61 Specificational Copular Sentences and Pseudoclefts

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This is a case study on specificational copular sentences, including specificational pseudoclefts. Before we can embark on a discussion of the specifics of these constructions, we first of all need to delineate a number of terminological domains. will address the typology of copular sentences in some detail, laying out the various types of copular constructions identified in the literature and highlighting their properties and differences. will repeat the typological exercise of with specific reference to a subtype of copular sentence referred to as the pseudocleft construction. will subsequently home in on specificational copular sentences (pseudocleft and non-cleft alike) and discuss their characteristics, addressing questions arising specifically in the context of specificational pseudoclefts and discussing the various analyses proposed in the literature.

1 Introduction: types of copular sentences

1.1 Copular sentences: preliminaries

In this work, by copular sentence in the broad sense of the term we understand any sentence type of the general schema in (1):

(1)

General format of copular sentences:
XP *be* YP [where YP ≠ participial VP]

The schema in (1) gives us a variety of different types of copular sentences, some examples of which are given in (2–12) (see Blom and Daalder 1977 : 115; Safir 1983 ; Den Dikken 1987 ; Neeleman 1997 : 106–110 on examples of the type in (5–7), featuring what Safir has called 'Honorary NPs'; Blom and Daalder and Den Dikken propose to analyze such subjects as elliptical NPs, but we will not take a stand on this matter, which is orthogonal to our concerns in this work):

(2)	My colleagues are nice people.	XP = NP	YP = NP
(3)	My colleagues are nice.	XP = NP	YP = AP
(4)	My colleagues are at the office.	XP = NP	YP = PP
(5)	Under the bed is a good hiding place.	XP = PP	YP = NP
(6)	Down the hill is easier than up the hill.	XP = PP	YP = AP
(7)	Bashful is a terrible thing to be.	XP = AP	YP = NP
(8)	That they lost is an unfortunate thing.	XP = CP	YP = NP
(9)	That they lost is unfortunate.	XP = CP	YP = AP

		XP =	
(10)	What happened was they lost the game.	XP = CP/NP	YP = IP
(11)	What they did was lose the game.	XP = CP/NP	YP = VP
(12)	Lose the game is what they did.	XP = VP	YP = CP/NP

Exemplification is not exhaustive here, and certain non-trivial questions are raised already at this elementary stage – for instance, concerning the analysis of constructions like (10–12), particular types of pseudocleft construction; and about the accidental or principled non-existence of certain XP/YP combinations in some or all languages. (In particular, we need to exempt from the schema in (1) constructions in which YP is a participial VP – these are either passives (if the V-head is a past participle) or progressives (where the V-head is a gerund or present participle), neither 'auxiliary construction' generally being included in the set of copular sentences; we will follow standard practice here.)

At this elementary stage in the discussion these questions need not concern us. We will return to the former question ( ); the latter will not play a role in the discussion to follow at all.

Note that although the schema in (1) is presented as a linear string, we make no *a priori* claims here about the word order of copular sentences. Indeed, one of the things we will have occasion to discuss in great detail in this work is the fact that a specific subtype of copular sentence, the specificational copular sentence, allows its major constituents to 'change places': one often finds that in such sentences each can be on either side of the copula.

Specificational copular sentences are just one of a variety of copular sentence types distinguished in the literature on copular sentences. Before we will be able to properly address the specifics of these specificational constructions, we will first of all need to outline the typology of copular sentences, which will serve as a backdrop to the discussion to follow. Thus, in we will go through increasingly more

detailed typologies of (largely double-NP) copular sentences, then proceeding to attempts at reducing the fine-grained typologies to a simpler pattern ( ), and finally ( ) raising the question of whether the typology of copular sentences (however coarse- or fine-grained) should be given shape: in terms of properties of the copula or in terms of properties of the structure/derivation/major constituents of the constructions in question.

1.2 Types of copular sentences (I): a basic two-way split

That not all copular constructions are of the same type is not a contentious claim. There is a general consensus that at least two types need to be distinguished. Basing themselves typically on the referentiality of the second, or post-copular noun phrase in a 'straight' or 'canonical' double-NP copular sentence of the general format NP_1 is NP_2 (cf. (13) for an example), scholars have made a general distinction between double-NP copular sentences in which NP_2 is non-referential and ones in which NP_2 is referential. Even when it comes to this simple two-way split, however, terminological proliferation is rampant. The overview in (14), which aims to be representative rather than exhaustive, gives the reader a glimpse of the kinds of labels assigned to the two types of copular sentence, with references to their inventors in the right-hand column. In what follows we will use the boldface labels **predicational** (*food for the dog* in (13) predicates a property of *his supper*) and **specificational** (*food for the dog* specifies what *his supper* consists of), due to Akmajian (1979):

(13)

		His supper is food for the dog.
	a.	**predicational**: 'His supper serves as food for the dog.'
	b.	**specificational**: 'He eats food for the dog for his supper.'

(14)

(14)

A basic two-way split:		
a. NP$_2$= non-referential	b. NP$_2$= referential	
classifying	identifying	Kruisinga and Erades (1953)
intensive	extensive/equative	Halliday (1967), Huddleston (1971)
non-equational	equational	Bolinger (1972b)
ascriptive	equative	Lyons (1977)
attributive	identificational	Gundel (1977)
predicational	specificational	Akmajian (1979)
predicational	specificational(ly identifying)	Declerck (1988)

All scholars referred to in (14) essentially agree that the difference between the two types of copular sentences in (14a, b) turns on the referentiality of the post-copular noun phrase, though individual authors disagree on the precise notion of referentiality that they avail themselves of (see Keizer 1992 : ch. 2 for a detailed précis).

1.3 Types of copular sentences (II): more fine-grained typologies

While the Greek philosophers of classical antiquity (Aristotle, Plato) already recognized the versatility of the copula and the many sides of 'being', it was not until Higgins (1979) that the linguistics literature was introduced to syntactic and semantic grounds for distinguishing more than just the two basic types of copular sentence in (14). Higgins (1979) proposed a four-way distinction in the realm of copular sentences, adopting the basic split in (14) and enriching it with two additional types (of which the fourth

is often referred to as the equative construction as well). In his reappraisal of Higgins's seminal work on copular sentences, Declerck (1988) once again recognizes four basic types (though the criteria used for distinguishing them differ from those employed by Higgins, and concomitantly the definitions of the various types are not exactly the same either). Declerck also considers the possibility that there might be even more types of copular sentences, highlighting in particular the 'definitional copular sentence' in (16e):

(15)

		NP_1	NP_2
a.	predicational	referential	predicational
b.	specificational	superscriptional	specificational
c.	identificational	referential	identificational
d.	identity statement	referential	referential
			(Higgins 1979)

(16)

a.	predicational	referring	non-referring
b.	specificational(ally identifying)	weakly referring (attributive)	strongly referring
c.	descriptionally identifying	strongly referring	strongly referring or non-referring
d.	identity statement	referring	referring
e.	definitional	non-referring	?
			(Declerck 1988)

For both Higgins and Declerck, the typology of double-NP copular sentences is in large measure a function of the referentiality of the two noun phrases that constitute them, as well as the discourse function of the various copular sentences (usable as answers to questions, list readings, focus/presupposition), their syntactic properties (reversibility etc.; see) and their intonational properties. Higgins and Declerck disagree on the proper definition of 'referential', however. Higgins follows Strawson (1950) and Geach (1970b) in taking 'referentiality' to be about 'what a proposition is about'. Declerck, on the other hand, avails himself of a subtler approach to referentiality, making distinctions not just between referring and non-referring NPs but also, within the set of referring NPs, between weakly and strongly referring NPs (the former corresponding to Donnellan's 1966 'attributive'). (Declerck does not make the referential status of NP_2 in definitional copular sentences explicit.)

Higgins explicitly rejects a classification of the NP_1 of specificational copular sentences (his 'superscriptional' NP) as 'attributive' in Donnellan's sense (but see Declerck 1988 : 48–49 for a repartee of Higgins's counterarguments). For Higgins neither NP_1 nor NP_2 of a specificational copular sentence can be referential (since specificational copular sentences are not 'about' either of the two NPs); he therefore needs to introduce additional terminology to label the constituents of specificational sentences (as 'superscriptional' (defining the heading of a list) and 'specificational' (specifying the content of the list)). Apart from drawing a connection with lists (or 'colon constructions'; cf. *the winner is: John Johnson* or *the winners are: John Johnson*, *Jack Jackson*, *Dick Dixon*, . . .), however, Higgins never makes it entirely clear what it means for an NP to be 'superscriptional'.

Examples of the various types of copular sentences distinguished in (15) and (16) are given in (17–21), along with a summary of their most important characteristics (largely adapted from Declerck 1988 , to whose work the page references in (17–21) refer; cf. also Keizer 1992 : ch. 2):

(17)

Predicational double-NP copular sentences:
a.	John is a teacher

(17)

	Mary is a pretty girl
	• are "not felt to answer a question asking for specificational (identifying) information"; in fact, "not felt to answer a question at all" (p. 55, *q.v.* for further discussion);
	• do not alternate with *it*-clefts (**It is a teacher that John is*), which are "always specificational" (p. 69);
b.	• are not reversible (**A teacher is John*).

(18)

	Specificational(ly identifying) double-NP copular sentences:
a.	The bank robber is John Thomas.
	The only people that can help you are the Prime Minister and the Queen herself.
	• exhaustively specify the candidates ("values") for the "variable" (*the bank robber* in (18a)); "list reading,""exhaustivity"– ;
	• alternate with *it*-clefts (*It is John Thomas that is the bank robber*) and put focus on the "value" NP (*John Thomas* in (18a));
b.	• are reversible (*John Thomas is the bank robber*).

(19)

	Identificational/descriptionally identifying double-NP copular sentences:
a.	That (man) is John's brother.
	That (place) is Boston.
	• are not meant to specify a value for a variable (p. 95) and are not exhaustive or contrastive;
	• do not alternate with *it*-clefts (**It is that (man) that is John's brother*, **It is John's brother that is that (man)*);

(19) b. • are not reversible (*_John's brother is that (man)_).

(20)

Identity statements:		
a.	The Morning Star is the Evening Star.	
	Dr Jekyll is Mr Hyde.	
	•	are typically used to correct the hearer's assumption that two different descriptions apply to two different referents;
	•	do not alternate with _it_-clefts (*_It is the Morning Star that is the Evening Star_);
b.	•	are reversible (_The Evening Star is the Morning Star_).

(21)

Definitions:		
a.	A motor car is a vehicle that has four wheels and is propelled by an internal combustion engine.	
	A pyramid is what the Egyptians built to bury their pharaohs in.	
	•	though a paraphrase of the form "NP_1 is the following: NP_2" ("list") is possible, they lack the exhaustivity typical of specificational sentences;
	•	do not alternate with _it_-clefts (*_It is a vehicle that has four wheels and is propelled by an internal combustion engine that a motor car is_);
b.	•	are not reversible ("That is to say, switching the places of the subject NP and the predicate nominal in [(21a, b)] results in a sentence that is not ungrammatical, but which no longer counts as an example of a definition"– p. 113).

Copular sentences are often several ways ambiguous on paper. Thus, Higgins (1979 : 266–267) presents the example in (22) as a three-ways ambiguous copular construction:

(22)

The girl who helps us on Friday is my sister.		
a.	*Predicational*	Answers the question of how the referent of NP$_1$ is related to the speaker; no exhaustivity implied.
b.	*Specificational*	Provides an exhaustive list in answer to the question *Who is the girl who helps you on Friday?*
c.	*Identificational*	Identifies the referent of NP$_1$ as the speaker's sister (cf. *That is my sister*).

1.4 Reducing the typology

Higgins (1979) notes that his identity statements and identificational copular sentences are potentially reducible to one single type, depending on one's interpretation of 'referentiality': if one insists "that referentiality is a property of expressions, not of the use of expressions, then one might also want to insist that [an identificational copular sentence] is an identity statement" (p. 263). (He himself uses 'referentiality' with reference to the use of expressions, however, so he keeps the two types of copular sentence distinct.)

Taking Higgins's typology as her starting point, Verheugd (1990) has attempted to reduce the four types of copular sentence in (15) to the two basic ones in (14), once again making crucial use of the notion 'referentiality'. Verheugd's objective is to reduce Higgins's five NP types (referential, specificational, superscriptional, predicational, identificational) to just two: referential and non-referential. With particular reference to specificational copular sentences and Higgins's notion of superscriptional NPs, she argues that such NPs can be treated as underlying predicates. She thus treats specificational sentences like *The culprit is John* as inverse copular sentences: copular sentences with a surface word order derived via inversion of the underlying subject-predicate order (see below for details concerning the properties of copular inversion).

In the principles-and-parameters framework, Moro (1987, 1988) was the first to attempt a reduction of Higgins's typology of copular sentences, proposing an analysis of specificational sentences as inverse copular constructions (see Moro 1997 for a fully developed analysis along lines originally laid out in Moro 1987, 1988). Heggie (1988)

took the same tack in her study of the syntax of copular sentences. Heggie and Moro present a variety of syntactic arguments to support a transformational derivation of such inverse copular sentences – though they differ with respect to the way they implement the analysis. We will return to the details in the discussion of inversion (once again, see below).

By analyzing specificational copular sentences as inverse copular constructions, the principles-and-parameters analyses by Verheugd, Heggie, and Moro continue the line of thought initiated by Blom and Daalder (1977), who likewise claim that there are just two types of copular sentence (the predicational and specificational types) and that as far as the underlying relationship between two NPs in predicational and specificational copular sentences is concerned there is no difference between the two sentence types: in both, one of the two NPs is the predicate of the other; underlyingly, then, both types of copular construction are predicational. Blom and Daalder take their cue from the intonational contour of copular sentences (focal stress in particular), and give the following characterizations of specificational and predicational copular sentences:

(23)	a.	In a *specificational* copular sentence, the *focused* element is contained in the *hyponym*=*Theme*=*deep structure subject*.
	b.	In a *predicational* copular sentence, the *focused* element is **not** contained in the *hyponym*=*Theme*=*deep structure subject*.

