wh*-phrase in the FR in (243a) is shared between the two predicates, *eat* in the matrix clause and *cook* in the embedded, and must meet the different selectional requirements of both.

One debate in the literature on FRs is whether *what* in (243a) raises to a clause-internal position (Groos and Van Riemsdijk 1981) or to a clause-external one (Bresnan and Grimshaw 1978). I will follow Groos and van Riemsdijk (1981) in assuming that the *wh*-phrase moves to spec CP as illustrated in (244):

244. [<sub>TP</sub> [<sub>CP</sub> What<sub>i</sub> [<sub>TP</sub> Adam presented t<sub>i</sub>]] sounded plausible]

I do not think anything in my proposal hinges on the particular analysis adopted for the internal structure of FRs. The important piece for my proposal is what we need at the semantic interface: in (244) the raising of the *wh*-clause to spec-CP gives rise to an operator-variable dependency. For the purpose of our discussion, I think that any approach to the syntax of FRs is fine as long it can derive this dependency. See van Riemsdijk (2007) for more detailed review of the different syntactic analysis of free relatives. I will address the semantics of FRs in Chapter 7.

## 6.2 Pro-Interrogative Evidence

Before I begin, I would like to point out that in proposing the *wh*-clause of a specificational pseudocleft is syntactically an interrogative, more accurately I am suggesting that it is an embedded interrogative. Clearly, it does not have the same form as a matrix question, as there is no subject-auxiliary inversion in the *wh*-clause of specificational pseudoclefts:

245. a) What you want is a new car.  
 b) \*What did you want is a new car.
246. a) What James is doing is cleaning his room.  
 b) \*What is James doing is cleaning his room

In the data below I will be including both matrix and embedded interrogatives for the sake of completeness. Finally, recall that the *wh*-clause of *predicational* pseudoclefts is uncontroversially a FR. I will therefore not be including any predicational pseudoclefts in the coming subsections, except in particular cases when I want to emphasize how the *wh*-clause of a predicational pseudocleft – a clear FR – contrast with the *wh*-clause of a specificational pseudocleft.

### 6.2.1 Infinitival *wh*-clause

In support of an interrogative analysis of a specificational pseudocleft's *wh*-clause, it has been noted that interrogative clauses such as (247) can be infinitival (Zwicky, 1986:120), but free relatives cannot (Jacobson, 1995: 478; Šimík, 2010, 2017:22).

247. a) What to do? (Zwicky, 1986: 120)  
 b) John knows [what to read]. (Jacobson, 1995: 478)
248. a) \*I haven't yet read [what to read]. (Jacobson, 1995: 478)  
 b) \*[Who to call] will answer the phone right away.

In this respect, the *wh*-clause of specificational pseudoclefts such as (249-250) pattern with interrogatives in that it can also be infinitival.<sup>1</sup>

249. a) [Who to call in case of an emergency] is the police.  
 b) The police is [who to call in case of an emergency].
250. a) [What to do in the event of an earthquake] is follow the DCH (drop, cover and hold on) approach. (www...)  
 b) Follow the DCH (drop, cover and hold on) approach is [what to do in the event of an earthquake].

Regarding the ability to be infinitival, the observation that the *wh*-clause of a specificational pseudocleft behaves like an interrogative as opposed to a free relative is one piece of evidence that supports the proposed analysis in which the *wh*-clause of a specificational pseudocleft is syntactically a question.

### 6.2.2 Restrictions on *-ever*

The ability to add *-ever* to the *wh*-element is a definitive characteristic of free relatives such as (251) (Šimík, 2017). Indeed, many have argued that adding *-ever* can ameliorate a free relative that would otherwise be only somewhat acceptable (Cooper, 1983:96; Šimík, 2017).<sup>2</sup> In contrast, *-ever* is typically disallowed in interrogatives such as (252) (den Dikken, 2006; others), though some have argued that *-ever* in interrogative is sometimes alright (Richardson, 1988; Zwicky, 1986).

251. a) I'll eat [what(ever) you cook]. (Jacobson, 1995:451)  
 c) [What(ever) he saw] distressed him. (Zwicky, 1986:120)
252. b) What(\*ever) did you cook.  
 b) I wonder [what(\*ever) you cooked].

<sup>1</sup>This judgment conflicts with that of Zwicky (1986), who presents (i) to illustrate that in fact specificational pseudocleft cannot be infinitival:

i. \*What to notice was an ivory spoonbill.

<sup>2</sup>This is especially relevant to FRs with *wh*-elements such as *who* or *where*, as in (249-250):

ii. a) ?I introduced who stood first in line. (Zwicky, 1986:22)  
 b) I introduced whoever stood first in line

iii. a) ?I will arrive when you call.  
 b) I will arrive whenever you call.

Crucially, *-ever* is also disallowed in the *wh*-clause of specificational pseudoclefts such as (253-254) (Declerck 1988:72; den Dikken et al. 2000; den Dikken, 2006; Jacobson, 1995). In this respect the *wh*-clause of a specificational pseudocleft patterns like an interrogative.

253. a) What(\**ever*) John ate was an apple. (Jacobson 1995: 479)  
 b) An apple was what(\**ever*) John ate.
254. a) What(\**ever*) Mary hates is Bill's tie. (den Dikken 2006:346)  
 b) Bill's tie is what(\**ever*) Mary hates.

The ban on *-ever* in the *wh*-clause of specificational pseudoclefts thus is consistent with its characterization as an interrogative.

### 6.2.3 Multiplicity

Free relatives do not allow multiple *wh*-elements (255) whereas multiple *wh*-elements are allowed in interrogatives (256) (Baker 1968; den Dikken, 2006; Ross, 1999; Zwicky, 1986). Examples below are due to den Dikken (2006:370)

255. a) \*[**Who** ordered **what**] should come and fetch it at the counter. [FR]  
 b) \*I'll spill water on [what is resting on top of what]. (Baker 1968)
256. a) I would like to know [**who** ordered **what**]. [Q]  
 b) John knows [what is resting on top of what]. (Baker 1968)

The *wh*-clause of a specificational pseudocleft has been claimed to at least marginally allow multiple *wh*-elements (den Dikken 2006; Ross 1999; Zwicky, 1986:118), suggesting that it is an interrogative and not a FR:

257. a) ?[Who kissed whom] was John kissed Mary.  
 b) ?John kissed Mary was [who kissed whom].
- 258 a) ?[What she put where] was the carving knife on the sideboard. (Zwicky, 1986:118)  
 b) ?(She put) the carving knife on the sideboard was [what she put where].
259. a) ?[Who ordered what] was Tom (ordered) a beer and Jim a watermelon flip. (Ross, 1999)  
 b) ?Tom (ordered) a beer and Jim a watermelon flip was [who ordered what].

The claim that multiplicity is acceptable in the specificational pseudoclefts in (257-259) is controversial. Den Dikken recognizes that there is likely “substantial dialectal and idiolectal variation” (2006:371). Akmajian (1979:76) objects to the acceptability of (257), as does Higgins, who provides the example in (260) to illustrate multiplicity is ungrammatical in specificational pseudoclefts. Note that Higgins' example has a confound—specificational pseudoclefts cannot focus non-constituents, therefore (260) is likely ungrammatical for independent reasons.

260. \*[What Mary gave who] was John a book. (Higgins 1979:67)

Nevertheless, I think it's important to note that multiple *wh*-elements in specificational pseudoclefts such as (257-259) are least *more* acceptable than in predicational pseudoclefts such as (261):

261. \*Whoever ordered what was rude and expensive. (\*SPC/PPC)  
Intended: A rude person ordered an expensive item.

Compared to the specificational pseudoclefts in (257-259), it seems that multiplicity is actually much worse in predicational pseudoclefts such as (261). If the ability to have multiple *wh*-elements is indicative of interrogative-hood, this potentially indicates that the *wh*-clause of a specificational pseudocleft is at the very least more interrogative-like than the *wh*-clause of a predicational pseudocleft.

#### 6.2.4 QAP Connections

An analysis of the *wh*-clause of a specificational pseudocleft as an interrogative captures most strongly the connections that have been noted between such pseudoclefts and QAPs (Akmajian 1979; Clifton 1969; Declerck 1988; den Dikken et al. 2000; den Dikken 2006; Faraci 1971; Higgins 1979; Huddleston 1971; Ross 1999; Seuren 1985; others). This property was introduced in section 2.2.3.

262.

a)	What John did	was	(John) read the newspaper.
b)	What did John do?	–	(John) read the newspaper

(den Dikken 2006:311)

263.

a)	What John loved	was	(John) loved himself.
b)	What did John love?	–	(John) loved himself

(Sharvit 1999)

Specificational pseudoclefts like those in (262-263) are interpreted as essentially self-answering questions (Culicover and Jackendoff 2005; Declerck 1988; den Dikken et al. 2000; den Dikken 2006; Heycock and Kroch 1999; McCawley 1999; others): (262) raises and answers the question of “what is it that John did” (answer: *read the newspaper*), (263) asks and answers the question of “who does John love” (answer: *himself*).

The observation that the pre- and post- copular constituents of a specificational pseudocleft must be acceptable as a QAP follows directly in the proposed analysis where the *wh*-clause of these pseudoclefts is syntactically an interrogative. This can explain the contrast between (264) and (265):

264. [What he wanted] was to wash his wounds.  
265. ??\*[What he tried] was to wash his wounds. (Higgins, 1979:121)

If specificational pseudoclefts are subject to QAP wellformedness conditions, then (265) is unacceptable is due to inability to ask the question “*what did he try?*”,<sup>3</sup> whereas in (264) it is fine to ask “*what did he want?*”. This is consistent with Higgins, who suggests the reason why (265) is bad is the same reason that underlies the badness of its QAP counterpart, noting “the same answer should be forthcoming for both pseudo-cleft sentences and question-answer pairs here” (1979:121-122).

Nevertheless, it is important to recognize that this does not necessarily constitute evidence against the *wh*-clause as an FR, since an FR approach can also account for the contrast in (264-265) in that “what he tried” is not a possible FR, whereas “what he wanted” is:

266. [What he wanted] cost him his freedom. [FR]  
 267. \*[What he tried] cost him his freedom. [FR]  
 Intended: He tried to kill someone, which cost him his freedom.

### 6.2.5 Sluicing

In FRs such as (268) sluicing is not permitted, whereas in interrogatives (269) sluicing is allowed:

268. i. John bought something, and \*I like what ~~he bought~~.  
 ii. John bought something, and \*what ~~he bought~~ cost half his paycheck.
269. i. John bought something, but I dont know what ~~he bought~~.  
 ii. John bought something, but what ~~he bought~~ remains a mystery.

Moreover, when matrix interrogatives are set up in a context that ensures recoverability they also allow sluicing:

270. Person A: John bought something.  
 Person B: What ~~did John buy~~?

The *wh*-clause of specificational pseudoclefts such as (271-271) pattern with interrogatives over FRs in that they (somewhat) allow sluicing (Ross, 2004:551)<sup>4</sup>. Interestingly, sluicing seems to be much better in reversed specificational pseudoclefts (those in the b sentences) than in regular ones:

271. a) John bought something, and ?what ~~he bought~~ is a book.  
 b) John bought something, and a book is what ~~he bought~~.

<sup>3</sup>Unless one has a nominal response in mind, as in:

Q: What did John try?

A: The pizza

<sup>4</sup>The manner sluicing in pseudoclefts is presented in Ross is as a response to a question. Consistent with his deletion assumptions, the counterweight is a presented as a full clause:

Q: Where is he going?

A: (He is going) to Rome is [where ~~he is going~~].

272. a) John did something thoughtful, and ??what ~~he did~~ is buy a present for his mother.  
 b) John did something thoughtful, and buy a present for his mother is ?what ~~he did~~.

When (271b) is pronounced with pitch accent on *a BOOK*, to my ear it seems perfectly acceptable. Therefore, (271-272) seem to indicate that the *wh*-clause of a specificational pseudocleft in an interrogative, as they both allow sluicing. Moreover, in predicational pseudoclefts where the *wh*-clause is a uncontroversially a FR it is never possible to sluice:

273. John bought something, and \*what(ever) ~~he bought~~ was expensive.

One possible counter to the claim that (271b) is a case of acceptable sluicing in “..... and a book is what ~~he bought~~” is that perhaps what’s actually going on is short sourcing. In that case, (271b) would be “..... and a book is what ~~it is~~”, rather than “..... and a book is what ~~he bought~~”. This would allow us to maintain a FR analysis of the *wh*-clause of specificational pseudoclefts, however we would then need to determine why short sourcing is not available to recover other FRs such as (268) or (273).