Of these two claims, the former is undisputed; that predicational copular sentences demand that the focus not be on/in the subject is a controversial claim, however (see Heycock 1994a, 1998).

Blom and Daalder (1977) (who express their indebtedness to Den Hertog 1973) are perhaps the most rigid and explicit champions of the idea that all copular sentences are underlyingly represented as predications, with one of the two NPs functioning as the hyperonym (Lyons's 1977 'superordinate'; cf. 'predicate') of the other (the hyponym). They even extend their hyponym/hyperonym (or subject/predicate) approach to identity statements of the type in (20), saying that the post-copular noun phrase in such constructions is the hyponym of the pre-copular NP. They argue as follows (p. 76; my somewhat liberal translation):

In an example such as [(20a)], [*the Morning Star*] is presented as the more narrowly described element, while [*the Evening Star*] is a non-directly-identifying expression. Put differently, "being the evening star" is a property which is ascribed to something, in this case to what is referred to as [*the Morning Star*].

Since this treatment of identity statements entails that of the two NPs in (20) only the pre-copular one is referential, they add (p. 77, translation mine; original italics):

The necessary "referential" knowledge, the knowledge that we are dealing here with what are called "definite descriptions", can be taken to be of a different nature than knowledge of the content of a grammatical construction. We would therefore like to claim that the referential knowledge in the case of an interpretation which goes beyond the grammatical interpretation is *added* to the hyperonym relationship expressed in the grammatical construction.

For Blom and Daalder, in other words, 'referentiality' is less basic when it comes to the *grammatical* classification of copular sentences than it is for the other scholars referred to in the foregoing: a predicate nominal, while quintessentially non-referential, can nonetheless be interpreted referentially on the basis of the language user's non/extra-grammatical knowledge.

Blom and Daalder's predicational approach to equative copular sentences/identity statements is controversial;[1] and since, as far as their syntactic properties are concerned, identity statements have more in common with (inverse) specificational copular sentences than with their predicational counterparts (cf. especially Heycock and Kroch 1999 ; also Guéron 2001 ; cf., e.g., below), it may be better (if one wants to treat them as underlyingly predicational in the first place) to try to analyze equatives along the lines of inverse specificational constructions. Be that as it may, even when we confine our attention to specificational copular sentences (for which inversion accounts have been proposed not just by Blom and Daalder but by Heggie, Moro, and Verheugd as well) the idea that the relationship between the two NPs is one of hyponym/hyperonym or subject/predicate is controversial.

Thus, Declerck (1988 : 93) dismisses the approach, stressing that "[s]pecificational sentences do not express a hyponymy relation." In defense of his position, Declerck draws on Higgins (1979) and

Halliday (1967, 1968): Higgins points out that the essence of the specificational relationship is that the contents of the concept expressed by the superscriptional NP are specified, which "naturally means that the NP denoting the concept and the NP specifying its contents cannot differ in generality or specificity" (Declerck 1988 : 92–93); and Halliday argues that the two NPs of specificational sentences have "the same degree of specificity, and that this is precisely the reason why such sentences are reversible" (Declerck 1988 : 93, n. 98).[2]

In what follows, we will not take a stand on the question of whether the four or five types of copular sentences enumerated in (15) and (16) qualify as primitives or whether they are instantiations of two or even just one 'macro-category' of copular constructions, noting simply that if one wants to reduce the various types of copular sentence to one underlying structure, this will be the structure most directly represented by copular sentences of the *predicational* type: a subject-predicate structure (cf. Blom and Daalder 1977 ; Heggie 1988 ; Verheugd 1990 ; Moro 1997 for representatives of this general perspective).

1.5 A typology of copulas?

In we have seen that there is good reason, at least descriptively (for the possibility of reducing the typology from a theoretical perspective, see), to distinguish between a number of different types of copular construction (cf. (14–16)). There are two ways, in principle, of thinking of such a typology of copular constructions (cf. (24)). We refer to Keizer (1992 :) and Moro (1997 : Appendix) for careful discussion, which we will summarize briefly in this section.

(24)

	a.	*One 'be', different structures/derivations*
		[e.g., Montague 1973 ; Stowell 1981 ; Dik 1983 ; Partee 1986, 1999 ; Heggie 1988 ; Moro 1997]
		Multiple 'be's
		[e.g., Huddleston 1971 ; Akmajian 1979 ; Safir 1985b ; Seuren 1985 ; Rapoport 1987 ;

(24) b. Higginbotham 1987 ; Zaring 1996]

The 'classical' position in this debate is the one represented by Aristotle and Plato – the idea that 'be' is a polysemous lexical item with a variety of different meanings (corresponding to the different types of copular sentence enumerated in the foregoing). Modern philosophers have generally followed this venerable tradition in assigning *be* a variety of different meanings (cf., e.g., Mill 1856 : 86; Russell 1903 : 64).

In early generative work, the multiplicity of the copula seems to have been assumed more or less as a matter of course: thus, Huddleston (1971 : 241), in making a distinction between predicational and specificational pseudoclefts, refers to the dichotomy in terms of the different types of *be* used in them: 'intensive *be*' vs. 'equative *be*'; elsewhere in the book he also distinguishes an identificational *be*. In making this three-way distinction among types of *be*, Huddleston follows Halliday's (1967 : 66) typology of copulas. Likewise, Bolinger (1972b : 98) casts his typology of copular constructions in terms of a typology of *be*'s, recognizing an equational *be*, a locational *be* and a non-equational *be*. Akmajian (1979) similarly talks in terms of two species of *be*, as does Higgins (1979 : 191) ("the verb *be* is the identity"); but Higgins (1979 : 161–163) also takes care to point out that "other verbs that permit a meaning relation similar to specification," like *lie in*, *consist in*, *constitute*, *amount to*, *entail*, *involve*, *have to do with* (also *justify*) behave the same way when it comes to one of the key properties of specificational sentences: connectivity.

More recently, Seuren (1985b: 299) has also felt the need to "begin by distinguishing a separate verb *be*, distinct from the ordinary predicative *be* . . . and distinct also from the *be* of identity"– a type of *be* that he labels 'specifying *be*', used in specificational pseudoclefts. And in the principles-and-parameters framework, Safir (1985b : 116) stands out as an example of the multiple-*be* approach, distinguishing at least two lexical entries for *be*: an identificational and a predicational one. In a rather different vein, Guéron (1992) argues that, while otherwise meaningless, the copula is an 'identificational operator' in inverse (specificational) copular sentences at the level of *commentaire*.[3] For a recent principles-and-parameters study of copular constructions (with special reference to Hebrew), the use of *be* in predicative and identity sentences in English, and the meaning of 'the verb *be*', see Rothstein (2001a).

The generative literature has generally tended, however, toward the one-*be* approach, ascribing the

semantic variability of copular sentences to the structures involved, not to the semantics of *be*.[4] In fact, most authors in this framework agree that a key property of *be* is that it has no meaning at all – it is a functional element, linking the major constituents of copular sentences (cf. Stowell 1981 ; Heggie 1988 ; Den Dikken 1995b ; Moro 1997). Even generativists who believe in the existence of a separate category of equative copular sentences alongside predicative copular constructions (cf. Heycock and Kroch 1999 for a recent defense of this position; see also Adger and Ramchand 2003 and Pereltsvaig 2001 for discussion) routinely hasten to add that they do not take this to imply the existence of a separate 'equative *be*': there is only one copula, a 'linker', as its name suggests; the difference between equative and predicational copular sentences lies in the structures of the constructions (for Heycock and Kroch 1999 , the internal structure of the small clause in the complement of *be*– see for brief discussion; for Pereltsvaig 2001 , the distinction between *be* as a realization of I or *v*).

In denying the copula a meaning of its own and assigning it the status of a semantically void functional category (Partee's 1999 'non-lexical *be*'), the generative work referred to in the previous paragraph is in perfect agreement with Dik (1983), which represents a Functional Grammar perspective (for more FG-based studies on copular sentences, see Hengeveld 1992 and Keizer 1992 ; we will not address these further here).

In what follows we will follow (24a), the one-*be* approach to copular constructions – in the light of Higgins's (1979 : 161–163) point about equivalents of *be*, and the fact that in the absence of an explicit demonstration of the polysemy (or, in fact, the 'semy', i.e., the meaningfulness) of the copula, one should proceed on the assumption that all of the semantics of copular sentences derives from (i) its major constituents and (ii) their syntactic structure and derivation.

2 Types of pseudocleft sentences

2.1 Pseudocleft sentences: preliminaries

A particular kind of copular sentence which has attracted a great deal of specific attention in the generative linguistic literature is the so-called pseudo(-)cleft construction.[5] Quintessential representatives of the class of pseudoclefts are copular sentences featuring a *wh*-clause, typically with *what* (less often *where*, *when*, *why*, *how*, even more rarely *who*), as one of their major constituents. Examples of such pseudoclefts are given in (25–33) (cf. esp. Akmajian 1979 : 18–19):[6]

(25) What John does not eat is food for the dog.

(26) What John is is a good teacher.

(27) What John is is tall.

(28) What we need is Jerry drunk.

(29) Where John finally ended up was in Berkeley.

(30) When John arrived was at five o'clock.

(31) Why John went to the bookstore was to buy a book about pseudoclefts.

(32) How John did it was by using a decoder.

(33) %Who John visited was Bill.

Not all types of specificational pseudocleft illustrated in (25–33) are found in all languages (Ross 1999 notes, for instance, that Japanese and Kitchangana (Bantu) seem not to have the counterpart of (27)). Even in English, as Akmajian (1979 : 83, n. 1) notes, "[m]any speakers find sentences such as [(33)] unacceptable (or less acceptable than sentences [(25–32)]) but judge as acceptable sentences [(25–

32)]." In his corpus-based study, Collins (1991) found not a single example of a *who*-cleft, while of all the tokens of pseudoclefts with *wh*-words other than *what*, only one had the order illustrated in the examples above (with the *wh*-clause preceding the copula – see also Geluykens's 1984 corpus-based study for the rarity of this type, attested just once in his corpus as well; cf. also Heggie 1988 : 352–353), all other cases involving the reverse order – but even then, their total incidence is not anywhere near that of *what*-clefts. Higgins (1979 : 2) explicitly sets aside all pseudoclefts with *wh*-elements other than *what*; we will not, though most of our examples will indeed be of the *what* type.

The unbalanced distribution of *what* vs. pseudoclefts with other *wh*-words disappears once we include in the class of pseudocleft constructions examples featuring a headed relative instead of a *wh*-clause, illustrated in (35–39). All examples on this list are equally acceptable.

(34) The things John does not eat are food for the dog.

(35) The place where John finally ended up was in Berkeley.

(36) The time at which John arrived was at five o'clock.

(37) The reason why John went to the bookstore was to buy a book about pseudoclefts.

(38) The way John did it was by using a decoder.

(39) The {%one/√person} who John visited was Bill.

Most scholars agree that '*th*-clefts' (to borrow Collins's 1991 term; see also his '*all*-clefts': *All John ever eats is food for the dog*) should be treated on a par with '*wh*-clefts' (an alternative for the term 'pseudoclefts') – but Hankamer (1974) warns that the two, though similar, should not be identified (on account of the fact that "the allowable subjects of ['*th*-clefts'] are very restricted"; Hankamer 1974 : n. 9); see also (175–176)). In this work, we follow the general trend of assimilating '*th*-clefts' to '*wh*-clefts'.

The term 'pseudocleft' seems to be a terminological innovation that we have generative linguistics to

thank for – as Higgins (1979 : 1) puts it, "this term is relatively new and seems to have arisen within the transformational-generative tradition, its formation emphasizing the formal and semantic kinship of the construction concerned to what Jespersen termed the 'cleft' construction". Jespersen's (1909) term 'cleft sentence' applies to such constructions as *It was Bill that John visited yesterday*, featuring the pronoun *it* in pre-copular position and a relative clause to the right of the copula. In early work on '*wh*-clefts', they occasionally were referred to simply as 'clefts' (cf. Jacobs and Rosenbaum 1968 : 39). The parallels and differences between *it*-clefts and pseudoclefts will not be discussed here in any detail; that the two cannot be identified is clear, for instance, from the fact that there is no *it*-cleft counterpart to our earlier example in (28) (cf. **It is Jerry drunk that we need*).[7]

2.2 Types of pseudocleft I: a basic two-way split

Just as there are several types of copular sentence, the literature has also found occasion to distinguish different kinds of pseudocleft construction – where 'pseudocleft' is understood in the sense of : as a copular sentence featuring a *wh*-clause or a corresponding (light-)headed relative clause construction as one of its major constituents (on a substantially narrower interpretation of the term 'pseudocleft', see). Thus, Higgins (1979) distinguishes between two types, as in (40) (cf. the typology of copular sentences in (14)). The difference between the two can be illustrated with the aid of the ambiguity of the example in (25) (adapted from Clifton 1969 ; cf. (13), above): here *food for the dog* may be taken to denote a property ascribed to the referent of *what John does not eat* ('the things that John does not eat serve as food for the dog'), in which case we are dealing with a predicational pseudocleft; alternatively, we can take *food for the dog* to be a specification of what it is that John does not eat ('John does not eat the following: food for the dog'), in which case we are confronted with a specificational pseudocleft:

(40)	*A basic two-way split* (Higgins 1979):	
	a.	predicational (25): 'The things John does not eat serve as food for the dog.'

(40)

b.	specificational (25): 'John does not eat (the following:) food for the dog.'

2.3 Types of pseudocleft II: more fine-grained typologies

In we have seen that a more microscopic investigation of copular sentences has turned up a number of additional types of such constructions (cf. (15) and (16)). In the light of the proliferation of copular sentences in general and the fact that pseudoclefts are unquestionably copular sentences themselves, one might therefore reasonably expect there to exist more than just two types of pseudocleft construction. And indeed, a more elaborate typology of pseudoclefts has been argued to exist. The one in (41) is due to Declerck (1988 : 70):

(41)

A more refined typology of pseudoclefts:	
a.	predicational
b.	specificational
c.	identity
d.	definitional

(41a, b) are familiar from the foregoing discussion; examples of pseudoclefts identity statements and definitional pseudoclefts are given in (42) and (43), respectively (from Declerck 1988):

(42)

Pseudocleft identity statements:	
a.	What I did was what you told me to do.

(42)

b.	The one who is drinking the martini is Mr Brown.

(43)

Definitional pseudocleft sentences:
A pyramid is what the Egyptians built to bury their pharaohs in. (cf. (21b))

Declerck's (1988) typology of double-NP copular sentences in (16) raises the expectation that a fifth type of pseudocleft construction might exist: descriptionally identifying pseudoclefts (cf. (16c); or Higgins's 1979 identificational pseudoclefts, (15c)). Though Declerck does not discuss this, it does indeed seem possible to find pseudocleft counterparts to examples of the type in (19) above: sentences of the type in (44) would appear to instantiate this type:

(44)

Identificational/descriptionally identifying pseudoclefts:	
a.	That is what I need.
b.	This is how I did it.

The examples in (44) seem parallel to the examples of identificational/descriptionally identifying double-NP copular sentences given in (19) – a parallelism which extends to the fact that reversal of the word order of (44b) is impossible (**How I did it is this*).[8] Collins (1991) includes (44) type examples in his set of specificational pseudoclefts and consequently finds overwhelmingly more XP < *wh* orders than *wh* < XP cases in his corpus.

For constructions of the type shown in (44b), with proximal *this* rather than distal *that*, it does not seem generally impossible, however, to reverse word order: with 'colon intonation' following *this* and a following specification, examples like *What I'm looking for is this: a crowbar and a wrench* are perfectly

acceptable. Constructions such as this are most certainly specificational (as is revealed by their characteristic 'colon intonation' and their 'list reading'; cf. Higgins 1979 on the latter as a defining property of specificational sentences). One might actually go so far as to hypothesize that this *this* is a quintessential ingredient of specificational copular sentences: one might suggest that it is this *this* (which would have a null incarnation in all specificational sentences in which it does not surface overtly) that functions as the predicate of specificational sentences, with the other two major constituents functioning as subject and 'specifier' of this predicate.

The typology in (41)/(44) mimics the typology of copular sentences presented in . A more microscopic typology (developed in Declerck 1988 : 220ff.) zooms in on specificational 'clefted sentences' (a cover term for *it*-clefts and specificational pseudoclefts), and primarily uses the information-structural properties (for more on these, see , below) and concomitant intonational characteristics of the constructions as diagnostics:

(45)

*A typology of **specificational** pseudoclefts:*	
a.	contrastive pseudoclefts (or 'stressed-focus') (cf. (46))
b.	unaccented-anaphoric-focus pseudoclefts (cf. (47))
c.	discontinuous pseudoclefts (cf. (48))[9]

(46)

a.	Who broke the window? – The one who did it was John.
b.	Who broke the window? – John was the one who did it.

(47)

(47)

a.	It turns out that there is interesting independent evidence for that rule, and that evidence is what we must now turn to.
b.	Why is everybody so interested in uranium? – Because uranium is what you need to produce atomic power.

(48)

a.	My dear friends, what we have always wanted to know but what the government has never wanted to tell us, is what exactly happens at secret conferences like the one you have been reading about in the papers this week; there is one man, however . . .
b.	Those apples are good, aren't they? – So they are! What keeps me from eating all of them is that mother would be furious if I left none for the others.

These three types of specificational clefted sentences have the following key properties (cf. Declerck 1988 : 224):

(49)

	(45a)	(45b)	(45c)
New/old info	focus new; clause old	focus old; clause new but represented as old	both focus and clause new
Accent	focus: heavy; clause: weak	focus: weak; clause: normal	both focus and clause normal
Contrast focus	strongly	not strongly	not strongly
Word order	both orders good	*wh*-clause post- copular	both orders good

As far as word order is concerned, Declerck's (1988) 'unaccented-anaphoric-focus' pseudoclefts (45b) are special in that they allow only the XP < *wh* order – cf. the 'identificational/descriptionally identifying pseudoclefts' of (44); see also Collins (1991) on the differences between pseudoclefts with *wh* < XP word

order and their congeners with XP < *wh* orders. What this shows is that, when one is talking about pseudoclefts, one should be careful to keep an eye on their word order.

The role of word order is also emphasized by Den Dikken et al. (2000), who make a distinction, within the class of specificational pseudoclefts, between 'Type A' and 'Type B' constructions:

(50)

		Den Dikken et al. (2000):
a.		'Type A' specificational pseudoclefts
	•	feature as their major constituents a *wh*-clause and a **full IP** (which is subject to optional ellipsis);
	•	have *wh* < XP orders only;
	•	exhibit connectivity effects for negative polarity.
b.		'Type B' specificational pseudoclefts
	•	feature as their major constituents a *wh*-clause and some XP (X ≠ I);
	•	have XP < *wh* orders;
	•	do not exhibit connectivity effects for negative polarity.

As the characterizations of the two types in (50) suggest, Den Dikken et al.'s (2000) two-way split within the class of specificational pseudoclefts is based largely on the behavior of pseudoclefts with full-IP 'value-XPs'[10] (cf. (51); see, e.g., Ross 1972a for discussion) and pseudoclefts featuring connectivity effects with respect to the licensing of negative polarity items in the 'counterweight' of the *wh*-clause (cf. (52)):

(51)

	a.	What John bought was he bought some wine.

(51)　b.　*He bought some wine was what John bought.

(52)　a.　What John didn't buy was (he didn't buy) *any* wine.

　　　b.　*Any* wine was what John didn't buy.

We will have occasion to discuss these two properties of ('Type A') specificational pseudoclefts in more detail further below. (See especially for discussion of the role of word order in the domain of specificational pseudoclefts.)

In what follows, we will not be concerned in any detail (except when it comes to contrastive analyses) with pseudoclefts of any type other than the specificational ones.

2.4 The scope of the term 'pseudocleft'

There is considerable confusion and disagreement in the literature on pseudocleft constructions concerning the meaning and scope of the term 'pseudocleft'. To quote Higgins (1979 : 1–2) on this point:

Unfortunately, the domain of application of the term is not completely clear, and there is much confusion in the literature. There are two features of the pseudo-cleft construction which are by many authors taken as defining features: (i) a semantic kinship to cleft sentences, and a consequent semi-formal requirement that pseudo-cleft 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; (ii) 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.

While some scholars use 'pseudocleft' as a cover term (in the way we did in ; cf. also Declerck 1988), others confine its reference in one or more of the following ways:

- to distinguish between examples with a *wh*-clause and examples featuring a headed relative (with *the one| thing| reason| time| way|* . . . [cf. (33–39)], or *all*, as in *All John eats is food for the dog*; cf. Prince 1978 , who uses the term '*wh*-cleft' in this narrow sense);
- to single out one particular type of pseudocleft construction: the specificational pseudocleft (see, e.g., Akmajian 1979 , who uses the term 'pseudocleft' in this narrow sense);
- to single out pseudocleft constructions with *wh* < XP word orders (see the above quote from Higgins 1979 – these are Den Dikken et al.'s 'Type A' pseudoclefts).

Following, for instance, Akmajian (1979) and Collins (1991), we will include in this study not just (i) those pseudoclefts featuring a *wh*-clause ('*wh*-clefts') but also what Collins (1991) calls (ii) '*th*-clefts' and (iii) '*all*-clefts'. Unlike Akmajian (1979), but instead following, for instance, Higgins (1979) and Declerck (1988), we will not confine the term 'pseudocleft' to specificational constructions; to refer to such pseudoclefts we will use the term 'specificational pseudoclefts'. Though the emphasis will be on specificational pseudoclefts in what follows, we will contrast these with their predicational congeners in various places to properly delineate the set of specificational pseudoclefts.

3 Specificational copular sentences and pseudoclefts: an inventory of properties

3.1 Characterizing specificational pseudoclefts

What unites the examples in (25–39) (with (25) read specificationally) and sets them apart from other copular sentences is (as Akmajian 1979 : 19 puts it) "that the initial clause of the pseudo-cleft contains what is essentially a semantic variable, a semantic 'gap' which must be 'filled' or specified by the focus item." Even pseudoclefts with a headed relative as NP_1 are different from specificational copular sentences of the type discussed in : they "contain relative clauses whose heads function as variables ranging over given semantic classes." We may therefore rephrase our characterization of specificational pseudoclefts as follows:

(53)

Specificational pseudoclefts consist of:
• a constituent containing a variable (also called identified (Huddleston 1971));
• a constituent (exhaustively) specifying the value for that variable (also called identifier (Huddleston 1971), focus (Akmajian 1979, Higgins 1979), highlighted constituent (Collins 1991), counterweight (Heycock and Kroch 1999));
• a form of the copula linking the two major constituents.

In what follows, we will refer to the constituent containing the variable simply as 'the variable' (or 'the *wh*-clause', in the discussion of pseudoclefts), and to the constituent specifying the value as 'the value-XP'.

(i) *Connection between specificational pseudoclefts and question-answer pairs* The recipe in (53) is advantageous in two respects. First of all, it allows us to see the connection between specificational pseudoclefts and question-answer pairs (cf. (54)).[11] In both we find a constituent containing a variable (the *wh*-clause in (54i)) and a constituent (exhaustively) specifying the value for that variable (the focus of the post-copular constituent/answer in (54ii)); the two construction types are obviously different in that the copula is obligatorily present in the former, but absent from the latter:

(54)

(i)		(ii)

(54)

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

The links between specificational pseudoclefts and question-answer pairs are stressed in many works on pseudocleft constructions (cf., e.g., Clifton 1969 ; Faraci 1971 ; Huddleston 1971 ; Ross 1972a, 1997, 1999 ; Akmajian 1979 ; Higgins 1979 ; Seuren 1985 ; Declerck 1988 ; Den Dikken et al. 2000). We will return to them in detail in .

3.2 Properties distinguishing specificational from predicational copular sentences

3.2.1 Syntactic properties

(ii) *Reversibility* The second respect in which the recipe in (53) is beneficial is that it makes no reference to word order. And indeed, a key property which specificational pseudoclefts share with specificational copular sentences (cf.) is their reversibility (cf. (55–56)):

(55)

a.	What John contributed to the conference was his best speech ever. (ambiguous: predicational or specificational)
b.	His best speech ever was what John contributed to the conference. (specificational only)

(56)

a.	John's contribution to the conference was his best speech ever. (ambiguous: predicational or specificational)
b.	His best speech ever was John's contribution to the conference. (specificational only)

While the a-examples in (55) and (56) allow a reading for *his best speech ever* according to which it predicates a property of the pre-copular constituent alongside a specificational reading which says that John contributed his best speech ever to the conference, only the latter reading survives in the b-examples.

It should be borne in mind that reversibility is not a foolproof diagnostic for specificational status – there are specificational copular sentences that are not reversible. The restrictions on reversal are largely of a categorial nature:

- if the value is an adverbial, the value < variable order is typically poor (though not entirely impossible); cf. (57) (Declerck 1988 : 40; Heggie 1988 : 371; Collins 1991):

(57)

a.	The usual method of solving this problem is by firing the coach.
b.	??By firing the coach is the usual method of solving this problem.

- if the value is not an expression containing an iota operator, a variable and a domain of individuals, it cannot precede the variable; cf. (58) (Guéron 1992 has the most explicit discussion of this constraint):[12]

(58)

a.	Bill is {captain of the team/a doctor/a friend of mine/the best doctor in town/my best friend}.
b.	{*Captain of the team/*a doctor/*a friend of mine/the best doctor in town/my best friend} is Bill.

- if the value is a full IP (possible only in pseudoclefts), it cannot precede the variable if the verb in the *wh*-clause is substantive (rather than *do*); cf. (59) (Ross 1999, 2000 ; Den Dikken et al. 2000):[13]

(59)

a.	What John {did/bought} was he bought some wine.
b.	He bought some wine was what John {did/*bought}.

- if the value is an AP and the verb in the *wh*-clause (of pseudoclefts) is not the copula, it must precede the variable; cf. (60) (Heggie 1988 : 352–353):[14]

(60)

a.	*How John likes his women is rather plump.
b.	Rather plump is how John likes his women.

Most of these constraints on reversal are not very well understood. These constraints aside, the general rule is that specificational sentences are reversible.[15] This seems to lead to a paradox when combined with the parallel between specificational sentences and question-answer pairs highlighted under (i), above. After all, question-answer pairs are not reversible (i.e., the answer does not normally precede the question). Den Dikken et al. (2000) address this question and distinguish two types of specificational pseudocleft, 'Type A' and 'Type B' constructions (cf. (50), above): it is only the 'Type A' cases that (thanks to their full-IP 'value') are on a par with question-answer pairs; and concomitantly, a hallmark of 'Type A' constructions is that they are not reversible (cf. (59b)).

With these caveats in place, we will now continue down the list of definitional properties of specificational copular sentences (see Akmajian 1979 ; Higgins 1979 ; and Declerck 1988 for the provenance of many of the following arguments, acknowledged wherever distinctive).

(iii) *Connectivity/connectedness effects* A property of specificational constructions which has preoccupied much of the discussion of these sentences in the generative literature is the fact that they

exhibit connectivity/connectedness effects (cf. (61) for initial illustration). (The terms 'connectivity' and 'connectedness' are used interchangeably, the latter being the older term (cf. Akmajian, Higgins); however, to avoid confusion with the technical term 'connectedness' introduced by Kayne (1984a), in what follows we will avail ourselves of the label 'connectivity'.)