In sum, the *wh*-clause of a specificational pseudocleft seems to pattern with interrogative *wh*-constructions with respect to sluicing rather than with free relatives. Sluicing thus serves as evidence in support of the proposed interrogative analysis.

### 6.2.6 Clefting

The observation that the *wh*-clause of a specificational pseudocleft can contain an *it*-cleft supports an interrogative over a FR analysis: the specificational pseudocleft in (274-275) patterns with the interrogatives in (276) in allowing *it*-clefts (Ross, 2004; Faraci, 1971; Zwicky, 1986). Example (274) is due to Ross (2004), while (275) and (276) are due to Zwicky (1986:118):

274. a) What (it was that) I visited is Atibaia. [SPC]  
 b) Atibaia is what (it was that) I visited.  
 275. a) What (it was that) they had in their hands was white sand. [SPC]  
 b) White sand was what (it was that) they had in their hands.  
 276. a) Who was it that ate the tarts? [Int]  
 b) I don’t know [who (it was that) ate the tarts].

On the other hand, the free relative in (277) due to Zwicky (1986:118) does not permit *it*-clefting:

277. \*What (it was that) they had in their hands sparked. [FR]

However, there are two different responses to the paradigm above that suggest the ability to cleft is not necessarily a clear argument in favour of an interrogative analysis. First, some researchers such as Blom and Daalder (1977:22) and Akmajian (1979)

directly disagree with the judgements in (274-275)– for them, clefting inside the *wh*-clause of a specificational pseudocleft is ungrammatical, meaning it patterns with FRs like (301).

Second, clefting actually is allowed in FRs such as (278) on the condition the *wh*-element includes *-ever* (Akamjian 1979:81):<sup>5</sup>

278. a) [What\*(ever) it is that John bought] cost him a lot of money [FR]  
 b) She threw away [what\*(ever) is was that John bought] [FR]

In sum, if the judgements in (274-275) are correct in indicating that the *wh*-clause of a specificational pseudocleft allows *it*-clefts, this is compatible with both an interrogative and an FR characterization of that clause: *it*-clefts are permitted in both questions and free relatives, illustrated in (276) and (278), respectively. On the other hand, if Akmajian is correct in saying that (274-275) are unacceptable, then the *wh*-clause of a specificational pseudocleft patterns with neither interrogatives nor free relatives.

### 6.2.7 Inconclusive Evidence

Appendix A summarizes some evidence that has previously been cited in favour of either an FR or an interrogative approach to the *wh*-clause of specificational pseudoclefts, but which I suggest is likely inconclusive. Topics include complex the *what*-restriction, complex *wh*-phrases, *else/ever*, topicalization, and PP pied-piping.

## 6.3 Summary: pro-interrogative evidence

The subsections above have presented some properties that follow from analyzing the *wh*-clause of specificational pseudoclefts as an interrogative. The similarities between interrogatives and the *wh*-clause of specificational pseudoclefts are what underlie the argument for the proposed analysis of the *wh*-clause. Since the crux of the argument is that a specificational pseudocleft's *wh*-clause is an interrogative because it behaves exactly like interrogatives do, then this approach will be threatened by any occasion in which the two do not display similar properties. However, it seem like they do pattern with interrogative over FRs with respect to properties listed in table below:

Figure 10

<sup>5</sup>For Akmajian, what clefting reveals is the generalization that “non-referential clauses may occur in clefted form” (1979:81) and the addition of *-ever* makes FRs non-referential. Jacobson (1995:454) argues that an *-ever* free relative can indeed refer– it can be the antecedent of the anaphor in (i):

- i. Everyone who went to [whatever movie the avon is now showing] said **it** was very boring.

	FR	Q	SPC
Infinitival	×	✓	✓
<i>-ever</i>	✓	×	×
Multiplicity	×	✓	✓
QAPs	×	✓	✓
Sluicing	×	✓	✓
Clefting	×	✓	✓

I will now present the main challenge to this proposal– the cross-linguistic evidence that suggests the *wh*-clause of a specificational pseudocleft is a FR.

## 6.4 Challenge to the interrogative view: Cross-linguistic evidence

In this subsection I will present the most compelling evidence for the other view, that the *wh*-clause of a specificational pseudocleft is syntactically a free relative. Cross-linguistic data supports a free relative analysis, where in languages that make a morphological distinction between free relatives and interrogatives, the *wh*-clause of a specificational pseudocleft typically has the same morphological marking as the former.

For example, in Macedonian a FR such as (279) is introduced by *ona* (that), whereas embedded interrogatives like (280) are not. The examples below are due to Caponigro and Heller (2007: 247).

279. (Jas) sakam [\*(ona) shto Petar saka].  
 I love that what Petar loves  
 ‘I love what Petar loves.’

280. kazhi mi [(\*)ona) shto navistina Petar saka].  
 tell me that what really Petar loves  
 ‘Tell me what Petar really loves.’

Specificational pseudocleft such as (281) pattern with FRs in that they also require *ona*:

281. [\*(Ona) shto Petar saka] e samiot sebe si.  
 That what Petar loves is alone himself  
 ‘What Petar loves is himself.’

Similarly, in Hungarian the prefix *a-* obligatorily introduces FRs such as (282), while in interrogatives (283) *a-* is not permitted. We therefore can only get the form in *mit* in (283), while in (282) only *amit* can occur. The Hungarian examples are due to Caponigro and Heller (2007:247).

282. megettem [amit/\*mit                      főzött]]  
 i-ate            **whatFR/\*whatINT** cooked  
 ‘I ate what he cooked.’

283. mondd me [\*amit/mit                      főzött].  
 tell    me **\*whatFR/whatINT** cooked  
 ‘Tell me what he cooked’

Like FRs, the *wh*-clause of a specificational pseudocleft such as (284) only allows *amit* (Caponigro and Heller 2007; Hartmann et al., 2013):

284. [amit/\*mit                      keres\_        ] az Chomsky legujabb könyve.  
**whatFR/\*whatINT** is-looking- for that Chomsky’s latest    book  
 ‘What he is looking for is Chomskys latest book.’

In Wolof, a Niger-Congo West Atlantic language spoken in Senegal and Gambia, the *wh*-word in an interrogative such as (285) is a combination of a classifier and the suffix *-u*. Free relatives (286) are formed using the same classifier, but instead the suffix added is *-i*. Examples are due to Caponigro and Heller (2007:248):

285. yëg-na                      [\*l-i/l-u                      móódu gën-ë                      bëgg].  
 find out-neutral cl-FR/cl-INT Moodu surpass-inf like  
 ‘She found out that Moodu likes most.’

286. bañ-na                      [l-i/\*l-u                      móódu gën-ë                      bëgg]  
 hate-neutral cl-FR/cl-INT Moodu surpass-inf like  
 ‘She hates what Moodu likes most.’

Like FRs, Specificational pseudoclefts use the suffix *-i*, not *-u*:

287. [l-i/\*l-u                      móódu gën-ë                      bëgg\_] bopp-am                      la.  
 cl-FR/cl-INT Moodu surpass-inf like                      head-3sgposs be  
 ‘What Moodu likes most is himself.’

Finally, in Hebrew a FR requires the complementizer *še*, as in (288). This complementizer cannot occur in interrogative such as (289):

288. dan kara [ma \*(še)-                      karati].  
 Dan read what thatCOMP- (I)-read  
 ‘Dan read what I read.’

289. dan berer [ma (\*še)-                      karati].  
 Dan inquired what thatCOMP- (I)-read  
 ‘Dan inquired what I read.’

Once again, specificational pseudoclefts (290) behave like FRs as they also require the complementizer to be present:

290. [ma \*(še)-dan ohev\_] ze et acmo.  
 what thatCOMP-Dan loves is Acc himself.  
 ‘What Dan loves is himself.’

In sum, data from Macedonian, Hungarian, Wolof and Hebrew indicates that the *wh*-clause of a specificational pseudocleft is a FR, not an interrogative: when a language overtly distinguishes between the two, specificational pseudoclefts pattern with the former. This has further been argued for Bulgarian (Izvorski 1997), Greek (Iatridou and Varlokosta 1998; Alexiadou and Giannakidou 1998), and Portuguese (Ross 1999).

## 6.5 Summary: Status the *wh*-clause

In sum, I suggest that the *wh*-clause of English specificational pseudoclefts is best characterized as an interrogative, in part because it pairs well with the semantic analysis in Chapter 7, and also because of what follows about relationship between specificational pseudoclefts and QAPs. The current analysis, in its strongest form, proposes that the *wh*-clause and counterweight of a specificational pseudocleft are (syntactically and semantically) a question and an answer, respectively. This captures directly the connection between QAPs and *specificational* pseudoclefts: the similarities are not just an interpretive phenomenon, they are derivational.

However, I acknowledge that cross-linguistic data strongly supports a FR analysis over an interrogative one. I therefore suggest that the proposal could take a weaker form in which the *wh*-clause is only semantically an interrogative and syntactically it is a free relative. A trade-off is that the QAP connections are not captured as directly, though they are not necessarily lost. Furthermore, if we adopt a FR analysis to the *wh*-clause of a specificational pseudocleft then I do not know how to account for the properties listed in sections 6.2.1-6.2.6 (sluicing, infinitival, WH-ever, multiplicity, etc.) where specificational pseudoclefts patterned *against* FRs. Additionally, if we adopt a FR analysis to the *wh*-clause of a specificational pseudocleft then we would not be able to get the types to work out in the semantic composition: FRs are typically analyzed as type *e*, and if the counterweight is a CP (type *s,t*) then there is no plausible analysis of the copula that would allow the two to compose properly. This point is address in more detail in Chapter 7.

Finally, one reason I prefer to say that the *wh*-clause of a specificational pseudocleft is syntactically and semantically an interrogative (and not a FR that is interpreted as the question under discussion (QUD)) is because I think that the constraints on ‘questions’ and ‘answers’ in specificational pseudoclefts and non-interrogative QUDs are not on par. In the former, what exactly is the question and what exactly is the answer is clearly and explicitly stated: the *wh*-clause is interpreted as the question, and the counterweight is the answer. Consider the examples below:

293. a) What Mike did is buy a house.  
 b) What John ate yesterday is a piece of cake.  
 c) What Sue wrote was a book about bats.

In the specificational pseudoclefts above, there is no ‘wiggle room’ – the question that is being ‘asked’ is clear and we don’t need extra context to help us determine what it is: (a) asks about what Mike did, and the answer is that he bought a house, (b) asks what John ate yesterday and answers that he ate a piece of cake, etc.

In contrast, in QUDs “what utterance responds to what QUD (and in what way it does so) is highly context-dependent” (Kubota and Matsui, 2010: 65). For example, Beaver et al. (2017) contrast between two very similar dialogues (see their examples 17 and 18 on p.274 for detail) in which the order of the turn-taking begins with speaker A, then speaker B, and ends with speaker A again. The two dialogues differ only with respect to speaker A’s final utterance. Crucially, Beaver et al. (2017) note that the “intended interpretation of the utterances seems to become completely clear only after A establishes in the continuation of the utterance what he or she takes the current question to be” (p.274). I do not think that specificational pseudoclefts allow for this kind of freedom of interpretation regarding what is being asked/answered.

To support the claim that the *wh*-clause is (minimally) semantically an interrogative, I follow Schlenker who notes that the *wh*-clause denotes a question “even when the morphology would seem to suggest the opposite” (2003:169). For example, in French the “*wh*”-clause of specificational pseudoclefts can only be introduced by *ce que* ‘it that’ as in (294), not by a “*wh*”- phrase such as *qui* ‘who’ as in (295):

294. [**Ce qu’il<sub>i</sub> aimait**]<sub>k</sub>, c’était lui-même<sub>i</sub>/??lui<sub>i</sub>/\*l’imbécile<sub>i</sub>/\*Jean<sub>i</sub>  
 .[it that he<sub>i</sub> liked]<sub>k</sub> it<sub>k</sub> was himself<sub>i</sub>  
 ‘What he liked was himself.’