(61)

	a.	What *John* treasures most is a book about *himself*/* *him*.
	b.	*John*'s greatest treasure is a book about *himself*/* *him*.

As (61) shows, connectivity (here with respect to anaphor–antecedent relationships) is a property of specificational sentences in general, not just specificational pseudoclefts. Indeed, "[s]pecificational sentences are the only type of copular sentences that show 'connectedness' " (Declerck 1988 : 51) – as a consequence, connectivity effects can be used as a disambiguator of otherwise ambiguous pseudoclefts, as Higgins shows: while (62) is ambiguous between a specificational and a predicational reading, (63a) with anaphor connectivity is unambiguously specificational and (63b) is predicational only.

(62)

		What John is is important.
	a.	specificational: 'John is important.'
	b.	predicational: 'What John stands for is important.'

(63)

		What *John* is is important to *himself*. (specificational (Higgins))
	a.	What *John* is is important to *him*. (predicational)

Connectivity effects come in a variety of subtypes, listed and briefly discussed here.

(iii.a) *Reflexive connectivity*   (See (63); cf. Higgins 1979).

(iii.b) *Reciprocal connectivity*   (See (64); cf. Declerck 1988 : 52)):

(64)

a.	What *they* did was kiss *each other*. (specificational)
b.	*What *they* did was surprising to *each other*. (*predicational)

Reflexive and reciprocal connectivity, taken together, have served from the very beginning of the theoretical discussion of pseudocleft constructions as a key argument for somehow relating the specificational pseudocleft to the simple clause that paraphrases it (for (64a): *they kissed each other*, with *in situ* focus). The argument is simple and clear: specificational pseudoclefts reproduce 'across the copula' the binding properties characteristic of simple clauses.

The argument has never been water-tight, however. As Blom and Daalder (1977 : 54) point out (cf. (65)), anaphor connectivity breaks down in Dutch when the anaphor is itself the post-copular constituent of the pseudocleft (rather than being contained in it); note, though, that English examples rendering things like (65a) are generally judged grammatical in the literature – see, e.g., Akmajian's 1979 : 125 *The one that I shaved was myself* and *The one that you cheated was yourself*, and below on emphatic reflexives in English; we are not aware of any reported English counterparts to Dutch (65b), featuring the reciprocal, but they seem perfectly grammatical: *What they most detested was each other* (Caroline Heycock, p.c.)).

(65)

	?*Wie	*hij*	op	het	oog	heeft	is	*zichzelf*.
	who	he	on	the	eye	has	is	se-self
a.	'Who is *he* thinking of is *himself*.'							

(65)

	*Wie	*zij*	tartten	was/waren	*elkaar.*
b.	who	they	pestered	was/were	each other

Note also that pseudoclefts (and *it*-clefts as well) behave 'anomalously', from the simple clause perspective, in a number of contexts, as noted by Akmajian (1979 : 125) and Hankamer (1974 : 231–2, n. 6) (cf. also Sharvit 1997a ; Den Dikken et al. 2000 : 74, n. 29) – see (66a), from Akmajian, and (66b), adapted from an example of Hankamer's attributed to Stephen Anderson. Akmajian points out in a footnote (n. 10 on p. 153) that the reflexives used in examples of this kind "cannot be interpreted as normal reflexives, since they form the *foci* of their containing sentences" (original emphasis); this is certainly true, but the fact remains that the non-cleft counterparts of example like (66a, b) remain unacceptable even with heavy focal stress on the reflexive; cf. (67):

(66)

a.	The one who *John* claimed had been cheated was *himself.*
b.	What was staring up at *John* out of his soup was *himself.*

(67)

a.	**John* claimed that *himself* had been cheated.
b.	**Himself* was staring up at *John* out of his soup.

The status of anaphor connectivity as an argument for a transformational relationship of some sort between specificational pseudoclefts and their corresponding non-cleft paraphrases is less than crystal clear, therefore.

We note here that anaphor connectivity is unaffected by the linear word order of specificational sentences: that is, (63a) and (64a) remain grammatical with the relative order of variable and value inverted, as in (68):

(68)	a.	Important to *himself* is what *John* is.
	b.	Kiss *each other* is what *they* did.

In this respect, anaphor connectivity effects in specificational sentences are different from a third case of binding connectivity attested by specificational constructions (iii.c).

(iii.c) *Principle C connectivity ('anti-reconstruction')* (See (69); cf. Heycock and Kroch 1999 ; Den Dikken et al. 2000 : 84, n. 35):

(69)	a.	*What *he* had said to Mary was that she had been lying to *John*. (specificational)
	b.	What *he* had said to Mary was an embarrassment to *John*. (predicational)

The facts in (69) are as expected, in the light of the anaphor connectivity effects noted above. Interestingly, however (cf. Den Dikken et al. 2000 : 84, n. 35), (70), which has XP < *wh* order, is grammatical, in contradistinction to the *wh* < XP case in (69a):

(70) *Peter*'s picture of Mary is what *he* covets most.

Den Dikken et al. suggest that perhaps "such sentences are not SPCs [specificational pseudoclefts, MD] at all, or are ambiguous between an SPC and some other sentence type, e.g. an equative sentence."

(iii.d) *Negative polarity item connectivity* (See (71); cf. Ross 1972a ; Halvorsen 1978 ; Akmajian

[16]

(71)

a.	What I have *never* noticed is *any* signs of dissatisfaction. (specificational)
b.	*What I had *never* noticed was noticed by *any* of us. (*predicational)

(72)

a.	What John hasn't done is leave *yet*/*already*.
b.	What I doubt is that *anyone*/*someone* needs this money. (cf. What I don't doubt is that *anyone*/someone* needs this money.)
c.	What John doesn't want is *ever* to be left alone.

Higgins (1979 : 23–24) acknowledges the NPI connectivity effect noted by Ross and Akmajian (along with a number of other connectivity effects listed here) but decides not to address it, saying that of the connectivity effects canvassed by Akmajian "the only one . . . that carries any great weight is the reflexive pronoun case." His rationale is as follows: "the rule is more clearly defined and the phenomenon better understood than, for instance, that governing *some*/*any* alternations."Heggie (1988 : 325, n. 5) also explicitly sets aside NPI connectivity in her otherwise detailed discussion of specificational pseudoclefts. As Den Dikken et al. (2000) argue in detail, however, the distribution of NPI connectivity effects does indeed give us clear insights into the analysis of (a subtype of) specificational pseudoclefts.

We note in the context of negative polarity connectivity in specificational pseudoclefts that Blom and Daalder (1977 : 24–25) present two types of example, from Dutch, in which such connectivity breaks down in these constructions. (They in fact draw the general conclusion that specificational pseudoclefts exhibit no NPI connectivity effect (in Dutch), but this is too strong a claim: Dutch counterparts to examples of the type in (71a) are grammatical, as shown in (73).)

(73)

Wat	ik	nog	*nooit*	opgemerkt	heb	is	*ook*	*maar*	*enig*	teken	van	ontevredenheid.
what	I	yet	never	noticed	have	is	also	but	any	sign	of	dissatisfaction

'What I have never noticed is any sign of dissatisfaction.'

The first type of example discussed by Blom and Daalder is illustrated by the pair in (74). Blom and Daalder note (with a reference to the discussion of *any* in Klima 1964) that (74a) allows for a (salient) reading in which *ieder* behaves like English *any*: what (74a) then says is that he refused and would refuse any medicine at all that one offered or would offer him. That reading (which we may call the polarity reading of (74a))[17] , Blom and Daalder point out, is unavailable for the pseudocleft in (74b); the example in fact has no reading at all: it is unacceptable as a reflex of a general ban on QPs as the post-copular constituent of pseudoclefts (be they predicational or specificational; see also the text accompanying (115) below for discussion).

(74)

a.	Hij	weigerde		ieder	geneesmiddel.
	he	refused		every	medicine

b.	*Wat	hij	weigerde	was	ieder	geneesmiddel.
	what	he	refused	was	every	medicine

The lack of connectivity in (74b) is paralleled by the unavailability in (75b) of the inference which presents itself in (75a): that he gets upset about *any* joke at all (cf. Fauconnier 1975 ; like (74), we present this under the rubric of 'negative polarity'– cf. n. 17). We share Blom and Daalder's judgment; though we are not aware of any discussion of this phenomenon in the literature on English pseudoclefts, the facts seem transposable to English, with the same net result: a lack of parallelism/connectivity between specificational pseudoclefts and their simple clause counterparts.

(75)

Hij	trekt	zich	het	onschuldigste	grapje	aan.

	he	pulls	se	the	most-innocent	joke	prt
a.	'He gets upset about (even) the most innocent of jokes.'						

(75)

	Wat	hij	zich	aantrekt	is	het onschuldigste grapje.
	what	he	se	prt-pulls	is	the most-innocent joke
b.	'What gets him upset about is the most innocent of jokes.'					

The failure of polarity connectivity in examples of the type in (75b) is presumably connected to the fact that, systematically, NPI connectivity breaks down in specificational pseudoclefts whenever special NPIs (like *not . . . until*, Clifton 1969 ; Higgins 1979 : 44; Sternefeld 1997) and idiom chunks are involved:

(76)

a.	*What John did*n't* do was (he did*n't*) leave *until 6 p.m.*
b.	*What did*n't* John do? – (he did*n't*) leave *until 6 p.m.*

(77)

a.	*What John did*n't* have was (he did*n't* have) *a red cent.*
b.	*What did*n't* John have? – (he did*n't* have) *a red cent.*

Den Dikken et al. (2000 : 80) address this point and observe (i) that the ban on special NPIs and negatively polar idiom chunks as the 'value'-XP of specificational pseudoclefts rears its head in question-answer pairs as well (cf. the b-examples in (76) and (77)), and (ii) that this ban manifests itself even when the 'value'-XP or answer is a full IP containing a local licenser for the negative polarity item. The deviance of the examples in (76) and (77) (and presumably that of (75) on its idiomatic reading as well) should be sought, Den Dikken et al. suggest, in the lack of interpretive parallelism between the *wh*-clause and the 'value'/answer (manifest also in the oddity of a question-answer pair such as *What did John take?* –$^{??}$*He took a picture*): while the 'value'/answer is idiomatic, there is no choice but to read the *wh*-clause literally, which yields a clash.

(iii.e) *Quantifier connectivity*   (See (78); cf. Hankamer 1974 : 223):

(78)

a.	What *the little bastards* did was *all* get in the tub at the same time.
b.	*What *the little bastards* did was *all* surprising to us.

This once again highlights the parallel between specificational pseudoclefts and their simple clause paraphrases (cf. *The little bastards all got in the tub at the same time*). If 'floating quantifiers' (like *all* in (78a)) are taken to be stranded by movement of the quantified noun phrase (cf. Sportiche 1988), the distribution of *all* in (78) might be construed as an argument for a transformational analysis of specificational pseudoclefts (cf. for discussion of transformational approaches). The stranding analysis of floating quantifiers is controversial, however (see Bobaljik 1998 for a critical assessment).

(iii.f) *Scope connectivity* (See (79); cf. Declerck 1988 : 53; Den Dikken et al. 2000):

(79)

a.	$^{?}$What I *want* to marry is *a Swedish girl*.
b.	What he *wanted* to find was *a nice Swedish girl* to marry.

An example of the type in (79) allows a reading of *a Swedish girl* on which it is in the scope of the intensional verb *want*, but such a reading is available only on the specificational reading of the sentence, not on the predicational one.

Scope connectivity also comes to the fore in the examples in (80), which show that the 'value'-XP of a specificational pseudocleft allows for the same *de dicto/de re* ambiguity (customarily treated in terms of scope) as does the object of the corresponding simple clause:

(80)

a.	What John seeks is a unicorn.	(*de dicto* or *de re*)
b.	John seeks a unicorn.	(*de dicto* or *de re*)

(iii.g) *Selectional connectivity*   (See (81–82); cf. Peters and Bach 1968 ; Hankamer 1974 ; Heggie 1988):

(81)

What John counted was the pigeons/*the pigeon.
cf. John counted the pigeons/*the pigeon.

(82)

a.	What John wondered was whether/*that it was raining.
	cf. John wondered whether/*that it was raining.
b.	What he's {asking/not saying/*saying} is whether there will be any beer.
c.	What {that depends/*John counts} on is whether there is enough beer.

| (82) | d. | What she wouldn't say (*to me) was why she ate them all at once.[18] |

For reasons inherent in the lexical selectional properties of the verb *count*, a plural countable object (or a mass term, not illustrated here) is needed in combination with this verb. As (81) shows, this selectional restriction imposed by *count* carries over into specificational pseudoclefts featuring this verb in the *wh*-clause. Likewise, the fact that *wonder* selects a *wh*-clause complement asserts itself in the pseudocleft in (82a) as well. (Of course, (82) involves specificational pseudoclefts for trivial reasons, *wh*-questions not being construable as predicates.)

(iii.h) *Emotive should connectivity* (See (83–84); cf. Higgins 1979 : 139–140; Bošković 1997a ; Heycock and Kroch 1999 .) Another reflex of selection which we may mention here under the general rubric of connectivity effects is what we will call 'emotive *should* connectivity':

| (83) | a. | The *odd* thing is that he *should* have managed to do this all by himself. |
| | b. | What is *odd* is that he *should* have managed to do this all by himself. |

(84) It is *odd* that he *should* have managed to do this all by himself.

As Higgins (1979 : 139–140) first noted, the 'value'-XP of a specificational copular sentence may contain so-called 'emotive *should* as a reflex of a selectional property of a subconstituent of the 'variable' constituent. Predicates like *odd* can trigger the use of *should* in the clause that they select (cf. (84)); this selectional property of the predicates in question is preserved in specificational copular sentences, despite the fact that a direct link between *odd* and the clause containing *should* is not establishable in (83).

We add in the context of 'emotive *should* (even though this does not obviously have anything to do

with connectivity) that the presence of 'emotive *should* in specificational pseudoclefts may also be triggered by a predicate outside the pseudocleft construction altogether – and that, when this happens, 'emotive *should* will show up either in the root clause or in the *wh*-clause if the word order of the pseudocleft is XP < *wh* but may surface only in the *wh*-clause if the order is *wh* < XP (see Higgins 1979 ; also Bošković 1997a : 271; Heycock and Kroch 1999):

(85)

a.	It is a pity [that [proud of himself] *should* be [what John is]].
b.	It is a pity [that [proud of himself] is [what John *should* be]].

(86)

a.	*It is a pity [that [what John is] *should* be [proud of himself]].
b.	It is a pity [that [what John *should* be] is [proud of himself]].

For Bošković (1997a) and Heycock and Kroch (1999) the facts in (86) are an indication that specificational pseudoclefts of this type are 'reconstructed' into their simple clause counterparts in the semantic component of the grammar. See especially Bošković (1997a : 271) for careful discussion, as well as for the observation that the distribution of 'emotive *should* is a diagnostic for distinguishing specificational and predicational pseudoclefts: in the latter, 'emotive *should* never shows up in the *wh*-clause in such contexts as (87):

(87)

a.	It is a pity [that [what John is] *should* be [worthwhile]].
b.	*It is a pity [that [what John *should* be] is [worthwhile]].

(iii.i) *Case connectivity* (See (88–90); cf. Bošković 1997a ; Iatridou and Varlokosta 1998). One last connectivity effect that we will discuss here involves Case. Iatridou and Varlokosta (1998) point out that the 'value'-XP of specificational pseudoclefts is Case-dependent on the verb in the *wh*-clause; that of predicational pseudoclefts is not. The German pair in (88) shows this most clearly, thanks to the morphology on the post-copular noun phrase:

(88)

		Was	Hans	essen	wollte	war	*einen*	Apfel.
a.	what	Hans	eat		wanted	was	an (acc.)	apple
		Was	Hans	essen	wollte	war	*ein*	Apfel.
b.	what	Hans	eat		wanted	was	an (nom.)	apple

Den Dikken et al. (2000 : 73, n. 27) point out that Iatridou and Varlokosta have over-stated the case: (88b) is not unambiguously predicational; it allows a specificational interpretation as well (as is shown by connectivity effects, which are reproducible in these kinds of sentences; see Sharvit 1997 for a similar observation about Hebrew). Be that as it may, (88a) is certainly unambiguously specificational (moreover, it is grammatical only with a *wh* < XP word order, a 'Type A' diagnostic; see Den Dikken et al. 2000 for discussion). It shows that the 'value'-XP can get its Case from the verb in the *wh*-clause: a case of Case connectivity.

That the 'value'-XP is Case-dependent on the verb in the *wh*-clause is shown also by facts presented by Bošković (1997a : 250). While *ask* and *wonder* both semantically select a question, it is only *ask* which allows this question to take the form of a noun phrase; this follows from the fact that only *ask* is a Case assigner. The distribution of CP and DP complements seen in the simple clauses in (89) is mimicked perfectly in the corresponding specificational pseudoclefts in (90).

(89)

a.	I asked {what the time was/the time}.

(89)	b.	I wondered {what the time was/*the time}.

(90)	a.	What I asked was {what the time was/the time}.
	b.	What I wondered was {what the time was/$^?$*the time}.

(Bošković 1997a : 253 presents similar facts for *hope* and *inquire*.)

The examples in (91) and (92) (both taken from corpus-based studies: Geluykens 1984 : Appendix and Collins 1991 : 45, respectively) make a similar point. In both cases, the fact that the post-copular 'value'-XP does not want Case seems to be responsible for the absence of the preposition which the verbs in the *wh*-clauses would select in the presence of a Case-dependent DP. Bošković's (1997a : 253, n. 20) constructed examples in (93) (which he calls "degraded" yet better than the corresponding *wh*-questions: *What is John afraid?*, *What does it seem?*) fit into this general picture as well. (See Bošković 1997a : 253, n. 20 for discussion of why his examples in (93) are degraded.)

(91) What I am convinced is that we shall not do anything unless departments cooperate.

(92) Now what I'm fascinated is to know that communists and fascists are such bad shots.

(93)	a.	$^{??}$What John is afraid is that Mary will leave.
	b.	$^{??}$What it seems is that Mary will leave.

For Bošković, the above examples show, in addition, that the *what* inside the *wh*-clause apparently is not Case-dependent. This seems to be contradicted, however, by familiar facts of the type in (94–96)

(cf. Heggie 1988 : 340, 343). Here, the distribution of *of* indicates that *what* does indeed demand Case – the *what* of specificational pseudoclefts imposes the exact same restrictions on the complement of the verbs in these examples which unmistakable DPs also impose:

(94)

a.	What did you persuade him *(of)?
b.	You persuaded him (*of) [that he should try harder]/[to try harder].
c.	What you persuaded him *(of) was [that he should try harder]/[to try harder].

(95)

a.	What did he agree *(to)?
b.	He agreed (*to) [that he would work harder].
c.	What he agreed *(to) was [that he would work harder].

(96)

a.	What are you wondering (about)?
b.	John is wondering *(about) DP.
c.	What John wonders (about) is [whether he can succeed].

Notice that these data seem to confirm the parallelism between specificational pseudoclefts and question-answer pairs (cf. (i), above; also see , below), while the ones in (91–93) seem to pose a problem for such a connection.

(iv) *Agreement effects* The whole battery of connectivity effects reviewed in the foregoing as a group sets apart specificational sentences (double-NP as well as pseudocleft varieties) from predicational copular sentences. Similar in spirit and effect are the (iv) agreement effects. These come in three

types, the third of which deserves comment here (on (iv.a) see).

(iv.a) *Phi-feature agreement*   See (97); cf. Declerck 1988 : 79):

(97)

a.	What you have bought *is* fake jewels.	(specificational)
b.	What you have bought *are* fake jewels.	(predicational)

(iv.b) *Aspectual agreement* (See (98); cf. Declerck 1988 : 52):

(98)

a.	What he was do*ing* was work*ing* in the garden.
b.	*What he was do*ing* was work in the garden.
c.	*What he did was work*ing* in the garden.

(iv.c) *Temporal agreement/congruence* (See (99); cf. Akmajian 1979 : 168–169):

(99)

a.	What you are holding in your hand *is* a small brown butterfly. (pred/spec)
b.	What you are holding in your hand *was* a small brown butterfly. (predicational)
c.	What you are holding in your hand *will be* a small brown butterfly. (predicational)

As Akmajian points out (p. 169), of the examples in (99) only the a-sentence has a specificational

reading; the other two are unambiguously predicational. In concert with this observation, Akmajian also shows that of these three examples only the a-example is reversible (cf. (100); see property (ii)):

(100)

a.	A small brown butterfly *is* what you are holding in your hand.
b.	*A small brown butterfly *was* what you are holding in your hand.
c.	*A small brown butterfly *will be* what you are holding in your hand.[19]

Akmajian (1979 : 169–170) points out that "while the phenomenon illustrated by the sentences of [(99)] has been viewed in terms of tense agreement, it is in fact part of a deeper phenomenon," characterizable as "temporal congruence": cf. the fact that it rears its head also in non-cleft specificational copular sentences of the type in (101), conditioned by the adjective *old* in the pre-copular NP:[20]

(101)

a.	His old job *was* building radars at Lincoln Labs.
b.	*His old job *is* building radars at Lincoln Labs.
c.	*His old job *will be* building radars at Lincoln Labs.

This once again confirms the intimate connection between specificational pseudoclefts and specificational copular sentences in general.

While the preceding examples suggest that tense agreement/congruence is obligatory in specificational pseudoclefts, we should note that Declerck (1988 : 81–82) points out that tense in specificational pseudoclefts is "determined by two different and independent systems": (i) "the tense depends on the relation between the chosen deictic centre and the time implied by the variable NP," or (ii) "the tense of the copula is neutralized" (with the copula systematically occurring in the present

tense). We have come across examples illustrating (i) in the foregoing; examples of the second type are given in (102) (from Declerck 1988 : 82), which are grammatical only "if there is 'present tense relevance', i.e., if the past act of specification is still felt to be relevant" (p. 83):

(102)

a.	The reason he did it *is* that he is a coward.
b.	What he would not say *is* when it will happen.

We note also that there may be an effect of word order on the temporal agreement facts: though this does not seem to have been discussed in detail in the literature, Heggie's (1988) pairs in (103–104) suggest that it is only specificational pseudoclefts with *wh* < XP order which are subject to strict tense agreement restrictions:

(103)

a.	Where John met Mary *was* in the park.
b.	In the park *is* where John met Mary.

(104)

a.	Who I gave the book to *was* John.
b.	John *is* who I gave the book to.

Under the rubric of temporal agreement/congruence, we may also draw attention to a number of restrictions on specificational sentences in general, and specificational pseudoclefts in particular, when it comes to tense. The reader familiar with Higgins (1979) may have assumed that Akmajian's examples reproduced here as (99c) and (100c) are ungrammatical (as specificational pseudoclefts) regardless of tense agreement/congruence – after all, Higgins (1979 : 310) claims that the tense of the copula in specificational pseudoclefts may only be simple present or past tense (see also Heggie's

1988 : 315 statement that "sentences like *The boss must be Joe Horn* are always equative"). Declerck (1988 : 81) takes issue with Higgins's claim, however, pointing out that a specificational pseudocleft of the type in (105a) is grammatical. Ross (1999) gives additional examples (cf. (105b–d)) that contradict Higgins's claim in this domain, and help further emphasize the requirement of temporal agreement. The facts in (105c, d) are complicated, and will not be dissected in detail here; what (105c) shows particularly clearly, however, is that the agreement requirement refers to tense, not aspect: the perfect in the *wh*-clause need not be matched in the copular main clause, but the present tense form of *has* in the *wh*-clause *must* be matched by a present tense form in the matrix:

(105)

a.	The one who *will* win *will be* one of us.
b.	What Sandy *might have been* reading {*might have been*|*might be*|**has been*} Tolstoy
c.	What Sandy *has been* reading {**might have been*|$^{?}$**might be*|*has been*|*is*|**was*} Tolstoy.
d.	what *could have been* happening {*could have been/could be/*was/is*} that she {**has been/could have been/was/is*} working at home.

Declerck (1988 : 85) also dismisses Higgins's (1979 : 242) statement that *used to be* can replace *be* in predicational sentences only (a statement which is apparently correct for sentences like (106)) with reference to the grammatical examples in (107):

(106) (The one who was) the murderer of Tom *was*\|**used to be* John.

(107)

a.	The colour that she preferred *used to be* blue.
b.	The one who did most of the work *used to be* John.

Declerck (1988 : 85) concludes that (107) is grammatical since "the variable NP is such that different values can be assigned to it at different times," while such is impossible in (106). Even with this correction to Higgins

(1979) in place, though, it remains true that with respect to the restrictions on tense (including *used to*), all specificational copular sentences (cleft and non-cleft alike) behave on a par and are to be distinguished from their predicational counterparts.

(v) *Extraction restrictions*   (See (108–109); cf. practically all of the literature on specificational sentences – in particular, Heggie 1988 ; Moro 1997 ; Heycock and Kroch 1999). This is another important property covering the entire spectrum of specificational sentences.

(108)

a.	I believe that the cause of the riot was a picture of the wall.
b.	*Which picture do you believe that the cause of the riot was *ec*?
c.	*Which wall do you believe that the cause of the riot a picture of *ec*?
d.	*Which riot do you believe that the cause of *ec* was a picture of the wall?
e.	*The cause of which riot do you believe *ec* was a picture of the wall?

(109)

a.	I believe that what caused the riot was a picture of the wall.
b.	*What do you believe that what caused the riot was *ec*?
c.	*What do you believe that what caused the riot was a picture of *ec*?
d.	*What do you believe that what caused *ec* was a picture of the wall?

Grosu (1972) presents the opacity of the post-copular 'value' constituent of specificational pseudoclefts as an argument for the so-called extraction analysis of these constructions (see , below); however, the fact (which he notes himself) that specificational copular sentences generally have this property makes it highly unlikely that the extraction restrictions in (109) constitute an argument for an

analysis of specificational pseudoclefts that derives them from their corresponding simple clause counterparts (or vice versa; on the latter, see Bošković 1997a , and the discussion in). What is needed is an account of the data in (108) and (109) which generalizes over all specificational copular sentences and sets them apart from predicational copular sentences (which do allow extraction from and of the post-copular constituent; cf. (110)):

(110)

a.	I believe that the cause of the riot was a big surprise to us all.
b.	How big a surprise do you believe the cause of the riot was *ec*?
c.	Who do you believe that the cause of the riot was the biggest surprise to *ec*?
d.	*What do you believe that the cause of *ec* was a big surprise to us all?

The above five traits of specificational copular sentences (including specificational pseudoclefts) are the most important syntactic distinctive features of these constructions (on interpretive hallmarks of these constructions, see below). In addition to these, we may mention a number of somewhat more microscopic ways in which predicational and specificational copular sentences differ.

(vi) *Negation* (See (111); Higgins 1979 : 321; Declerck 1988 : 166):

(111)

a.	What John is isn't important to him.	(predicational)
b.	*What John is isn't important to himself.	(specificational)
c.	*Smith's murderer isn't John.	