295. \*[**Qui’il<sub>i</sub> aimait**]<sub>k</sub>, c’était lui-même<sub>i</sub>/??lui<sub>i</sub>/\*l’imbécile<sub>i</sub>/\*Jean<sub>i</sub>  
 .[who he<sub>i</sub> liked]<sub>k</sub> it<sub>k</sub> was himself<sub>i</sub>  
 Intended: Who he liked was himself.

While this suggest that the “*wh*”-clause in (294) is not syntactically a question, Schlenker point to the question anaphora in (296) to show that it is nevertheless interpreted as a question (p.169-170):

296. Je me suis longtemps demandé [**ce qu’il<sub>i</sub> aimait**]<sub>k</sub>, et j’ai finalement appris que **c<sub>k</sub>**’était lui-même<sub>i</sub>/??lui<sub>i</sub>/\*l’imbécile<sub>i</sub>/\*Jean<sub>i</sub>.

The sentence in (296) places the “*wh*”-clause of (294) as the complement of *se demander* ‘to wonder’, therefore in an environment in which [**ce qu’il<sub>i</sub> aimait**] must be interpreted as an indirect question. The same connectivity effects from (294) obtain in (296), but in (296) the fact that *ça* is coindexed with the embedded interrogative indicates that the pre-copular [**ce qu’il<sub>i</sub> aimait**] in (294) is indeed a question.

In conclusion, I want to emphasize that the relationship between questions and

free relatives in general is very tight, even outside the domain of pseudoclefts. Many have noted the “striking similarities” (Jacobson, 1995:475) between the two, where free relatives have been argued to be more closely related to interrogatives than to headed relative clauses (Cooper 1983:143; Prince 1988; Zwicky 1986). For example, in English the set of pronouns used in the formation of FRs is (almost) identical to those used in interrogatives, while headed relatives draw from a different set (Jacobson, 1995; Chierchia and Caponigro, 2013).<sup>6</sup> Other languages in which free relatives pattern with interrogatives to the exclusion of headed relatives are German (Cooper, 1983), Yiddish (Prince, 1988; Zwicky 1986) and Chinese (Cooper 1983:145).

In addition to the syntactic/morphological similarities between FRs and interrogatives, there are a number semantic similarities that lead researchers such as Chierchia and Caponigro (2013) and Hirsh (2016) to propose that FRs are semantically derived *wh*-questions. See Chierchia and Caponigro (2013) for further detail. The cross-linguistic evidence in section 6.4 against an interrogative analysis came from languages in which FRs and *wh*-questions are distinct. I therefore suggest it could be that an interrogative approach to the specificational pseudocleft’s *wh*-clause is only be appropriate for languages in like English, Yiddish, Chinese and German in which FRs and *wh*-questions are similar. A future area of research that could be profitable would be to conduct a cross-linguistic investigation into the relationship between interrogatives and FRs to see if this impacts the patterning of a pseudocleft’s *wh*-clause. I leave this question open for now.

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<sup>6</sup>Moreover, Jacobson (1995: 483-484) follows Zwicky (1986) in noting the further similarity that the pronouns in both FRs and questions (i) always take singular agreement, whereas headed relative pronouns (ii) always have the number of the head:

- (i) FR: I’ll read [what is/\*are on the reading list].  
Q: I don’t know [what is/\*are on the reading list].
- (ii) HR: ...the book [which is/\*are on the table].  
HR: ... the books [which \*is/are on the table].

# Chapter 7

## The Semantics of Pseudoclefts

In the syntactic analysis outlined in the previous chapter, the counterweight of a predicational pseudocleft such as (297) is a predicate, whereas in a specificational pseudocleft such as (298) it is a full clause:

297. What John ate is tasty.

298. What John ate is ~~John~~ ate an apple.

Given these syntactic assumptions, this chapter will present semantic analyses for predicational and specificational pseudoclefts in order to make sense of how the expression *what John ate* can combine with a predicate (type  $\langle s, \langle e, t \rangle \rangle$ ) in some cases (398), and with a proposition (type  $\langle s, t \rangle$ ) in others (399).

I will argue that the string ‘*what John ate*’ in predicational and specificational pseudoclefts is ambiguous between denoting an entity and a question, respectively. Further, the copula in predicational pseudoclefts is vacuous, whereas in specificational pseudoclefts it denotes identity. Both analyses will make use of a maximality operator,  $MAX_{INF}$ , which in predicational pseudoclefts operates over sets of individuals, and in specificational pseudoclefts over sets of propositions. Once these pieces are put together, the resulting paraphrase for (297) is “the maximal thing that John ate is tasty”, while the resulting paraphrase for (298) is “the most informative true answer to the question ‘what John ate is ‘John ate an apple’”.

### 7.1 Predicational Pseudoclefts: Take I

In this section I will begin by reviewing the treatment of definites in Link (1983), going on to discuss how Jacobson (1995) builds on this treatment in her analysis of free relatives. Once Jacobson’s definite analysis has established I will then go through my proposal in which it is extended to predicational pseudoclefts.

Many have noted that free relatives can be reasonably paraphrased using a definite in place of the *wh*-clause without altering the truth-conditions of the sentence (Jacobson, 1995: 454; Šimík, 2017, Zwicky, 1986:122<sup>1</sup>). Consider the FRs and their

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<sup>1</sup>For Zwicky, the paraphrase uses a definite pronoun+which, as in ‘*that which he had in his hand was a grenade*’.

paraphrases below:

299. a) I ordered [what he ordered for dessert]. (Jacobson 1995:454)  
 b) I ordered the thing(s) he ordered for dessert.
300. a) [What(ever) Adam presented] sounded plausible. (Šimík, 2017)  
 b) The thing(s) Adam presented sounded plausible.

The definites in the (b) sentences have been argued to have a maximality requirement (Jacobson, 1995; Link, 1983), such that  $[[\text{The } P]] = \lambda P.max(P)$ . Thus in (300b) “the thing(s) that Adam presented” denotes ‘maximal plural entity’ that satisfies predicate  $\lambda x.present(a,x)$ .

The underlying assumption is based on Link (1983), where the domain of individuals  $D_e$  partially ordered by ‘part-of’ relation. For example, if there are two atomic individuals, a and b, then the sum is also an individual, a+b:

$$301. D_e: \{a, b, a+b\}$$

If all satisfy the predicate  $P$ , then  $max(P)$  returns a+b, because a+b entails the other two, as a and b are both ‘part of’ a+b. The extension of  $MAX$  to complex individuals is intended to capture issues in the semantics of plurals and mass nouns. Identifying *the* with this kind of maximality operator over individuals captures the meaning of sentences like *the girls left*, which is true only if all girls left, or *the water is blue*, which is true only if the total mass of water is blue.

Jacobson argues that Link’s analysis can be extended to free relatives like those in the (a) sentences of (299-300), which she suggests are definite descriptions.<sup>2</sup> For Jacobson FRs have the internal structure of *wh*-constituents (1995:451), in contrast to Bresnan and Grimshaw (1978) who suggest the *wh*-word in a FR is in the same position as ‘*the dish*’ in ‘*I will eat what/the dish you cook*’. Compare the normal (i.e. headed) relative clause in (304) to the FR in (305):

304. I will eat the dish [which John ordered].

305. I will eat [what John ordered].

A normal relative clause denotes a function characterizing a set of individuals, in (304), the set of individuals that John ordered. Thus, in a standard analysis the relative pronoun ‘*which*’ is the identity function on properties.

On the other hand, consider the FR in (305). The set of *wh*-words in FRs is different from the set of *wh*-words used to form regular relative clauses: ‘*what*’ is not used in regular relative clauses, while ‘*which*’ is not used in FRs. Jacobson argues

<sup>2</sup>Additional evidence that FRs are definites comes from the way they relate to discourse anaphora: a FR can be an antecedent for discourse anaphora as in (302) and it can act as discourse anaphora itself as in (303) :

302. John read [what(ever) Bill assigned]<sub>i</sub>– although I don’t remember what it<sub>i</sub> was, but I do know that it<sub>i</sub> was long and boring. (Jacobson 1995:454)
303. Mary bought some thing<sub>i</sub>. [What(ever) she bought]<sub>i</sub> was expensive. (Dayal 1997:103)

that ‘*what*’ differs in meaning from ‘*which*’ in such a way that a *wh*-constituent such as ‘*what John ordered*’ does not have the same meaning of a regular relative clause like ‘*which John ordered*’ (Jacobson 1995:467).

For free relatives, she proposes that the *wh*-constituent *what John ordered* denotes a particular subset of the individuals that John ordered– the set containing the maximal plural entity that he ordered (Jacobson, 1995:467). Recall from our discussion of Link (1983) that a maximal plural entity is the entity with a property P that is composed of all other entities with the property P. Consider again the FR in (300):

300. [What(ever) Adam presented] sounded plausible.

Jacobson argues that the meaning of the FR in (300) *what Adam presented* shifts down from a property to an individual– the individual denoting the maximal plural entity that Adam presented (Jacobson, 1995:466). Recall that in Jacobson’s analysis *what Adam presented* and *the thing(s) Adam presented* have identical denotations. Thus, if Adam presented a, then the set of things that Adam presented is {a} (a singleton set) and the denotation of ‘*what Adam presented*’ (and of ‘*the thing(s) Adam presented*’) is a. If Adam presented a, b, and c, then the set of things that Adam presented is {a, b, c, a+b, b+c, a+b+c} and the denotation of ‘*what Adam presented*’ is a+b+c.

Jacobson follows Partee (1987) in using the  $\iota$ -operator to derive the definite interpretation, illustrated in (306a). Šimík’s (2017) slight modification which instead uses  $\sigma$  is presented in (306b). The truth-conditions of (306) are in (307):

306. [[what(ever) Adam presented]] / [[the thing Adam presented]] =

- a)  $\iota x \text{ thing}(x) \wedge \text{presented}(x) \text{ (Adam)}$   
(the single x such that x is a thing and Adam presented x)
- b)  $\sigma x \text{ thing}(x) \wedge \text{presented}(x) \text{ (Adam)}$   
(the maximal single x such that x is a thing and Adam presented x)

307. [[306]] = 1 iff  
sounded plausible ( $\sigma x \text{ thing}(x) \wedge \text{presented}(x) \text{ (Adam)}$ )  
(the thing(s) that Adam presented sounded plausible)

Jacobson argues that her analysis in which FRs are definite descriptions is appropriate for both plain and *-ever* FRs: even though *-ever* FRs such as (308) are often naturally paraphrased by *every* or by free choice *any*, they are nevertheless definites (like plain FRs), not universals.

- 308. a) John will read whatever Bill reads. (Jacobson 1995:454)
- b) John will read anything/everything Bill reads.

In English,<sup>3</sup> when an *-ever* FR is interpreted like a definite it has an ignorance reading (Dayal, 1997) as in (309) or an indifference reading (von Stechow, 2000) as in (310):

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<sup>3</sup>Not all language can have definite *-ever* FRs. Indeed, English is in the the minority, with Serbian being another possible example. In contrast, in Hungarian (von Stechow 2000), Czech (Šimík, 2016) and Greek (Iatridou and Varlokosta, 1999) *-ever* FRs cannot have definite meanings. For a cross-linguistic review of of *-ever* FRs see Šimík (2017).

309. [Whatever is now playing at the Avon] (#namely Arrival) is making a lot of money.

310. John voted for [whoever was at the top of the ballot] (namely for Clinton).

In the ignorance reading in (309), the speaker does not know or has no belief about what is playing at the Avon. In the indifference reading in (310), John did not care about the identity of who he voted for— he voted for the person who was at the top of the ballot, but if there had been someone else at the top of the ballot, John would have voted for that person. The felicity of the *namely* clause in (310) indicates that speaker ignorance is not necessarily involved in indifference readings.

Evidence that the *-ever* FR in (309) is definite come from the fact that it can be referred to anaphorically by *it*, as in (311). Typical universal NPs cannot be the antecedent of *it*, as illustrated in (312).