As Higgins (1979 : 321) points out, "the copula in a Specificational pseudo-cleft cannot have a 'straight' negation of the predicate, but at best only some kind of contradiction negation"– that is, (111b), while bad in isolation, could be salvaged by contrasting *important to himself* with some other

value of the variable in the *wh*-clause (cf. *What you need is not a doctor but a wife*; see also Ross's (2000) *Though what I like is not pizza, what he likes is*, which is likewise contrastive, though not with respect to the value). Declerck (1988 : 166) broadens the scope of Higgins's observation to include specificational copular sentences in general; cf. (111c), which likewise is good only on a 'contradiction reading'. (On restrictions on adverbial modification other than negation, see (xx), below; this is a domain in which the facts are substantially less clear, and where, moreover, specificational pseudoclefts diverge from other specificational copular sentences.)

(vii) *Copula contraction*   (See (112); cf. Kaisse 1979 : 708–709). This is another domain in which all specificational copular sentences differ *en bloc* from their predicational pendants:

	What I eat's important to me.	(predicational)
a.	*What I want's an avocado.	(specificational)
	*The culprit's Chuzzlewit.	
c.	cf. Chuzzlewit's the culprit.	

(112)

As (112) shows, only predicational copular sentences allow the copula to contract onto the pre-copular constituent.

(viii) *Degree modification of the post-copular term*   (Cf. (113); Akmajian 1979 : 164; Heggie 1988).[21] Predicational copular sentences are also singled out by restrictions on degree modification of the post-copular term.

(113) What *John* is is **somewhat/very/more** important to *him/*himself* (than . . .).

For both Akmajian and Heggie, the impossibility of this kind of construction counts as evidence that

the post-copular AP in specificational pseudoclefts like this is not a predicate – modification is a property limited to predicates.

(ix) -ever *and quantificational restrictions*   (Huddleston 1971 : 242; Heggie 1988 ; Declerck 1988 .) A further peculiarity of pseudoclefts which has been made out to be reducible to a property of predicates (predicate nominals, to be more specific) concerns *-ever* and quantificational restrictions:

(114) Whatever she wrote was a novel. (predicational/*specificational)

a.	*John is every teacher.
b.	*Bill's tie is whatever Mary hates.

(115)

The example in (114), from Bolinger (1972b), is unambiguously predicational, whereas its counterpart without *-ever* is perfectly ambiguous between a predicational and a specificational interpretation.[22]

Heggie links the unavailability of a specificational reading for (114) and the ungrammaticaticality of her (115b) to a general ban on predicate nominals: they resist universal quantification, as is shown by Williams's (1983b) example in (115a). Iatridou and Varlokosta (1998) take essentially the same tack, analyzing the ungrammaticality of examples like (115b) by analyzing the *wh*-clause of specificational pseudoclefts as a free relative functioning as a predicate nominal. Heggie and Iatridou and Varlokosta thus construe the facts in (114) and (115) as an argument for an analysis of the *wh*-clause of specificational pseudoclefts as an underlying predicate.

Their point is not well taken, however. For in specificational sentences *both* major constituents are in fact subject to quantificational restrictions – not just the *wh*-clause (as the *-ever* facts show) but the 'value' NP as well (cf. Gundel 1977 ; Seuren 1985 : 297; Declerck 1988 : 87–88; Moro 1997 ; Heycock and Kroch 1999); cf. also Blom and Daalder's 1977 : 24–25 discussion of (74), above), as (116) and (117) show:[23]

(116)

What Henry sold was	
a.	a postcard
b.	a few postcards
c.	*few postcards
d.	*many postcards
e.	*most postcards
f.	*every postcard

(117)

The problem/cause of the riot was	
a.	English hooligans
b.	a few English hooligans
c.	*few English hooligans
d.	*many English hooligans
e.	*most English hooligans
f.	*every English hooligan

If Heggie's and Iatridou and Varlokosta's interpretation of (115) were correct, the facts in (116–117) would imply (in combination with their conclusion based on (115)) that specificational copular sentences have *two* predicative constituents – and that would not make any sense. We therefore refrain from drawing hasty conclusions concerning predicativity on the basis of quantificational restrictions of the type just illustrated.

3.2.2 Interpretive properties

Two interpretive properties of specificational constructions, closely related to one another, are worth drawing special attention to.

(x) *Information structure*   There is a strong tendency for the 'value'-XP of a specificational sentence to be the focus of the construction, and to convey new information. Blom and Daalder (1977) effectively use this fact as the key distinguisher between specificational and predicational copular sentences. The following definitions have been adapted from Blom and Daalder's work ('value'-XP replaces their 'hyponym'; see (23),):

(118)

a.	In a *specificational* copular sentence, the focused element is contained in the 'value'-XP.
b.	In a *predicational* copular sentence, the focused element is **not** contained in the 'value'-XP.

To illustrate, in a specificational pseudocleft such as (119), the information structure (or theme-rheme structure) of the sentence is partitioned in such a way that the *wh*-clause expresses old information while the 'value', which specifies the variable in the *wh*-clause, supplies new information. Concomitantly, the 'value'-XP in examples of this sort receives focal stress.

(119) What John bought was a book.

However, while there is indeed a strong tendency for the variable to merely express old information and for all the new information to be packaged into the value, one cannot strictly correlate the variable/value (or identified/identifier) dichotomy with the new/given information split, as Halliday (1967 : 226) already pointed out. As Collins (1991 : 82–83) puts it, "the two are independenty variable; the association of new information with the highlighted element may be over-riden by marked focus." An example of such an override is Collins's (120):

(120)

	a.	Tom offered Sue a sherry.
	b.	No, the one who poured the sherry was Tom.[24]

Although, therefore, "in the majority of basic pseudo-clefts the relative clause/theme [i.e., variable] contains (at least some) new information . . . there are several factors which work together to attenuate the newness of the item or items so marked intonationally" (Collins 1991 : 119).

Declerck (1998 : 13) makes a more general point of the same general nature, observing that there are essentially four ways of focusing in specificational sentences:

- focus can be on the value as a whole (the 'standard' case),
- focus can be on a subpart of the value,
- focus can be on the entire pseudocleft (in which case information in the *wh*-clause is also new; cf. Erades 1962 ; Prince 1978),
- focus can be on two value parts, one of which appears in the *wh*-clause (cf. (121), adapted from Declerck's cleft example).

(121) (Why did you hit Mary? – I beg your pardon!) She was the one who hit me!

We refer the reader to Collins 1991 : 133, 145 for lucid summaries of the information-structural properties of pseudoclefts with *wh* < XP and XP < *wh* orders.)

(xi) *Exhaustivity* Exhaustivity (or exclusivity or uniqueness, as it has also been called) is another interpretive property peculiar to specificational copular sentences, closely related to the information structural properties of these constructions. It is an implicature (cancelable by 'particularizers' like *not only*, *mainly*, *especially*, *primarily*), not overly robust at that – as Collins (1991 : 32) points out, "the types of sentences one may construct to test the exclusiveness implicature elicit variable responses when submitted to the judgment of native speakers": examples of the type in (122c, d), while "rejected by many" once the parenthesized material is included, apparently are not deemed as awkward as the relevant variants of (122b, e, f).

(122)

	a.	The car needs a new battery (amongst other things/and it needs a new alternator too).
	b.	The car only needs a new battery (*amongst other things/and it needs a new alternator too).
	c.	It is a new battery that the car needs ($^?$amongst other things/and it needs a new alternator too).
	d.	What/the thing the car needs is a new battery ($^?$amongst other things/and it needs a new alternator too).
	e.	All/the only thing the car needs is a new battery (*amongst other things/and it needs a new alternator too).
	f.	It is only a new battery that the car needs (*amongst other things/and it needs a new alternator too).

Still, the fact that many speakers do indeed reject (121c, d) with the parenthesized material included "can only be attributable to the exclusiveness implicature associated with cleft and pseudo-cleft constructions" (Collins 1991 : 33).

This implicature is a sufficient but not a necessary condition for specificationality – that is, any copular construction that has an exhaustiveness implicature is specificational; but not every specificational copular sentence necessarily has this exhaustiveness implicature. As Declerck (1988) points out, this implicature

"can only arise if the variable is uniquely defined" (i.e., if the variable is *definite*, which it is when it is a definite noun phrase or the *wh*-clause of a specificational pseudocleft). As a consequence, in cases in which the variable happens not to be "uniquely defined," no uniqueness/exhaustiveness implicature presents itself (see Declerck's examples on p. 31, reproduced here):

(123)

a.	An example of this kind is World War II.
b.	Typical instances of this are Julius Caesar and Napoleon.
c.	Something that I don't understand is how the thief managed to get in.

There are cases in which exhaustiveness is not merely an implicature but actually an entailment of the singularity and definiteness of the variable.[25] In such cases, adding *only* to the focus will block the specificational reading (Declerck 1988 : 32): (124b) can only receive a predicational reading ('Smith's murderer is not someone with whom I have close relations').

(124)

a.	The one who murdered Smith is my neighbor. (ambiguous)
b.	The one who murdered Smith is *only* my neighbor. (predicational only)

In a similar vein, Seuren (1985) points out that there are contexts in which the interpretive difference between (pseudo)cleft sentences and their simple counterparts is not merely pragmatic but in fact truth-conditional (cf. (125), (126)): "if in a situation where nobody laughed [(125a)] is uttered it will simply be (minimally) false and its negation [(125b)] will be true, but if [(126a)] is uttered it will be (radically) false and its negation [(126b)] will still fail to be true."[26]

(125)

a.	Harry laughed.

(125) b. | Harry didn't laugh.

(126)
a. | The one who laughed was Harry.
b. | The one who laughed wasn't Harry.

3.3 Properties peculiar to specificational pseudoclefts

Now that we have essentially covered the list of syntactic and interpretive properties which unite all specificational copular sentences and set them apart from their predicational congeners, let us make a list of a number of characteristics peculiar to specificational pseudoclefts.

(xii) *The form of the value-XP* (Bolinger 1972b : 98–100; Hankamer 1974 ; Heggie 1988 : 371; Declerck 1988):

(127)
a.	The way he spoke to me was flatteringly.	(specificational)
b.	The way he spoke to me was flattering.	(predicational)

(128) The best way to categorize them in fact is historically. (Geluykens 1984)

(129)
a. | When/the day they're coming for the box is Friday. (Hankamer 1974)

(129)	b.	When she waters them is weekends.

Given that (127a) and (128–129) (the latter due to Hankamer 1974 ; these are good in certain dialects only) are unambiguously specificational, one expects (cf. property (ii) above) that this kind of pseudocleft should be reversible – and indeed, grammatical and somewhat marginal cases of this kind have been reported in the literature (cf. (130a), due to Radford 1981 , and (130b, c), from Heggie 1988 : 371). As Heggie points out, "it appears that to the extent that an adverb may be easily predicated of a human subject (i.e., PRO), the sentence is grammatical" (while "those adverbs which must be predicated of a clause are completely ungrammatical"; cf. *Apparently is how John left early).

(130)	a.	A little too casually seems to have been how he addressed the judge.
	b.	?Very quickly seems to be how she ran the race.
	c.	?Very reluctantly is how we all left.

(xiii) *PP pied-piping* (cf. esp. Heggie 1988 : 360–363)

(131)	a.	*With whom he goes to the cinema is with Mary/important to himself.	(specificational)
	b.	?With whom he goes to the cinema is important to him.	(predicational)

In English it is generally impossible to perform PP pied-piping in a specificational pseudocleft (though pied-piping is possible in predicational pseudoclefts, to the same extent that PP pied-piping is ever felicitous in English). Notice, however, that Heggie (1988 : 360–363) has found that pied-piping of a dative or *of*-PP does not seem impossible in specificational pseudoclefts: the examples in (132) and (133) are "simply awkward," not ungrammatical, according to her:

(132)

| a. | ?To whom I gave the book was John. |
| b. | ?John is to whom I gave the book. |

(133)

| a. | ?Of what Mary was convinced was that Bill would succeed. |
| b. | ?That Bill would succeed is of what Mary was convinced. |

(134)

a.	?A person to whom I sent a report without notifying *pg*.
b.	?A person to whom I spoke without kneeling in front of *pg*.
c.	?To whom did John speak without being able to see *pg*?

She notes in this connection that *to whom* can also (marginally) license an NP parasitic gap (as in (134)), which suggests that the PPs in (132) and (133) can exhibit 'NP-like' behavior. If so, (132) and (133) are not genuine exceptions to the generalization that English specificational pseudoclefts disallow PP pied-piping.

Languages differ on this point, however: Higgins (1979 : 41) notes Spanish examples of specificational pseudoclefts with PP pied-piping (due to Jespersen 1969 : 78–79) which are grammatical (cf. (135)):

(135)

| De | un | rey | es | de | quién | hablamos.[27] |

(135)

a.	of	a	king	is	of	whom	we speak
	Con	quién	hablaba		es	contigo.
b.	with	whom	I/he was talking		is	with you

Similarly, Den Dikken et al. (2000 : 72) report that Dutch and German allow PP pied-piping in specificational pseudoclefts as well; but see Blom and Daalder (1977 : 9) for an example of PP pied-piping in Dutch which they judge to be unacceptable (?*_Waar Jan op wacht is op de uitslag_ 'What Jan is waiting for is for the result'; to our ear, this example does not sound crashingly bad). See also , below.

(xiv) '_P-drop_' (Higgins 1979 : 303–304):

(136)

a.	Where John is going _to_ is a nice place.	(pred/spec)
b.	Where John is going is a nice place.	(predicational)

Higgins claims that not realizing the preposition _to_ delivers an exclusively predicational interpretation of the pseudocleft in (136). It is unclear what should explain this fact[28] – especially from the perspective of the parallels between the _wh_-clause of specificational pseudoclefts and _wh_-questions in question-answer pairs, one might have expected non-realization of _to_ to be perfectly compatible with a specificational interpretation of the pseudocleft: the question _Where is John going (to)?_ is perfect both with and without _to_.

(xv) _Tag questions_ (Higgins 1979 : ch. 6, (85)/(87); Bošković 1997a : 272):

(137)

(137)

a.	*What John is is proud, isn't it?	(specificational)
b.	?What John is is proud, isn't he?	