311. Everyone who went to [**whatever** is now playing at the Avon]<sub>i</sub> said it<sub>i</sub> was very boring. (Jacobson 1995:454)

312. \*Everyone who went to [**every** movie the avon is now showing]<sub>i</sub> said it<sub>i</sub> was very boring. (Jacobson 1995:455)

That *-ever* FRs are not always interpreted as “apparent” universals is illustrated in (309-312). Moreover, neither is it the case that plain FRs are always interpreted as definites: a plain FR with an “apparent” universal meaning is shown in (313), which means do everything that the babysitter tells you to do:

313. Do **what** the babysitter tells you to do. (Jacobson, 1995:454).

Jacobson suggests that her analysis can explain why FRs sometimes are interpreted like singular definites and other times like universals: returning to the example in (300), if there is only one atomic entity that Adam presented, {a}, then the FR is interpreted as a singular definite. However, if there is more than one atomic entity that Adam presented, {a, b, a+b}, then the FR will denote the single entity composed of all other entities that Adam presented, {a+b}, and so will be like a universal (Jacobson, 1995:468).

Nevertheless, an “apparent” universal meaning is more readily available in *-ever* FRs than plain ones (Cooper 1983:96, Jacobson 1995:480-481). Jacobson suggests that this is related to the contribution of *-ever*: the notion of maximal plural entity is relativized to some context, and it is this context that determines the domain of atoms out of which the plural entity is composed (Jacobson 1995:473). Jacobson suggests that what *-ever* does is broaden the domain, for example broadening it over time. Since the maximal plural entity in *-ever* FRs is constructed from a larger domain of atoms, it is less likely that the entity itself will be atomic.

In sum, Jacobson’s point is that both plain and *-ever* FRs are definites. Though they may have “apparent” universal force, they are not true universals (Jacobson, 1995:479). The apparent universal meaning of an FR comes from that fact that it denotes a complex individual, one composed of all the atomic individuals with the

relevant property (Jacobson, 1995:468). I am adopting Jacobson’s analysis mostly without defense. For an alternative view that plain FRs are definite descriptions while *-ever* FRs are universal quantifiers see Bresnan and Grimshaw (1978) and Tredinnick (1995). See Šimik (2017) for an overview of various analyses that have been proposed for the semantics of free relatives.

### 7.1.1 Extension to Predicational Pseudoclefts

Consider now the predicational pseudocleft in (297), repeated below as (314a). Recall that in predicational pseudoclefts the *wh*-clause is analyzed as a FR. I suggest that we can extend Jacobson’s treatment of FRs to cases like (314a), where the *wh*-clause in (314a) – like other FR – is taken as denoting the maximal plural entity that John ate.

314. a) [What John ate] is tasty.  
 b) [The thing(s) John ate] is tasty.

The end result of extending Jacobson’s analysis to (314a) will give us ‘ $max(P)$  is tasty’, where  $max(P)$  is the maximal entity that satisfies the predicate  $\lambda x.eat(j,x)$ , identical to the paraphrase in (314b). I walk through how we can arrive at this conclusion in the coming paragraphs.

To begin, I follow Jacobson in assuming that the two relevant semantic bits of the FR *what John ate* are the predicate  $\lambda x.eat(j,x)$  and maximality operator, *MAX*. The internal structure of *what John ate* is illustrated in brackets below:

315. [*what*  $\lambda_1$  John ate  $t_1$ ] is tasty.

In (315), *what* starts out in its base position as the object of *ate*. It then raises to spec-CP, leaving behind trace co-indexed with a lambda abstractor  $\lambda$  (loosely following Heim and Kratzer, 1998). The constituent to right of *what* forms predicate  $\lambda x.eat(j,x)$ . Regarding the Maximality operator, I follow Jacobson who suggests that we can think of it as being contributed by *what*.<sup>4</sup> I do not think anything in the current analysis would be incompatible with other assumptions regarding the origins of *MAX*.

Secondly, I propose that the copula of predicational pseudoclefts is vacuous, in contrast to the copula of specificational pseudoclefts which denotes identity. This is consistent with the views of Akmajian (1979:162-165)<sup>5</sup>, Heller (2005), Huddleston (1971), and Seuren (1985). In contrast, Partee (1986) and Williams (1983) assume there is a single copula, while Mikkelsen (2005) suggests that both predicational and specificational clauses involve a vacuous copula. For a review of different analyses

<sup>4</sup>Jacobson suggests that *MAX* is a consequence of the inherently exhaustive meaning of the *wh*-word, given in (316) for *what*.

316. [[*what*]] =  $\lambda P \lambda x [thing'(x) \wedge P(x) \wedge \forall y [P(y) \rightarrow y \leq x]]$

<sup>5</sup>For Akmajian, only regular ordered specificational pseudoclefts involve an identity copula, in reversed specificational pseudoclefts the copula is vacuous

of the copula in predicational and specificational clauses see Mikkelsen (2011:1814–1815).

Lastly, recall from the syntactic proposal that the counterweight is a predicate, type  $\langle e, t \rangle$ . We now have everything we need to get the meaning of (314):

314. What John ate is tasty

The two pieces of the FR ‘*what John ate*’ are  $\lambda x.\text{eat}(j,x)$  and  $MAX$ . Assuming *what* denotes  $\lambda P.\text{max}(P)$ , it takes the predicate  $\lambda x.\text{eat}(j,x)$  and returns an individual of type  $e$ : the maximal individual that satisfies the predicate  $\lambda x.\text{eat}(j,x)$ . The counterweight ‘*tasty*’ is type  $\langle e, t \rangle$  and the copula is vacuous, therefore everything will compose the right way, and we will end up with the meaning of (314) as ‘the maximal thing that John ate is tasty’, i.e. all the stuff that John ate was tasty. Consequently, (314) would be infelicitous if John ate pizza and an apple, and the pizza was tasty but the apple was not.

This is consistent with the observations of Rullmann (1995) and Grosu & Landman (1998) regarding FRs in general, who note that (316) is only true if Mary read all the things that John recommended to her last Friday.

316. Mary read what(ever) John recommended to her last Friday. (Hinterwimmer, 2013)

Recall that for the predicational pseudocleft in (314) to be true it must be the case that everything John ate was tasty. Similarly, Mary reading only some of the things that John recommended does not seem sufficient for the truth of (316). See Rullmann (1995) and Grosu & Landman (1998) for further discussion of maximality in FRs.

### 7.1.2 Summary: Predicational Pseudoclefts Take I

In sum, I propose a semantic analysis of predicational pseudoclefts that builds on the treatment of definites in Link (1983) and FRs in Jacobson (1995). Jacobson proposes that a FR type-shifts from a property to the maximal entity that satisfies it. Likewise, I suggest that the *wh*-clause of a predicational pseudocleft denotes the maximal plural entity that satisfies  $P$ . This kind of definite analysis is applicable to both plain (317) and *-ever* (318) predicational pseudoclefts, just like it is applicable to both plain and *-ever* free relatives in general.

317. What John ate is tasty.

318. Whatever John ate is tasty.

This analysis of predicational pseudoclefts will be slightly modified in section 7.3—the general details will remain the same, but the maximality operator involved will be  $MAX_{INF}$  instead of  $MAX$ . I wait until that section to present the entry for the maximality operator and to illustrate the composition of a predicational pseudocleft with a tree diagram.

## 7.2 Semantics of Specificational Pseudoclefts

Turning to the semantics of specificational pseudoclefts, consider again the pseudocleft in (298), repeated below as (319):

319. What John ate is ~~John~~-ate an apple.

In the predicational proposal above, the *wh*-clause was analyzed as an individual of type  $e$ . This will not extend to the *wh*-clause of specificational pseudoclefts such as (319): the counterweight in a specificational pseudocleft is type  $\langle s, t \rangle$  – unlike predicational pseudoclefts where it is  $\langle e, t \rangle$  – therefore if the *wh*-clause of a specificational pseudocleft were type  $e$  this would result in a type mismatch. Thus, the *wh*-clause in (319) must be something other than a typical NP denotation.

I suggest that we can avoid a type mismatch in (319) by having *what John ate* denote a proposition and the copula denote identity:  $\lambda p_\alpha. \lambda q_\alpha. p = q$ , where  $\alpha$  can be any type. Specifically, I follow Schlenker (2003), den Dikken et al. (2000) and den Dikken (2006) in assuming that the *wh*-clause in specificational pseudoclefts has the denotation of a question. With respect to (319), here *what John ate* denotes a question the same as in *What did John eat?* or *Mary wonders [what John ate]*.<sup>6</sup>

I depart from Schlenker regarding the particular semantics of questions that I adopt. I follow Karttunen (1977) in assuming that the meaning of a question in a world is the set of true answers in that world. For example, if in  $w$  John ate cake and John ate an apple, but he didn't eat pizza, then the Karttunen denotation of *what did John eat*, and equivalently of *what John ate*, in  $w$  is set of true answers: {that John ate cake, that John ate an apple, that John ate cake and an apple}. Note that in Karttunen's (1977) original formulation the set of true answers would not have included the conjunction of the propositions that John ate cake and that John ate an apple. In the current proposal the set of true answers is closed under conjunction given the assumptions about plural individuals outlined above.

### 7.2.1 Maximal Informativity

Adopting a Karttunen semantics of questions will get us as far as a set of propositions: {that John ate cake, that John ate an apple, that John ate cake and an apple}. However, in order to get the *wh*-clause to compose with the counterweight in (319) we need it to denote a single proposition, not a set. I suggest that a natural way we can obtain a single proposition from the set of true answers is by invoking the maximality operator  $MAX_{INF}$ . It has previously been noted that the semantics of questions, like definites and other operators, invokes maximality (Back and Rullmann, 1999; Fox and Hackl, 2006; Rullman, 1995; also Jacobson 1995:452). Furthermore, building on the treatment of maximality in Fox and Hackl (2006) will allow us to state a uniform treatment of both kinds of pseudoclefts.<sup>7</sup>

<sup>6</sup>I am ignoring here the internal structure of *what John ate*. However, it is worth noting that one important difference between the question *what John ate* and the free relative *what John ate* would be the existence of an abstract question operator (see Karttunen, 1977 for details).

<sup>7</sup>See Fox and Hackl (2006) for arguments that  $MAX_{INF}$  plays a central role in several operators in natural language, including questions, definites, *only*, and exhaustivity.

In the semantics of questions, the maximality operator  $MAX_{INF}$  is tied to the notion of a ‘complete’ answer,<sup>8</sup> roughly the strongest true answer to the question: given a set of propositions  $MAX_{INF}$  orders the propositions based on strength and returns the strongest true proposition in the set (von Fintel et al. 2014:166). The formulation of ‘Maximal Informativity’ is entailment-based, where the strongest true proposition in the set entails the truth of all the other (weaker) propositions in that set.

Returning to our example, if we use  $Q$  to represent Karttunen denotation of a question, then  $MAX_{INF}(Q)(w)$  will return the strongest (most informative) true answer to the question in  $w$ :  $Q(w) = \{\text{that John ate cake, that John ate an apple, that John ate cake and an apple}\}$  and  $MAX_{INF}(Q)(w) = \text{that John ate cake and an apple}$ .

More generally, letting  $Q$  be the characteristic function of a set of propositions, we can define the following lexical entry:

**Specificational  $MAX_{INF}$ :**

$MAX_{INF}(Q)(w) = \text{the unique } p_{\langle s,t \rangle} \in Q \text{ such that } p(w)=1 \text{ and for all } q \in Q, \text{ if } q(w)=1, p \text{ entails } q.$

## 7.2.2 Specificational Pseudoclefts: Putting things together

Given the assumptions above, we now have everything we need to get the correct intuitive meaning of the specificational pseudocleft in (319):

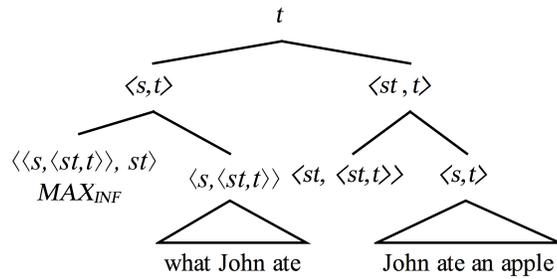
319. What John ate is ~~John~~ ate an apple.

Recall from the syntactic proposal that the counterweight denotes the proposition that John ate an apple, type  $\langle s,t \rangle$ . Given our semantic assumptions, the denotation of the *wh*-clause is a question which denotes different propositions in different worlds. If in  $w$  John ate an apple and nothing else, then it denotes the proposition that John ate an apple, type  $\langle s,t \rangle$ . I assume that the following LF is available:  $[[MAX_{INF} [\text{what John ate}]] \text{ is } [\text{John ate an apple}]]$ , though note that in this particular case  $MAX_{INF}$  will be vacuous. Lastly, as the copula denotes identity then (319) is true in  $w$  because the propositions on both sides of the copula are the same:  $\{w \in W : \text{John ate an apple in } w\}$ . The composition is illustrated below in Figure 11:

Figure 11

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<sup>8</sup>Complete answers are closely tied to exhaustivity. I will not elaborate here, but may return to this in future work.



A brief note on the left branch of the specificational tree in Figure 11: recall that here *what John ate* denotes a question. Following Karttunen, the extension of a question at a world is a set of propositions. Here we provide the composition using the question’s intension, in part because this will highlight the similarities and differences with predicational pseudoclefts (see Section 7.3) and the general  $MAX_{INF}$  template we propose in Section 7.4 (building on von Stechow, Fox, and Iatridou, 2014). Given that  $MAX_{INF}$  takes the question’s denotation as argument and returns a single proposition, the type of  $MAX_{INF}$  must be  $\langle\langle s, \langle st, t \rangle \rangle, st\rangle$ .

While I have illustrated this proposal with a regular specificational pseudocleft, note that it is applicable to reversed ones such as (319b) in exactly the same way:

319. b) ~~John ate an apple~~ is what John ate.

In both regular and reversed pseudoclefts, the constituents on either side of the copula denote a proposition and the copula denotes identity. The difference between regular and reversed is that in the former the question-denoting element precedes the copula, whereas in the latter the proposition that precedes the copula is the answer. If we want our paraphrases to be sensitive to this difference in linear ordering, a regular specificational pseudocleft would be “The most informative true answer to the question ‘What did John eat?’ is ‘John ate an apple’”, while a reversed one would be “‘John ate an apple’ is the most informative true answer to the question ‘What did John eat?’”.

One of the desirable consequence of this treatment of specificational pseudocleft is that it captures their intuitive exhaustive meaning (Declerck 1988:28; den Dikken, 2006; Higgins, 1979; Schlenker, 2003). This is exemplified in (319) which expresses that ‘an apple’ is the *only* thing that John ate. This is what makes (319) different from a non-cleft such as (320).

319. a) What John ate is an apple.  
b) An apple is what John ate.

320. John ate an apple.

As Jacobson (1995:471) notes, the two sentences above are not synonymous: in a world in which John ate an apple and a pear (319) would be false, as John’s eating an apple would not be the strongest true proposition in that world. In contrast, (320) is still true in such a world.

This proposal is consistent with the intuitive feeling that specificational pseudoclefts are self-answering questions (Akmajian 1979; Culicover and Jackendoff 2005; Declerck 1988:6-7; den Dikken et al., 20006; den Dikken, 2006; Faraci 1971; Heycock and Kroch 1999; McCawley 1999; Mikkelsen 2011:1819; Ross 1999). Furthermore, it captures the question-answer congruence effects discussed in Rooth (1992), and addressed briefly in Chapter 3. As an inherent focus construction, there are constraints on F-marking in the answer to a question (the semantic value of a question must be a subset of the focus semantic value of the answer). The same constraints on F-marking are at work in specificational pseudoclefts, but not in predicational ones. Given the current proposal this is not surprising: only the former are related to QAPs in that the *wh*-clause is the question-denoting element and the counterweight is the answer.

### 7.3 Extending $MAX_{INF}$ to Predicational Pseudoclefts

The proposed analyses of predicational and specificational pseudoclefts both make use of a maximality operator, though the particular operator is different:  $MAX$  or  $MAX_{INF}$ , respectively. In predicational pseudoclefts, the ordering of  $MAX$  is over domain of individuals (Link, 1983), while in specificational pseudoclefts the ordering of  $MAX_{INF}$  is over set of propositions (Fox and Hackl 2006).

As mentioned in section 7.2, it has been argued that  $MAX_{INF}$  is actually needed for definites as well. One reason is that the Link entry does not explain the observation that definites sometimes need to give a minimal amount instead of a maximal amount. Consider the example in (321) due to von Stechow et al. (2014:167):

321. The amount of walnuts sufficient to make a pan of baklava

The Link entry predicts that this expression should suffer from presupposition failure, because there is no maximum amount of walnuts that is sufficient to bake a pan of baklava – if an amount of walnuts  $f$  is sufficient to make a pan of baklava, then any amount larger than  $f$  is sufficient as well. Instead, what is needed here is the smallest amount of walnuts from which a pan of baklava can be baked, not the maximal amount. Informativity increases as the amount decreases: if 30g is sufficient to make a pan of baklava, so is any amount greater than 30g, but not (necessarily) so for amounts less than 30g. A maximal informativity account – which is sensitive to monotonicity<sup>9</sup> in a way that the Link entry is not – accounts for this. For arguments

<sup>9</sup>The extension of  $\phi$  alternates between referring to the minimal or the maximal individual depending on the monotonicity with respect to informativity of property  $\phi$ . When  $\phi$  is upward monotone we get a maximality effect; when  $\phi$  is downward monotone we get a minimality effect. The entry for the definite article in von Stechow et al. (2014:167) is below:

- i. a) [[the  $\phi$  is defined in  $w$  only if there is a uniquely maximal object  $x$ , based on the ordering  $\geq_\phi$ , such that  $\phi(w)(x)$  is true. The reference of the  $\phi$  (when defined) is this maximal element.
- b) For all  $x, y$  of type  $\alpha$  and property  $\phi$  of type  $\langle s, \langle \alpha, t \rangle \rangle$ ,  $x \geq_\phi y$  iff  $\lambda w. \phi(w)(x)$  entails  $\lambda w. \phi(w)(y)$ .

see Fox and Hackl (2006) and von Fintel et al. (2014).

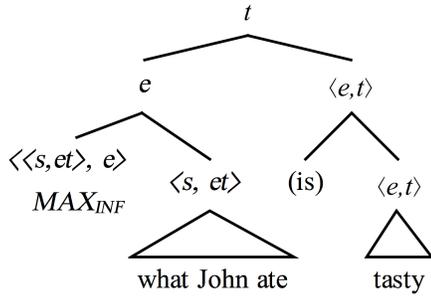
In light of this, I will make a slight modification to the predicational analysis, where I replace  $MAX$  with  $MAX_{INF}$ . The revised entry is shown below:

**Predicational  $MAX_{INF}$ :**

$MAX_{INF}(P_{\langle s, \langle e, t \rangle \rangle})(w) =$  the unique  $x_e$  such that  $P(x)(w) = 1$  and for all  $y_e$  such that  $P(y)(w) = 1$ ,  $\lambda w.P(w)(x)$  entails  $\lambda w.P(w)(y)$

The general assumptions stated in section 7.1 are the same. I maintain that the relevant semantic pieces of *what John ate* are a maximality operator and the predicate  $\lambda x.eat(j,x)$ . I also maintain that the maximality operator takes a predicate of  $\langle e,t \rangle$  and returns an individual. The only difference is nature of the maximality operator, which is now  $MAX_{INF}$ : in a predicational pseudocleft,  $MAX_{INF}$  takes a predicate  $P$  and returns the unique individual  $x$  such that  $P(x)$  is true and for all  $y$  such that  $P(y)$ ,  $P(x)$  entails  $P(y)$ . This is illustrated in Figure 12:

Figure 12



Note I follow von Fintel et al. (2014) in using  $\langle s,et \rangle$  as the type for intensional properties.

## 7.4 A General Characterization

I have now used  $MAX_{INF}$  in two different places: in the specificational analysis and in the predicational one. In both analyses, the ordering of  $MAX_{INF}$  is over a set of propositions: in predicational pseudoclefts  $MAX_{INF}$  operates over predicates, whereas in specificational pseudoclefts  $MAX_{INF}$  operates over sets of propositions. Below I present the general  $MAX_{INF}$  template that can be used across different semantic types:

**General  $MAX_{INF}$ :**

$MAX_{INF}(\phi_{\langle s, \langle \alpha, t \rangle \rangle}) =$  the unique  $x_\alpha$  such that  $\phi(w)(x) = 1$  and  $\forall y_\alpha : [\phi(w)(y) = 1 \rightarrow \lambda w.\phi(w)(x)$  entails  $\lambda w.\phi(w)(y)]$

This template highlights that both constructions are closely related, with the difference reducing to one of semantic types: the type of  $\alpha$  in the input to  $MAX_{INF}$ . The job of  $MAX_{INF}$  is to order propositions based on strength and pick out the strongest one: if you give it some object of type  $\alpha$  it will return the most informative object of type  $\alpha$  that is true in  $w$ . Returning again to our examples:

297. What John ate is tasty.

298. What John ate is ~~John~~ ate an apple.

In a specificational pseudocleft such as (298),  $\alpha$  is type  $\langle s, t \rangle$ . Plugging  $\langle s, t \rangle$  into the general  $MAX_{INF}$  template above illustrates that here  $MAX_{INF}$  operates of sets of propositions. It takes that set of propositions, orders it based on strength, and returns the most informative proposition that is true in  $w$ .

In predicational pseudoclefts such as (297)  $\alpha$  type  $e$ . Plugging  $e$  into the general template above illustrates that here  $MAX_{INF}$  operates over predicates. It takes a predicate and creates set of propositions that it orders based on strength, returning the unique individual that yields the strongest true proposition.

In a world where John ate an apple and nothing else and the apple was tasty, the trees representing the predicational and specificational pseudoclefts evaluated in that world are shown side-by-side below for comparison:

Figure 13

Predicational:	Specificational:
297. What John ate is tasty	298. What John ate is <del>John</del> ate an apple

Recall from the syntactic proposal that specificational pseudoclefts had the more complex structure of the two. In contrast, from a semantic perspective in some sense it is *predicational* pseudoclefts that are the more complicated ones: in specificational pseudoclefts  $MAX_{INF}$  takes a set of propositions, orders propositions and returns a proposition, but in predicational pseudoclefts  $MAX_{INF}$  takes a predicate, out of which it constructs a set of propositions to order, then it returns the entity that yields the strongest proposition. In this way, the maximality proposed in predicational pseudoclefts might be slightly less intuitive than the Link-type treatment introduced in section 7.1.

In the current proposal, I follow Cooper (1983:98) in assuming that the denotation of the strong ‘*what John ate*’ is ambiguous between an entity (in predicational pseudoclefts) and a proposition (in specificational ones).<sup>10</sup> It is the syntax of coun-

<sup>10</sup>Cooper (1983:98) notes that a verb that takes a CP argument such as *know* may also take a FR

terweight that determines whether the *wh*-clause denotes an entity or a proposition, and thus whether the pseudocleft is predicational or specificational.

297. What John ate is tasty.

298. What John ate is ~~John~~-ate an apple.

If counterweight can be a CP as in (298) ‘*John ate an apple*’, then ‘*what John ate*’ has a question denotation and the pseudocleft is specificational. In contrast, if counterweight cannot be a CP as in (297) \**John ate tasty*, then ‘*what John ate*’ denotes an entity and the pseudocleft must be predicational.

Recall from Chapter 2 that some pseudoclefts are ambiguous between a predicational and a specificational reading (Bachenko, 1976; Higgins, 1979):

323. What I saw in the park was a horse and a man.

a) **Predicational**: I saw a centaur in the park.

b) **Specificational**: I saw the following in the park: a horse, a man.

In such cases, the ambiguity of *wh*-clause between entity and proposition remains, since the post-copular XP is grammatical both as a CP as in ‘*I saw a horse in the park and I saw a man in the park*’, and as a predicate as in ‘*the thing that I saw in the park had the property of being a horse-man (i.e. it was a centaur)*’.