(138)

a.	What John is is lucrative, isn't it? (predicational)
b.	*What John is is lucrative, isn't he?

Bošković (1997a : 272) notes that, while in predicational pseudoclefts the choice of pronoun and verb in a tag question is determined wholly at the root level (a copular sentence with a free relative subject, resulting in *is* and *it*), in specificational pseudoclefts (at least the ones with *wh* < XP word order; we are not familiar with facts of this nature reported for XP < *wh* pseudoclefts) such is entirely impossible (see (137a)). Instead, the tag may marginally skip the copular root clause altogether and relate itself to the clause contained in the *wh*-constituent.

Sentences of the type in (137b) are certainly not brilliant (Bošković actually assigns (137b) two question marks), but they are attested in spontaneous speech –Geluykens (1984) found (139) in a corpus of spoken English (from the *Survey of English Usage*):

(139) What you're meaning, Joey, is what caused the bolus, aren't you?

The following are two restrictions on the *wh*-clause constituent of pseudoclefts.

(xvi) *Predication restrictions* (Akmajian 1979 : 165; Heggie 1988 : 351):

(140)

a.	He is tall.	(predicational)

(140)	b.	He is the man who robbed the bank yesterday.	(specificational)

(141)	a.	What he is is tall.
	b.	*What he is is the man who robbed the bank yesterday.

In a *wh*-cleft whose *wh*-clause has the form *what X is*, the 'value'-XP must correspond to the *predicate* of the copular *wh*-clause: specificational copular sentences do not serve as input to specificational pseudoclefts whose *wh*-clause has a post-copular gap (cf. (141b), due to Akmajian 1979 : 165).

This is clearly not a case of matching across the matrix copula – that is, it is not the case that the gap in the copular *wh*-clause must be a predicate in order to match the predicativity of the post-copular constituent in the matrix: after all, the latter is *not* a predicate. This is shown most directly, perhaps, by the fact that *though*-movement (an operation singling out predicates) fails in specificational pseudoclefts (as Ross 2000 has pointed out):

(142)	a.	Harmless old duffer though Al was, he won.
	b.	*Harmless old duffer though what Al was is, he won.
	cf.	Though what Al was is a harmless old duffer, he won.

While (141a) is grammatical (with *tall* functioning as a predicate inside the *wh*-clause), specificational pseudoclefts with a 'value'-AP "obtain freely only when the verb of the CP-predicate is the copula" (Heggie 1988 : 351) – the examples in (143) and (144) are ungrammatical. Contrast these with the grammatical example in (145) (= (60b); see n. 14 on speaker variation with respect to the reverse

order of (147), irrelevant here):

(143)

a.	*How Mary shook John was awake.
b.	*Awake is how Mary shook John.

(144)

a.	*How Tom hammered the nail was flat.
b.	*Flat is how Tom hammered the nail.

(145) Rather plump is how John likes his women.

The same problems found in (141b) and (143–144) rear their heads in question-answer pairs: while the *wh*-questions in (146a–c) are good in isolation, they cannot receive the answers provided on the right. (146d) (corresponding to (145)) once again behaves differently:

(146)

a.	What is he?	–	*The man who robbed the bank yesterday.
b.	How did Mary shake John?	–	*Awake.
c.	How did Tom hammer the nail?	–	*Flat.
d.	How does John like his women?	–	Rather plump.

This enhances the parallel between specificational pseudoclefts and question-answer pairs (see ; cf.

Den Dikken et al. 2000 for an analysis of specificational pseudoclefts exploiting this parallel).

(xvii) *Combining clefts and pseudoclefts I* (Blom and Daalder 1977 ; Akmajian 1979 : 89; Declerck 1988):

(147)

a.	Whatever it was that he got from her was expensive.
b.	*What it was that he got from her was expensive.

(148)

	Ik	weet	niet	wie	(het	is	die)	daar	staat.
a.	I	know	not	what	it	is	that	there	stands

	Ik	doe	wat	(*het	is	dat)	de	directeur	mij	opdraagt.
b.	I	do	what	it	is	that	the	manager	me	assigns

	Wat	(*het	is	dat)	hij	eet	is	een	banaan.
c.	what	it	is	that	he	eats	is	a	banana

(149) *The thing that it was that was in the car was my hat.

Declerck (1988 : 73) points out that clefting inside the *wh*-clause of a predicational pseudocleft is possible (as in (147a)), though only if *wh-ever* is used (cf. (147b)), for reasons unclear. Blom and Daalder (1977) make the converse claim: clefting inside the *wh*-clause of a specificational pseudocleft is impossible (cf. (148)). Similarly, Akmajian (1979 : 89, n. 11) draws attention to the ill-formedness of his (149).

We should point out immediately, however, that the claim that the *wh*-clause of a specificational pseudocleft may not contain a cleft is not uncontroversial. Thus, Faraci (1971) points out that (at least

in his variety of English) (150) is grammatical. Akmajian (1979 : 74), who includes this example in his discussion, adds that "for my own speech sentences such as [(150)] are more or less marginal":

(150) $^{\%}$What it was that John bought was a car.

(xviii) *Combining clefts and pseudoclefts II* (Heggie 1988). A second way in which combining clefting and pseudoclefting is restricted was first noted by Heggie (1988), who draws attention to the paradigm in (151):

(151)

a.	It's coconut that is what Mary hates.	cf.	It's John that is the teacher.
b.	*It's what Mary hates that coconut is.		*It's the teacher that John is.
c.	*It's what Mary hates that is coconut.		*It's the teacher that is John.
d.	*It's coconut that what Mary hates is.		*It's John that the teacher is.

As the parallelism between the left-hand and right-hand paradigms shows, specificational pseudoclefts behave like double-NP specificational copular sentences in this respect; (151) is strictly speaking out of place in this subsection, therefore, but we included it here for presentational purposes. We will return to this restriction in , in the discussion of the arguments for a predicational approach to the underlying representation of specificational sentences.

3.4 Properties peculiar to specificational pseudoclefts with wh < XP word orders

So far we have found that specificational pseudoclefts show a superset of the restrictions on specificational copular sentences per se. All cases in which specificational pseudoclefts exhibited

properties of their own involved peculiarities of their *wh*-clause, not reproducible in double-NP specificational copular sentences for obvious reasons. What we have not found yet is cases in which properties which *are* in principle reproducible throughout the class of specificational constructions are nonetheless specific to pseudoclefts. Such cases do exist, however – and systematically, whenever we find such cases, it is specificational pseudoclefts with a word order in which the *wh*-clause precedes the 'value'-XP which are subject to the constraints in question; their XP < *wh* counterparts are immune to them.

(xix) *Raising/ECM constructions* (Hankamer 1974 ; Higgins 1979 ; Williams 1983b ; Heggie 1988):

(152)

a.	?I consider important to *himself* what *John* is.	(specificational; XP < *wh*)
b.	*I consider what *John* is important to *himself*.	(*specificational; *wh* < XP)

The minimal pair in (152) (taken from Den Dikken et al. 2000 : 86, who refer to Williams 1983b) emphasizes the sensitivity to word order of ECM constructions embedding specificational pseudoclefts. In this respect, specificational pseudoclefts are like specificational copular sentences in general: no such construction with 'variable < value' order is ever embeddable under ECM and raising verbs (cf. Moro 1997 for extensive discussion; see also below):

(153)

a.	I consider John the best candidate.
b.	*I consider the best candidate John.

Declerck writes in connection with the examples in (154): "In a copular sentence in which *to be* is preceded by *seem*, the copula can never be deleted on a specificational reading" (cf. Den Dikken

1995b ; Moro 1997); he then goes on to point out that "WH-clefts like [(154a, b]) are not ambiguous between a predicational and a specificational reading but can only be interpreted predicationally."

(154)

a.	What you are working on seems an interesting subject. (predicational only)
b.	What he suggested seemed a difficult thing to do. (predicational only)

The way Declerck presents this observation, one gets the impression that once *to be* is added to the examples in (154), they will allow a specificational reading – on a par with the grammatical specificational copular sentences in (155). Declerck never makes this explicit; and as a matter of fact, the empirical status of specificational pseudoclefts of the type in (156) (from Higgins 1979), (157) (all from Hankamer 1974), (158a) (from Halvorsen 1978 : 34) and (158b, c) (from Ross 1999, 2000) is a contentious issue in the literature:

(155)

a.	The best candidate seems *(to be) John.
b.	The cause of the riot seems *(to be) a picture of the wall.

(156)

a.	What John is tends to be boring.	(predicational only)
b.	What he is pointing at seems to be a kangaroo.	(predicational only)

(157)

a.	*What he was doing turned out to be washing himself.
b.	*What they were doing seems likely to be claimed to be washing each other.

(157)

c.	*What the little buggers did happens to have been (to) all get in the tub at the same time.
d.	*What she never wants to hear again appears to be any more WH Cleft sentences.

(158)

a.	What John wants seems to be never to be left alone.
b.	What he likes seems *(to be) tofu.
c.	What Al is seems *(to be) a harmless old duffer.

Most authors seem to agree that specificational pseudoclefts cannot participate in the raising-to-subject construction; but Hankamer (1974 : 231–232, n. 6) points out that "there are some speakers who do not find all of these sentences [i.e., all of (157)] ungrammatical, particularly the ones involving reflexivization." Hankamer suggests linking this case of speaker variation to that surrounding (66b), repeated here:

(66) b. What was staring up at *John* out of his soup was *himself*.

This suggestion will not cover the entire range of speaker variation, however: no peculiarities of reflexives could be at issue in (the relevant variants of) the examples in (158).

Like raising-to-subject, raising-to-object (or ECM) seems to give rise to variable judgments in the domain of *wh* < XP specificational pseudocleft constructions – though, once again, there is no variation on this point when it comes to double-NP inverse specificational copular sentences:

(159)

a.	I believe the best candidate *(to be) John.
b.	I believe the cause of the riot *(to be) a picture of the wall.

(160)

a.	*We believe what he likes to do to be (to) kiss monkeys.
b.	*We believe what he is to be proud.
c.	*We found what the theory depends on to be how clefts work.
d.	*I believe when she waters them to be weekends. (cf. (129))

(161)

a.	We believe what John wants to be never to be left alone.
b.	I consider what he likes *(to be) tofu.

The examples in (160) are once again due to Hankamer (1974), the one in (161a) to Halvorsen (1978) (as quoted in Declerck 1988 : 91), and (161b) is from Ross (1999). The scope of Hankamer's acknowledgement of speaker variation (see above) includes these examples as well. (Blom and Daalder 1977 present grammatical Dutch examples of specificational pseudoclefts with wh < XP orders embedded under ECM verbs – but these require a special 'colon intonation'; we address this in below.)

Whatever the ultimate fate of specificational pseudoclefts in raising-to-subject and ECM constructions, and notwithstanding Declerck's (1988 : 91) observation that the acceptability of *The murderer seems/is unlikely to be John* is "more doubtful" than that of their congeners without raising, it seems clear enough that fewer people will gladly accept examples of the type in (158) and (161) than the ones who find the variants of (155) and (159) featuring *to be* acceptable. This, then, is one context in which wh < XP specificational pseudoclefts differ from inverse copular sentences, fellow instantiators of the class of specificational copular sentences.[29]

This turns out not to be the only context in which wh < XP specificational pseudoclefts behave in a special way. There are three further restrictions on wh < XP specificational pseudoclefts not shared

with their reverse or double-NP relatives. We sum them up below, and comment on them briefly.

(xx) *Restrictions on adverbial modification* (See (162); Higgins 1979 : 318–320; Declerck 1988 ; Bošković 1997a):

(162)

a.	*What John is is probably angry with himself.
b.	??What John is probably is angry with himself.

(163)

a.	Angry with himself is probably what John is.
b.	Angry with himself probably is what John is.

Higgins was the first to point out that specificational pseudoclefts with *wh* < XP orders permit no adverbial modifier to the right of the copula. (Higgins makes the same point with reference to the adverb *also*; see Declerck 1988 : 33–34 for critical discussion.) Bošković (1997a : 268, n. 35) adds that placing the adverbial modifier in pre-copular position delivers a "slightly better" result. In this respect, specificational pseudoclefts differ not just from XP < *wh* specificational pseudoclefts (cf. (163)) but also from double-NP specificational sentences with 'variable < value' orders:

(164)

a.	The cause of the riot was probably a picture of the wall.
b.	The cause of the riot probably was a picture of the wall.

The robustness of Higgins's observations is not crystal clear, however. Thus, Huddleston (1971 : 341) presents (165a) as an example (culled from a corpus of scientific English) of a specificational pseudocleft; if indeed that is what it is,[30] it flatly contradicts (162a). Another such example taken from a corpus is (165b) (Geluykens 1984). Similarly, Declerck (1988 : 91) offers (165c), featuring *perhaps* in post-copular position, as a perfectly well-formed specificational pseudocleft. Since the facts in the general area of adverbial insertion often tend to be somewhat less than clear-cut, we will not dwell on these data in any further detail here.

(165)

a.	What happens at the anode is probably the conversion of chloride ions into hypochlorite and hydrogen ions.
b.	The thing to do is obviously to swing the PhD subject 'round to something nearer what I'm being paid to do.
c.	What they need is perhaps a hammer.

(xxi) *Restrictions on gapping/ellipsis* (See (166–171); Higgins 1979 : 305; Williams 1983b : 249; Heycock and Kroch 1996 : 32; Ross 1999, 2000 ; Den Dikken et al. 2000 : 67–70):

(166)

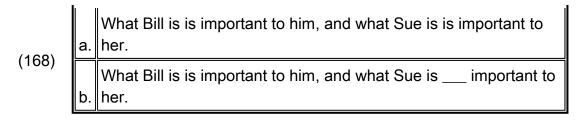|	
a.	What Bill is is important to himself, and what Sue is is important to herself.
b.	What Bill is is important to himself, and what Sue is ___ important to herself.