### 7.4.1 Presuppositions

I would like to briefly address the differences in presuppositions between predicational and specificational pseudoclefts. Recall from sections 2.2.4 and 3.2.1 that specificational pseudoclefts have been argued to have an existence presupposition, where (324) presupposes that John got something:

324. What John got was a book. (Declerck 1988:6)

It was further argued that QAPs such as (325) has the same presupposition of existence:

325. A: What did John get?

B: a book. (Declerck 1988:6)

Based on the claim that (324) and (325) both presuppose that John got something, Faraci (1971) and Grimes (1975:341) argued that the *wh*-clause of specificational pseudoclefts should be analyzed as a question. Declerck further suggests that the fact that specificational pseudoclefts carry an existence presupposition is what makes

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argument, in which case the *wh*-clause complement of *know* is ambiguous:

322. I know what Mary saw.

a) Speaker knows the membership of the set of true propositions Mary saw X.

b) Speaker is acquainted with all the things that Mary saw.

them sound off out of context.<sup>11</sup>

In response, I suggest that having an existence presupposition cannot be what distinguishes specificational pseudoclefts (and QAPs) from predicational ones,<sup>12</sup> since both specificational (327) and predicational (328) pseudoclefts presuppose existence:

327. What John got was a book. [SPC/\*PPC]  
 328. What John got was interesting. [\*SPC/PPC]

In both (327) and (328), the presupposition of existence in the *wh*-clause survives negation:

327. What John got was not a book. [SPC/\*PPC]  
      $\rightsquigarrow$  John got something.  
      $\rightsquigarrow$   $\neg$  John got a book.
328. What John got was not interesting. [\*SPC/PPC]  
      $\rightsquigarrow$  John got something.  
      $\rightsquigarrow$   $\neg$  John got something interesting.

Moreover, the presupposition projects in both (327) and (328) when the pseudoclefts are embedded in a conditional:

327. If [what John got was a book] then I'll be pleased. [SPC/\*PPC]  
      $\rightsquigarrow$  John got something.
328. If [what John got was interesting] then I'll be pleased. [\*SPC/PPC]  
      $\rightsquigarrow$  John got something.

---

<sup>11</sup>He also connects this existence presupposition to the claim that counterweight of a specificational pseudocleft such as (326) cannot be a “negative pronoun” (Declerck, 1988:86) such as *nothing*, *nobody* etc:

326. Who came in was XP

If XP in (326) were ‘nobody’ then the result would be that (326) presupposes someone came in and asserts that no one did.

<sup>12</sup>Furthermore, free relatives such as (b) have also been argued to have an existence “suggestion”:

- a. Anyone who handed in the assignment late failed.  
 b. [Whoever handed in the assignment late] failed.

As Elliot (1971) points out, the (b) sentence “strongly suggests the existence of a delinquent student”. Jacobson (1995: 473) argues that this is not a genuine entailment, since if no atomic individual handed in the assignment late, then ‘*whoever handed in the assignment late*’ is still true of the null set. For Jacobson, the denotation of a FR presupposes that there is a maximal entity that satisfies the predicate P, though possibly without any subparts.

Therefore, I argue that the reason why specificational pseudoclefts sound odd out of the blue cannot be due to their existence presupposition, because predicational pseudoclefts carry the same presupposition but do not sound as odd out of context. Instead, I suggest that the oddness of specificational pseudoclefts relative to predicational ones is connected to the fact that the former are focus constructions while the latter are not. I expand on this claim below.

Recall that Declerck (1984:253) suggests that specificational pseudoclefts must “link up” with the preceding context in a way that predicational pseudoclefts do not, where one consequence of this “linking” is that specificational pseudoclefts sound odd out of the blue because it is “a natural fact that we don’t tell someone the answer to a question unless we assume it is something they already have in mind” (Declerck, 1988:9). I think these intuitions are correct, but I think that tying them to the existence presupposition of the *wh*-clause will not give us any insight, for the reasons just mentioned. Instead, I speculate that the oddness is due to focus, in particular, due to the requirements of Rooth’s focus operator,  $\sim$ . Recall that the  $\sim$  operator is an anaphor that requires an antecedent: a set of alternatives. Like any anaphor,  $\sim$  cannot be interpreted if no antecedent is present.

329. What John got was a book.

Thus, I suggest (329) that sounds odd out of the blue because there must be some relevant set of alternatives presupposed, but in an out-of-context situation, the chance is higher that no presupposed alternative set is present. As a focus sensitive item, the presupposition of  $\sim$  is difficult to accommodate:  $\sim$  fails to find an antecedent and the derivation in (329) crashes.

I want to point out one possible counterexample to the claim that *wh*-questions have an existence presupposition. Consider question-answer dialogue in (330) due to Rooth (1985:11):

330. A: Who did John introduce Bill to?

B: John introduces Bill to SUE.

Jackendoff (1972) rejects the claim that (330.A) presupposes that John introduced Bill to someone, noting that it is possible to respond to (330.A) by saying John introduced Bill to NOBODY, which has the same focal properties but explicitly denies the alleged presupposition. Furthermore, Jacobson (1995:477) suggests that while *wh*-questions introduced by *what*+N<sub>sg</sub> (331) do entail existence, but that those introduced by *what*+N<sub>pl</sub> (332) do not:

331. John knows **what book** is on the reading list– #namely none.

332. John knows **what books** are on the reading list– namely none.

I am not sure what to make of these examples. Jackendoff’s NOBODY example in particular does not seem like denying a presupposition. Nevertheless, I conclude that existence is presupposed in all three: in the *wh*-clause of predicational pseudoclefts, in *wh*-clause of specificational pseudoclefts and –modulo cases like Jackendoff’s– in *wh*-questions. The oddness of specificational pseudoclefts out of context is related to the presuppositions of the focus operator  $\sim$ .

### 7.4.2 Negation

I want to briefly address the role of negation in pseudoclefts. I suggest that in some cases negation in the *wh*-clause can render a pseudocleft semantically odd (though not completely incoherent), possibly due maximal informativity requirements as in Fox and Hackl (2006) and also Beck and Rullmann (1999). First, consider the unambiguously predicational pseudoclefts below:

334. a) [What John ate] wasn't tasty  
 b) [What John didn't eat] was tasty

In (334a), negation on the copular head of the entire pseudocleft expresses that the maximal thing that John ate was not tasty. If John ate apple and a pear, but he didn't eat cake, then (334a) is true if the maximal individual he ate, apple+pear, was not tasty. In contrast, when is negation inside *wh*-clause as in (334b), the pseudocleft expresses that the maximal thing that John didn't eat was tasty. For example, if John is at a party where cake and apples are being served, and if he eat the apples but refuses the cake, then (334b) is true if that the maximal thing John did NOT eat, in this case the cake, was tasty.

There are three things that I want to point out about (334b). First, (334b) says nothing about what John *did* eat– in the party situation above, there is no requirement that the thing John *did* eat (the apple) be tasty or not. The only requirement is that the thing(s) that John did *not* eat (the cake) be tasty. Related to this point, (334b) is also compatible with John eating nothing at all. If John refused to eat both the cake and the apples, (334b) can still be true as long as both the apples and cake are tasty. Finally, the most important point is that the pseudocleft in (334b) is odd without the party example to delimit the context. I suggest this could be because negation inside the FR in (334b) violates maximality requirements (Rullmann, 2005; Fox and Hackl 2006), like it does in the degree question (and the definite) below:

335. \*How much does John not weigh?  
 336. \*I have the amount of water you don't.

Following Fox and Hackl, (335) asks for the most informative true proposition of the form *John does not weight d-pounds*. In this case, the most informative true proposition is the one where *d* is the minimal degree *d*, as *John does not weight d-pounds* becomes more informative the smaller *d* is. From density it follows that there is no minimal member in this set (Fox and Hackl, 2006:550): (335) is incoherent because there is no minimal degree *d* that yield a true proposition of the form John does not weight *d*-pounds– if John weighs exactly 150 pounds then for any degree *d* in the set of degrees greater than 150, John doesn't weigh *d* pounds.

Similarly, in the case of (334b), there is no most informative thing *x* such that John did not eat *x* is true. I suggest that in general, pseudoclefts with negation inside the *wh*-clause like (334b) will run into this kind of problem. Interestingly, the “oddness” in pseudoclefts doesn't seem to be to the point of incoherence– to my ear, none of the (b) pseudoclefts sound quite as bad the examples in (335-336). Probably

because Fox and Hackl's examples are degree questions, whereas the *wh*-clause in the (b) pseudoclefts here are non-monotonic.

Consider now the unambiguously specificational pseudoclefts in (337):

337. a) [What John hates] isn't himself.  
 b) [What John doesn't hate] is himself.

In (337a), negating the copular head of the entire pseudocleft expresses that the most informative true answer to the question "what does John hate" is not John hates himself. There is a contrastive feeling to (337a), because it leaves open what exactly *is* the most informative true answer to that question.

In (337b), negation inside the *wh*-clause expresses the most informative true answer to the question "what doesn't John hate?" is John doesn't hate himself. Thus, John hates everyone/thing else, but he does not hate himself. Like in (334b), the oddness of (337b) is due to the maximality requirement in the question "what doesn't John hate?" (see Beck and Rullmann 1999 for a discussion of these kinds of cases in questions).

Turning now to ambiguous pseudoclefts such as (338), I suggest that ambiguity remains even in negative contexts:

338. a) [What John ate] wasn't a donut and a croissant.  
 b) [What John didn't eat] was a donut and a croissant.

In (338a) it seems to me that both predicational and specificational readings are available. In a predicational reading, (338a) is true if John ate something, but that that thing was not a cronut. Perhaps the thing he didn't eat was a muffin, or a danish. In a specificational reading, (338a) is true if John ate something, but he didn't eat a donut and he didn't eat a croissant. There might be a slight preference for the predicational reading—my impression is that a specificational reading is still possible, but is easier to get if the conjunction is exchanged for a disjunction.

I suggest that both readings are also available in (338b), though again all the (b) examples we have seen are slightly strange. In a predicational reading, (338b) is true if, for example, John is at a party where cronuts are being served, but he didn't eat them (indeed, maybe he didn't eat anything at all). In a specificational reading, (338b) is true if the answer to the (odd) question "what didn't John eat?" is John didn't eat a donut and he didn't eat a croissant.

## 7.5 Summary: Semantics of Pseudoclefts

In conclusion, in the proposed analysis of predicational pseudoclefts the '*what John ate*' denotes an entity, the counterweight is a predicate, and the copula is vacuous. On the other hand, in the specificational proposal '*what John ate*' denotes a proposition, the counterweight is also a proposition, and the copula denotes identity. The analyses of the *wh*-clause in both predicational and specificational pseudoclefts make use the Maximal Informativity operator,  $MAX_{INF}$ , where the former uses maximality

over the domain of individuals, and the latter uses maximal informativity over a set of propositions.

I have provided a general  $MAX_{INF}$  template that can be used across these different semantic types, highlighting that both constructions are closely related semantically (both employing  $MAX_{INF}$ ), differing mainly in terms of which semantic types  $MAX_{INF}$  operates over. While this difference is forced by the particular syntactic assumptions outlined in Chapter 5, note that it is a small local one, the type of  $\alpha$  in input to  $MAX_{INF}$ , that relates naturally to the syntax.

Now that I have outlined my semantic proposal of pseudoclefts, I want to briefly revisit some of the previous approaches summarized in Chapter 4. First, I would like to address some important differences between my proposal and that of Schlenker (2003) regarding the semantics of the *wh*-cause. Recall that Schlenker adopts Groenendijk and Stokhof's semantics of questions in his approach to the specificational pseudocleft's *wh*-clause, arguing that it is "a more elegant solution" (p.184) than the semantics of Karttunen. I suggest that in fact a Karttunen semantics is superior, since it can be implemented in such a way that brings out the similarities between specificational and predicational pseudoclefts. This is implemented by pairing Karttunen's semantics of questions with the maximal informativity operator  $MAX_{INF}$ .

The end result in both my and Schlenker's analyses is that the *wh*-clause of a specificational pseudocleft comes to denote the most informative true answer. In my proposal, the *wh*-clause has the Karttunen denotation of a question— the set of true answers. The operator  $MAX_{INF}$  orders this set of propositions and returns the strongest one. Crucially,  $MAX_{INF}$  is also involved in the derivation of *predicational* pseudoclefts, thus my proposal is nice because it posits the same operator,  $MAX_{INF}$ , as being behind the maximality inferences in both FR and interrogative *wh*-constructions. This is something that Jacobson argues for as well (1995:452), though she uses the operator  $MAX$  instead of  $MAX_{INF}$ .

In contrast, since Schlenker adopts Groenendijk and Stokhof's semantics of questions, then the *wh*-clause already starts out denoting the most informative true answer. Accordingly, no single operator relates the maximality in the *wh*-expressions of predicational and specificational pseudoclefts, since in the latter Schlenker's assumptions regarding the semantics of questions means that the 'maximality work' is already done.

Next, I want to point out a potentially problematic assumption of the reconstruction-based approaches such as that of Heycock and Kroch (1999) and Bošković (1997). Recall that such approaches instead treat the pseudoclefts in (339) as being identical to their "simple declarative counterpart" in (400):

339. a) What John ate is ~~John ate~~ an apple.  
 b) ~~John ate~~ an apple is what John ate.
340. John ate an apple.

That (340) is taken as the LF paraphrase of (339) could be problematic, especially for Bošković where a pseudocleft is treated as being identical to its paraphrase. Thus, for Bošković, for the purposes of LF (339) is equivalent to (340). This is less of a problem

for Heycock and Kroch (1999), as the paraphrase in (340) is obtained slightly later in the derivation, therefore (339) and (340) are not yet equivalent until post-LF.

In my own proposal, I have tried to argue that a better paraphrase for the pseudoclefts in (337) is “the most informative true answer to the question ‘what did John eat’ is ‘John ate an apple’”. If Bošković is correct that the LF paraphrase of (339) is (340), then it is not clear how his analysis is compatible with (339) having the intuitive exhaustive feeling that ‘an apple’ is the only thing that John ate.

Although Declerck claims that specificational clefts have “non-cleft congeners” (1988:23) with which they are truth-conditionally identical, I follow Seuren who argues that a “cleft construction makes for certain truth-conditional differences with respect to ‘straight’ sentences” (1985:300). Seuren is making a slightly different argument from the one discussed here,<sup>13</sup> but the relevant point is that the difference between cleft sentences and ‘straight’ sentences is not purely pragmatic, rather it is truth-conditional. For example, recall from section 7.2 that in a world in which John ate an apple and a pear, (339) would be false while (340) would be true.

339. a) What John ate is ~~John~~ ate an apple.  
 b) ~~John~~ ate an apple is what John ate.

340. John ate an apple.

Given the contrast between (339) and (340), it seems potentially problematic for analysis like Bošković’s in which (339) and (340) are equivalent at LF.

Lastly, I would like to address a possible problem with den Dikken et al.’s (2000) analysis of the *wh*-clause in reverse specificational pseudoclefts. It seems like their treatment of these pseudoclefts might conflict with intuitions about exhaustivity. Recall that for den Dikken et al. the *wh*-clause in reverse specificational pseudoclefts such as (341) is a free relative predicate (type  $\langle e,t \rangle$ ):

341. My hat is [what I forgot to bring].

There is the intuitive exhaustive feeling in (341) that ‘*my hat*’ is the only thing that I forgot to bring. In my own proposal, this stems from maximality in the *wh*-clause of (341) which I suggest has the denotation of (the most informative true answer to) a question (type  $\langle s,t \rangle$ ). In contrast, for den Dikken, the *wh*-clause of (341) is a predicate with ‘*my hat*’ as its argument.

Given the assumption that the *wh*-clause is type  $\langle e,t \rangle$ , it is not clear how den

<sup>13</sup>Seuren points to the contrast between (i) and (ii):

- i. a) Harry laughed.  
 b) Harry didn’t laugh.  
 ii. a) The one who laughed was Harry  
 b) The one who didn’t laugh was Harry.

He claims that uttering (ia) in a situation where nobody laughed is simply (minimally) false, while (ib) is true. In contrast, uttering (iia) in the same situation will be “radically false” and (iib) will also be false. Declerck (1988: p.24) objects to Seuren, noting that (ia) is not specificational. Thus, while there are indeed truth-conditional differences between (ia) and (iia), this does not suggest that specificational sentences and their corresponding clefts have different truth-conditions.

Dikken et al. propose to capture the exhaustive flavour of (341). For Jacobson (1995:466), a FR type-shifting from predicate ( $\langle e, t \rangle$ ) to maximal plural entity (type  $e$ ) would be what gives rise to the feeling in (341) that ‘*my hat*’ is the only thing that I forgot to bring. If, however, for den Dikken et al. the FR in (341) never type shifts to type  $e$ , it then doesn’t denote “the maximal thing that I forgot to bring”.

This might predict a contrast between reversed (341) and regular (342) specificational pseudoclefts, where only the latter expresses that ‘*my hat*’ is the only thing that I forgot to bring:

341. [My hat] is what I forgot to bring.

342. What I forgot to bring is [my hat].

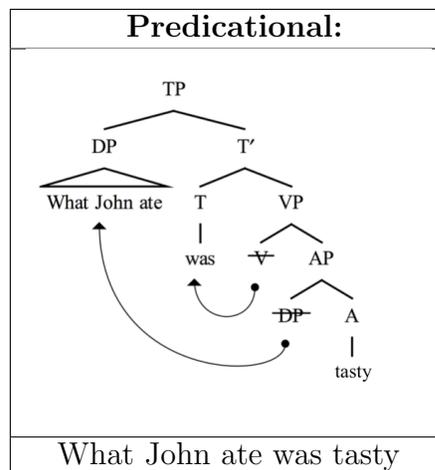
I am not sure what den Dikken et al. would say about this. Maximality and exhaustivity are related, but distinct, so although I propose that the exhaustive feeling in (341-342) is related to a maximality operator in the *wh*-clause, it is possible that den Dikken arrive at the same feeling by proposing that the counterweight of (341-342) is parsed with an exhaustivity operator.

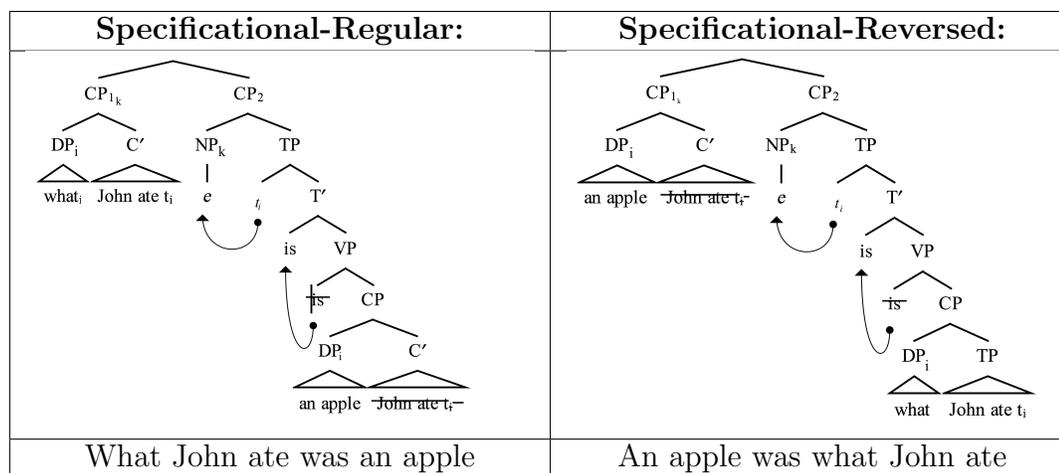
# Chapter 8

## Conclusion

In conclusion, I have presented syntactic and semantic analyses for both kinds pseudoclefts. Syntactically, a predicational pseudocleft is analyzed as a predicational copular clause in which a FR is the subject of the predicate counterweight. In contrast, I adopt a deletion-based approach for specificational pseudoclefts: both regular and reversed specificational pseudoclefts are analyzed as having a bi-clausal structure in which the pre-copular constituent is left dislocated and the counterweight is a CP. The two clauses on either side of the copula are related to each other as question and answer, with the *wh*-clause denoting the former and the counterweight the latter.

Figure 14





In addition, I proposed semantic analyses for predicational and specificational pseudoclefts that could be paired with this syntactic treatment. For predicational pseudoclefts (in which the counterweight is a predicate) I have argued that the *wh*-clause denotes an individual and the copula is vacuous. For specificational pseudoclefts (in which the counterweight is a proposition) I proposed that the *wh*-clause denotes a question and the copula denotes identity. The analyses of both predicational and specificational pseudoclefts made use of the maximality operator  $MAX_{INF}$ . In the former,  $MAX_{INF}$  operates over sets of individuals, resulting in the paraphrase for a predicational pseudocleft like that in Figure 14 being “the maximal thing that John ate is tasty”. In the latter,  $MAX_{INF}$  operates over sets of propositions, yielding the paraphrase for the specificational pseudocleft in Figure 14 “the most informative true answer to the question ‘what did John eat?’ is ‘John ate an apple’”.

The challenge for this kind of account of specificational pseudoclefts lies in “motivating the semantic and syntactic assumptions necessary for this very simple and attractive account of connectivity effects” (Mikkelsen, 2011:1819). I have tried to do this in Chapters 5 and 6, where I provided evidence that the counterweight is a full clause, and that the *wh*-clause is an embedded interrogative. Importantly, I suggest that once a question-answer approach to specificational pseudoclefts is adopted it buys us a lot more than just an attractive account of connectivity effects. From the semantic and syntactic proposals in which specificational pseudoclefts are positioned interpretively and derivationally alongside QAPs follow a number of properties, including the constraints on F-marking in the counterweight, prosodic constraints, some of the presupposition facts, as well as things like conditions on ellipsis and exhaustivity implicatures.

Finally, on a terminological note recall that there is some debate about the scope of the term ‘pseudocleft’—some use it to refer to both predicational and specificational *wh*-sentences (den Dikken et al. 2000; Higgins 1976; others), while others restrict the term to specificational *wh*-sentences only (Akmajian 1979; Bachenko 1976; Prince 1978; others). In the latter view, predicational *wh*-sentences are not pseudoclefts as they are not focus constructions: they do not have a fixed information structure in which the counterweight focuses a sub-constituent of a corresponding non-cleft.

That being said, one thing that this thesis contributes is an articulated semantic

analysis for both kinds of pseudoclefts– in the majority of the literature the focus has been on specificational pseudoclefts only. I am not aware of other proposals which lay out the differences in the semantic compositions of predicational and specificational pseudoclefts while also highlighting that the two are in fact quite similar. Based on these semantics similarities, in this thesis I adopt the view that the term ‘pseudocleft’ can be used for both predicational and specificational types.

## Appendices

### Appendix A

Inconclusive evidence regarding the status of the *wh*-clause in specificational pseudoclefts.

#### A1: What restriction

Some have argued that specificational pseudoclefts are restricted to *what* (Akmajian 1979; Bošković 1997; Declerck 1988:41; den Dikken et al. 2000; den Dikken 2006; Higgins 1979; McCawley 1998:60, others). Clearly we are not limited to asking *what* questions in general. If a *what*-restriction exists for specificational pseudoclefts, and further if a *what*-preference exists for FRs, then this would support a characterization of the *wh*-clause of a specificational pseudocleft as a FR.

Caponigro and Heller (2007:250) argue that the *wh*-preferences in specificational pseudoclefts mirror those of FRs. For example, they claim that FRs and specificational pseudoclefts introduced by *what* and *where* are fully acceptable:

348. a) I have lunch [where she has lunch].  
 b) [Where she has lunch] is at the cafeteria.

349. a) I read [what John is reading].  
 b) [What John is reading] is Ulysses.

However, FRs and specificational pseudoclefts with *who* and somewhat less acceptable:

350. a) I met [who gave you the flowers].  
 b) ?? [Who gave you the flowers] was your advisor.

Finally, Caponigro and Heller claim that FRs and specificational pseudoclefts introduced by *which*+NP or by *how much* are completely unacceptable:

351. a) \*I read [which book John is reading].  
 b) \* [Which book John is reading] is Ulysses.

352. a) \*I weigh [how much Sue weighs].  
 b) \*[How much Sue weighs] is 130 pounds.

There are several reasons why I think this doesn't not undermine an interrogative analysis. First, I don't think that FRs even have a *what*-preference— for me the FRs in (80-81) are perfectly acceptable. Indeed, den Dikken suggests that *wh*-elements other than *what* “occur readily in FRs” (2006:379), and in one of the first treatments of FRs in Bresnan and Grimshaw (1978) they include many non-*what* FRs:

353. a) Please, return [what you have taken from here].  
 b) I'll sing [whichever songs you want me to sing].  
 c) I'll sing [however carefully you want me to sing].

Second, I suggest there is reason to doubt that the *what*-restriction even holds of specificational pseudoclefts themselves.<sup>1</sup> For example, Bachenko (1976:9) and Declerck (1988:46) contend that in fact a variety of different *wh*-elements can be found in a specificational pseudocleft's *wh*-clause, as in the examples (354a-d) due to Higgins (1979:2) and (354e) due to Bachenko (1976:9):

354. a) **Who** told me about it was Jane.  
 b) **Where** he spends his summers is in Chester.  
 c) **How** he cut his face was by trying to eat while shaving.  
 d) **Why** they did it was to impress Mary.  
 e) **When** they will leave is in August.

In addition, I find the Caponigro and Heller's pseudocleft in (80-81) to be acceptable, and when I tested is the *what*-restriction in my own study, the average for *who* in regular and reversed specificational pseudoclefts was 4.4 and 4.5, respectively. In FRs the average for *who* was 5.5. The average for *where* in regular and reversed specificational pseudoclefts was 4.6 and 5.6, respectively, and for FRs it was 6.1. In predicational pseudoclefts the average for *who* was 4 and *where* was 3.7.

In sum, if it is true that non-*what wh*-phrases can appear in all three *wh*-clauses (specificational pseudoclefts, interrogatives and FRs), then this is not a place where we will be able to tease them apart. Furthermore, even if a *what*-restriction does hold for specificational pseudocleft, it doesn't for FRs. As den Dikken notes: "we are not aware of any approach to the syntax of the *wh*-clause of specificational pseudoclefts which has succeeded in accounting for the restrictions on the form of the *wh*-element" (2006:379).

## A2: Complex *wh*-phrases

Zwicky argues that complex *wh*-phrases serve as evidence against an interrogative analysis. For him, complex *wh*-phrases are allowed in interrogatives (355), but not in free relatives (356) or specificational pseudoclefts (357). These examples are taken from Zwicky (1986:117):

355. a) What/which lamp would you like?  
 b) I wonder what/which lamp you'd like.
356. \*What/which stone he had in his hand sparkled.
357. \*What/which bird Herman just noticed was an ivory spoonbill.

<sup>1</sup>Declerck (1988:234) suggests that a dispreference for *who* in specificational pseudoclefts could be due to issues of length/weight: *who* is more acceptable in specificational pseudoclefts with longer counterweights. Furthermore, reversed specificational pseudoclefts are less restricted than regular ones with respect to the *wh*-elements they allow (Declerck 1988:41).

Contra Zwicky, Dayal (1997) and Šimík (2017) both note that complex *wh*-phrases are permitted in FRs, though *-ever* must be present:

358. a) The director will nominate [whichever student the teacher selected]. (Šimík, 2017)  
 b) Whichever movie plays at the Avon makes a lot of money. (Dayal, 1997)

The observation that *-ever* FRs (358) and interrogatives (355) both allow complex *wh*-phrases suggests that the ban in specificational pseudoclefts does not serve well as (counter)-evidence for either view.

### A3: Else/ever

While *else* and *ever* are permitted in both matrix and embedded *wh*-questions such (359), they are not allowed in FRs (360):

359. a) Where else did he go? (Zwicky, 1986:117)  
 b) I can't imagine [where else he went]. (Zwicky, 1986:117)  
 c) [What he ever worked] on is simply not known. (den Dikken, 2006:376)
360. a) \*[What he ever worked] on took him a long time to finish. (den Dikken, 2006:376)  
 b) \*[What else she has in her hand] gave off the scent of amber. (Zwicky, 1986:117)

Some use the paradigm above to support an interrogative analysis, arguing that specificational pseudoclefts such as (361-362) pattern with interrogatives in also allowing *else/ever* (Schlenker 2003; Zwicky, 1986:117):

361. a) What else he saw was a crested grebe. (Zwicky, 1986:117)  
 b) A crested grebe was what else he saw.
362. a) What else he cooked was spaghetti flambé. (Schlenker, 2003:168)  
 b) Spaghetti flambé was what else he cooked.

In contrast, Akmajian (1979:75) uses the contrast in (359-360) to support a FR analysis, claiming that the *wh*-clause of specificational pseudoclefts patterns with FRs in disallowing *else/ever* :

363. a. \*What else he bought was a car [SPC]  
 b. \*What he ever worked on was his thesis [SPC]  
 c. \*What else he bought was very expensive [SPC]

Given these contradicting judgements, appealing to *else/ever* is not likely to serve particularly strongly as evidence for either side.

#### A4: Topicalization

Topicalization is another piece of evidence that has been cited to support the view that the *wh*- clause of a specificational pseudocleft is an interrogative: FRs disallow topicalization (364), whereas both interrogatives (365) and the *wh*-clause in specificational pseudoclefts (366) permit it. The examples below are due to den Dikken (2006):

364. \*[To Mary, what he gave] caused a scandal. [FR]  
 365. To Mary, what will he give? [Int]  
 366. [To Mary, what he will never give] is any wine. [SPC]

This is not necessarily sufficient evidence to conclude that the *wh*-clause of a specificational pseudocleft is an interrogative. First, the judgements in (364-366) are likely fairly controversial. Second, in the case of topicalization, this was claimed to support an interrogative analysis due to the similarities between the specificational pseudocleft's *wh*-clause and (matrix) interrogatives in both allowing topicalization. However, in the proposed analysis the *wh*-clause of a specificational pseudocleft is analyzed as an embedded question, not a matrix one. Yet, when embedded questions tested for topicalization, they do not pattern with specificational pseudoclefts. Instead, embedded interrogatives disallow topicalization, as is illustrated in (367):

367. \*?I wonder [to Mary, what he will give].

To further complicate the matter, it appears that in *predicational* pseudoclefts such as (368) topicalization is somewhat okay, or at the very least it is slightly better than in the embedded interrogative in (367).

368. ?[To Mary, what he gave] was expensive [PPC]

However, we wouldn't want to use (368) to argue that the *wh*-clause of a predicational pseudocleft is an interrogative for the reasons outlined in section 6. Since in predicational pseudoclefts the *wh*-clause is fairly uncontroversially assumed to a FR, should we therefore conclude from (368) that topicalization *is* permitted in free relatives, contra (364)?

Ultimately, the (lack of) ability to topicalize does not seem a good tool to use to distinguish between free relatives and interrogatives. In addition, the judgments from topicalization are quite murky, therefore citing topicalization does not seem to serve that well as evidence that the *wh*-clause of a specificational pseudoclefts is an interrogative, though neither does it particularly support the view that the *wh*-clause is a FR.

#### A5: PP Pied-Piping

Den Dikken et al. (2000) and den Dikken (2006) note that in some languages PP pied-piping is allowed in interrogatives such as (370), whereas in FRs such as (369)

it is forbidden (Bresnan and Grimshaw 1978; den Dikken et al. 2000:72; den Dikken, 2006:369). In German, the *wh*-clause of a specificational pseudocleft such as (371) patterns with the interrogatives in also allowing PP pied-piping:

369. \*Mit wem Maria gesprochen hatte kam gerade ins Zimmer [FR]  
 with whom Maria spoken has came just into-the room
370. Mit wem hat Maria gesprochen? [Interrogative]  
 with whom has Maria spoken
371. Mit wem Maria gesprochen hatte, war mit Peter [SPC]  
 with whom Maria spoken had was with Peter

It has been pointed out to me by Dennis Ott (p.c.) that (369) is somewhat unacceptable, not because PP pied-piping is forbidden in FRs, but because in (76) the PP pied-piping takes place in a subject FR. Since a FR has the category of its *wh*-phrase, the result in (369) is that we end up with a PP agent subject.

It is fine to pied-pipe in object FRs (as in the German version of ‘*I talked to whom Mary has talked*’)<sup>2</sup>, so this datapoint is not strong evidence that the *wh*-clause of a specificational pseudocleft is an interrogative–specificational pseudoclefts, interrogatives and FRs all pattern together in allowing PP pied-piping.

## Appendix B

I conducted a small web-based study on SurveyMonkey. Participants were undergraduate students of cognitive science at Carleton University recruited through SONA. They received a partial course credit for their participation.

Participants were given a sentence and asked to judge how natural it sounded on a scale of 1-7. Stimuli included both targets and fillers. All responses were anonymous. Judgments from 57 native speakers of English were collected and descriptive statistics were run.

### Instructions for participants:

Please read the following information carefully before proceeding. You will see a number of sentences. Please rate each sentence according to how natural it sounds. Rank the sentences on a scale from 1 to 7, where 1 means “This does not sound like an English sentence” and 7 means “This sounds like a completely natural sentence of English.” There are no correct or incorrect answers, we are simply interested in your intuitions.

For example, if you see the sentence “John left early this morning” and you think that sounds like a natural sentence of English, you would give it a 7. If you see the example “Man left roach a” and you think that does not sound like English, you would give it a 1.

Please rate each sentence according to how natural it sounds. There are no correct or incorrect answers, we are simply interested in your intuitions.

<sup>2</sup>Jacobson (1995:464) notes that there is a minority of speakers who find such examples in English to be perfectly acceptable.

**Stimuli**Targets:

What John does is important.  
What I cooked was delicious.  
What Karen is is definitely not important.  
Who Harold hates is probably unemployed.  
What Smith wants is certainly expensive.  
What Piper cooks is usually disgusting.  
What Karen does seems to be unimportant.  
Who Sam hates happens to be unemployed.  
What Smith wants seems to be expensive.  
What Piper cooks tends to be disgusting.  
What I want to do is buy a new car.  
What David baked was a carrot cake.  
What Smith wants is certainly expensive.  
What Piper cooks is usually disgusting.  
What Jones is is probably proud of himself.  
What Mike brought is probably the casserole.  
What Sarah is in charge of cleaning is usually the bathroom.  
What Seth broke is clearly the lamp.  
What John hates seems to be onions.  
What Fiona is seems to be proud of herself.  
What Mike did seems to be clean his room.  
What Beth detests happens to be Mary's cat.  
Buy a new car is what I want to do.  
A carrot cake was what Tom baked.  
A book is what John read.  
Proud of himself is probably what John is.  
The casserole is probably what Mike brought.  
The bedroom is usually what Sarah is in charge of cleaning.  
The lamp is clearly what Seth broke.  
Proud of herself seems to be what Kylie is.  
Onions seem to be what John hates.  
Mary's cat happens to be what John detests.  
Clean his room seems to be what Mike did.

Fillers:

We visited one museum per day.  
It seems like Fred is upset.  
Lisa and Peter visited a museum per day.  
Sophie laughed herself through life.  
The bus will be early.  
The students applied to the same school.  
The man was bleeding.

Laura wrote her essay.  
Nancy's going shopping.  
The plane will be on time.  
The students applied to the same school.  
We're eating lunch at noon.  
The taxi is going too fast.  
A variety of subjects interest me greatly.  
That's the bridge the famous singer was found under.  
The mathematicians disproved some of the theories.  
It would have been nice to have been invited.  
Jeremy thinks that tomorrow will be fun.  
If I wanted you to help I would have asked.  
Sometimes the roof leaks when it rains.  
Dana never believed anything he said.  
Are you coming to visit me soon?  
Did you remember to feed the fish?  
Is that man somebody I should avoid?  
Did you tell my mother that I would talk to her soon?  
Should we start thinking about buying a new house?  
Zara didn't want Peter to know that she stole the money.  
Ben made a big fuss because his wife forgot their anniversary.  
Amber wants to swim in the ocean.  
It was John that Sue thought that left.  
Most the people likes partied.  
No nurses treated a patient each.  
Susie left early, and so didn't I.  
The chefs cooked a pastas.  
The listeners loved he.  
The driver seemed like the bus was dirty.  
A student but John failed.  
The happy went to school alone.  
They doesnt want to drink any more wine.  
Matt and Jim ate any pizza.  
If you didnt wanted to go you should have just told me.  
Heather stopped to pet every the dog.  
The pilot will to fly the plane over the ocean.  
Gillian deserves to have privacy her respect.  
The new office building will development not on time.  
Billys mom wont letting him watching TV before bed.  
Any babies didn't cry on the flight.  
At her birthday party yesterday, Jamie got a lots of present.  
Dylan broken his only guitar.  
The king expected they to win the race.  
Did Mary tell Fiona to went out?  
Eat Alicia her birthday cake?

A few sand are in my shoe.  
When I was younger I wanted that I to be an astronaut.  
It only takes a one minutes to cook.  
Didnt Mary bought a new house?  
Is Wyatt remember to turn off the lights before leaving?  
Some students visited their professor in weeks.  
Not everyone is good at singing.  
What I am liking?

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