(167)

a.	Important to himself is what Bill is, and important to herself is what Sue is.
b.	Important to himself is what Bill is, and important to herself ___ what Sue is.

(168)

(168)

a.	What Bill is is important to him, and what Sue is is important to her.
b.	What Bill is is important to him, and what Sue is ___ important to her.

(169)

a.	The best candidate is John, and the runner-up is Bill.
b.	The best candidate is John, and the runner-up ___ Bill.

Higgins (1979) has noted that in specificational pseudoclefts with a word order in which the *wh*-clause precedes the copula and the constituent specifying the 'value', it is impossible to gap the copula linking the *wh*-clause to the 'value' constituent – (166b) is ungrammatical. In this respect, constructions of the type in (166) differ strikingly from all other English copular sentences, including pre-dicational pseudoclefts (168), double-NP specificational copular sentences with 'variable < value' orders (169), *and* specificational pseudoclefts with XP < *wh* orders (167).

The contrast between (166) and (167) shows that the ban on gapping of the root copula in the second conjunct of a specificational pseudocleft is a property peculiar to constructions with the word order *wh* < XP. Once the order of the two major constituents is reversed, gapping is perfectly possible (cf. (167b); see Den Dikken et al. 2000 : 69). Not surprisingly, gapping continues to be possible once the order in (170) is reversed; and since reversibility is not a property of predicational pseudoclefts to begin with, there are no grammatical counterparts to (168) at all in which the *wh*-clause follows the AP):

(170)

a.	John is the best candidate, and Bill is the runner-up.

(170)	b.	John is the best candidate, and Bill ___ the runner-up.

Ross (1999) notes that, in the domain of specificational pseudoclefts with *wh* < XP word order, ellipsis ('VP deletion' in Ross's terms: with the copula analyzed as a verb raising, when finite, from V to I, the ellipsis in (171) is a case of deletion of the beheaded VP) succeeds marginally when the post-copular constituent is nominal but fails completely when it is clausal; cf. (171).[31]

We add that such ellipsis comes out uniformly ungrammatical when specificational pseudoclefts have a XP < *wh* order (cf. the primed examples in (171)).[32] Note also that ellipsis is grammatical in reverse specificational sentences that are a pre-copular NP (cf. (172)).

(171)	a.	?What Bill made was popcorn, and what Terry made was too.
	a'.	*Popcorn was what Bill made, and fudge was too.
	b.	*What Mary thinks is that Mars is a star, and what Sue thinks is too.
	b'.	*That Mars is a star is what Mary thinks, and that Venus is a planet is too.

(172)	a.	Bill's biggest desire was popcorn, and Terry's was too.
	a'.	*Popcorn was Bill's biggest desire, and fudge was too.
	b.	Mary's opinion is that Mars is a star, and Sue's is too.
	b'.	*That Mars is a star is Mary's opinion, and that Venus is a planet is too.

The same grouping of subcases of copular sentences seen in (166–172) is attested another area of

the grammar in which reference is made to the copular element in the root of the construction:

(xxii) *Subject-auxiliary inversion* (See (173) vs. (174); cf. Ross 1999 ; Den Dikken et al. 2000 : 62–63):

(173)

a.	What John didn't buy was any wine.
b.	$^?$I don't know whether what John didn't buy was any wine.
c.	*Was what John didn't buy any wine?

(174)

a.	The cause of the riot was a picture of the wall.
b.	I don't know whether the cause of the riot was a picture of the wall.
c.	Was the cause of the riot a picture of the wall?

The example in (173a) is unambiguously a specificational pseudocleft – it exhibits NPI connectivity. Embedding such a pseudocleft in an embedded yes/no-question with *whether* is possible; but performing subject-auxiliary inversion in the root question in (173c) results in ungrammaticality. No such ungrammaticality results, however, in the example in (174c), involving an inverse specificational copular sentence with two NPs.[33]

Once again it should be noted that the ban on subject-auxiliary inversion is at least to some degree specific to specificational pseudoclefts with variable < value-XP word order. Examples of the type in (175a) do allow the formation of a root question with subject-auxiliary inversion (cf. Declerck 1988 : 45, n. 44):

(175)

| a. | Boring is something John has always been. |

b.	I was wondering whether boring is something John has always been.

(175)

c.	Is boring something John has always been? (cf. *Is something John has always been boring?)

It should be pointed out in this context, however, that this triplet involves a *th*-cleft, not a *wh*-cleft; that this may be important is suggested by Ross's (1999) observation that (176c) is entirely impossible (and substantially worse than *Was beans what he ate?* or [?]*Was in Londen where they lived?*). For true *wh*-clefts, therefore, the category of the value-XP seems to matter when it comes to subject-auxiliary inversion.

(176)

a.	Afraid of colons is what Jeremy has been for many years.
b.	I was wondering whether afraid of colons is what Jeremy has always been.
c.	*Is afraid of colons what Jeremy has been for many years?

The facts discussed in this subsection are a clear indication that we should be careful to look at the word order of specificational pseudoclefts – while it is generally true that specificational sentences (including specificational pseudoclefts) are reversible (cf. property (ii), above), we should not therefore assume that the properties of specificational pseudoclefts with '*wh*-clause *be* XP' word order are necessarily identical with those of their counterparts with 'XP *be wh*-clause' order (see above: Den Dikken et al.'s 2000 split between 'Type A' and 'Type B' specificational pseudoclefts). We will address this issue in more detail in the next section, which takes a closer look at reversibility (property (ii), above). (See also and the beginning of for further divergences of specificational pseudoclefts with *wh* < XP and XP < *wh* orders.)

4 Reversibility

6 Analyses of the relation between specificational pseudoclefts and simple sentences: transformation or base generation? ACKNOWLEDGMENT NOTES REFERENCES

The question as to how to best analyze the reversibility of specificational sentences, and the restrictions on this reversibility, is intimately related to the question of what the underlying representation of specificational sentences should be assumed to be. In abstract terms, when it comes to the question of how to analyze the word order alternation exhibited in (177), one has three options, *a priori*. These are summed up in (178a–c).

(177)

a.	XP *be* YP
b.	YP *be* XP

(178)

Theoretical possibilities:	
a.	(177a) and (177b) are unrelated, each having a different underlying structure.
b.	(177a) is basic, (177b) being transformationally derived from it.
c.	(177b) is basic, (177a) being transformationally derived from it.

And once the score has been settled for one particular type of instantiation of the pattern in (177), one should repeat this exercise for each additional instantiation. That is, if we were to decide, for instance, that the alternation in double-NP specificational sentences is an instance of (178b), this need not entail that the apparently similar alternation in specificational pseudocleft constructions should necessarily be analyzed along the same lines. In addition, any analysis will also need to take a decision on the question (related to the ones raised above) of whether one of the two major constituents, XP and YP, is a predicate of the other in the underlying representation of the construction at hand, and if so, which.

This said, a wealth of theoretical possibilities presents themselves. It is not surprising, therefore, that there are quite a number of different proposals available in the literature – and that there is a substantial amount of confusion around in this domain as well. In what follows we will endeavor to elucidate the issues and the positions taken in the literature.

4.1 Predicational and non-predicational approaches

In our discussion of approaches to the underlying structure and derivation of specificational sentences, we will make a basic split between two types of accounts: predicational and non-predicational approaches. The non-predicational approaches assume there to be no underlying relationship of predication between the two major constituents of specificational sentences; predicational approaches, on the other hand, do assume such an initial predicational structure.

- *Non-predicational* approaches (cf., e.g., Akmajian 1979 ; Heycock and Kroch 1999)
- *Predicational* approaches (cf., e.g., Blom and Daalder 1977 ; Higgins 1979 ; Heggie 1988 ; Declerck 1988 ; Moro 1997)

Non-predicational approaches are most strongly represented in the traditional analyses of specificational pseudoclefts and other specificational copular sentences; recently, Heycock and Kroch (1999) have reinvigorated this kind of approach. The principles-and-parameters literature has brought forth a number of detailed analyses of specificational sentences which treat them as underlyingly predicational – an analysis that has an important precursor in the pre-GB era in Blom and Daalder's (1977) analysis of specificational sentences.

Largely for presentational efficacy, we will first go through the non-predicational approaches to specificational sentences ( ), addressing the predicational approaches in .

4.1.1 Non-predicational approaches

The most explicitly non-predicational approach to specificational sentences (which in their account form a subgroup of the class of 'equative' constructions; cf. 'identity statements' in sections 1 and 2) is Heycock and Kroch (1999). They treat the relationship between the major constituents of specificational and equative sentences in terms of *equation*. One of the claims of their work, therefore, is that the theory should recognize "equation as distinct from predication" (p. 375).

With specific reference to specificational pseudoclefts (one of the foci of this case study), Heycock and Kroch draw attention to the fact that if one denies that there is a grammatical ('deep') distinction between equation and predication and treats specificational pseudoclefts as underlyingly predicative, one needs to allow free relatives (which is what they take the *wh*-clause of specificational pseudoclefts to be; see) to be ambiguous with respect to their semantic type: in *Honest is what I want a man to be*, the free relative would have to be of type $<<e,t>,t>$ (denoting as it does a second-order property: a property of properties), while in *John is what I want a man to be (i.e., he's honest)*, the free relative should be of type $<e,t>$. Moreover, in order to be able to handle tautologies like *(when it comes down to it,) honest is honest*, a predicational approach would need to both type-raise *honest* from $<e,t>$ to $<<e,t>,t>$ and attach a change in meaning to this type raising operation: *honest(x)* changes into *be identical to honest(x)*. Heycock and Kroch conclude, therefore, that "in other words, if equation is removed from the syntax, it has to be put back into the semantics" (p. 375). An equative approach to specificational sentences, by contrast, will be able to characterize free relatives as being of type $<e,t>$, and will not need to resort to type raising operations and concomitant meaning changes.

Heycock and Kroch's approach to specificational copular sentences thus treats these as equivalent to equative constructions – or 'identity statements', in the terminology of Higgins (1979) and Declerck (1988). There certainly are parallels between equative and specificational copular sentences – for example, both behave identically when it comes to embedding under ECM verbs like *consider*, *believe*, in the absence of a copula: both (179) and (180) are ungrammatical (cf. Heycock and Kroch 1999 : 374 for the equative cases; cf. Moro 1997 for the original observation concerning specificational or 'inverse copular' sentences):

(179)   I consider John the best

(179)

a.	candidate.	(predicational)
b.	*I consider the best candidate John.	(specificational)

(180)

a.	*I consider your attitude towards Jones my attitude toward Davies. (equative)
b.	*I consider my attitude towards Davies your attitude toward Jones. (equative)

In equative constructions, both orders of the two NPs deliver ungrammaticality in the complement of *consider* (180); neither order hence seems to be syntactically representable as predicational (cf. the grammaticality of (179a); recall, however, Blom and Daalder 1977 : 76 – discussed in above). It does not seem unreasonable, therefore, to deny predicate status to *both* NPs of an equative construction – equative constructions would be radically non-predicational from such a perspective. Whatever the merits of such an analysis of equatives, however, it has no logical implications when it comes to the analysis of specificational copular sentences: typologies of copular sentences routinely distinguish between identity statements and specificational copular sentences on account of the fact that their properties are not identical (see). Heycock and Kroch's (1999 : 375) remarks about tautologies like *honest is honest*, which instantiate equatives, not specificational constructions, therefore are strictly speaking beside the point when it comes to the analysis of specificational copular sentences.

Their objection to an underlyingly predicational approach to a pseudocleft like *Honest is what I want a man to be* (cf. above) is more to the point, in the present context – we are dealing here with a specificational copular sentence. But this objection of Heycock and Kroch's is based entirely on the premise that the *wh*-clause of specificational pseudoclefts like this is the same as that of the *wh*-clause of *John is what I want a man to be (i.e., honest)* (which is presumably not a pseudocleft construction to begin with): a free relative. This is by no means an uncontroversial point, however: several scholars have sought to analyze the *wh*-clause of specificational pseudoclefts as a *wh*-question instead (see for

discussion). Heycock and Kroch's objection will be valid only to the extent that one accepts a free relative approach to the *wh*-clause of specificational pseudoclefts; as soon as one denies this, their point is entirely moot.

Heycock and Kroch (1999 : 381–382) stress that their recognition of a separate class of equative copular sentences (alongside predicative ones) need not imply the recognition of (at least) two separate types of copular *be*– one may, instead, encode the difference between the two types of copular sentence entirely in the syntactic structure of the small clauses participating in them: there are two types of small clause, equative and predicative ones (the former involving "some functional head," the latter not); the copula *be* can take either as its complement.

(The fact that Heycock and Kroch assume that equative constructions feature a small clause, and that they say explicitly that the only difference between a predicative and an equative small clause lies in the presence in the latter of an additional functional head of sorts, may suggest that Heycock and Kroch do, after all, adopt a type of predicational approach to specificational/equative sentences – if the only difference between equative and predicative small clauses lies in a functional (i.e., non-lexical, non-predicating) head, and if – as is clear – predicative small clauses involve predication, then how can equative small clauses *not* involve predication? The answer to this question is not given by Heycock and Kroch. They do stress, however, that in equative constructions it is impossible "to interpret one of the noun phrases as less referential/more predicative than the other" (p. 374). This is why we have classified the Heycock and Kroch approach to specificational sentences (which they subsume under their rubric of 'equatives') as a representative of the group of non-predicational analyses.)

By not making a distinction between different types of *be*, Heycock and Kroch's "one *be* but more than one type of copular sentence" approach differs from Akmajian's (1979) account of specificational sentences (pseudoclefts in particular). Akmajian (1979 : 162) draws a distinction between "two fundamental senses of the copula, namely, the *specificational* sense as opposed to the *predicational* sense" (original emphasis); the former he later calls a "specification operator [=]" and the latter a "predicational operator [is]" (p. 217) – and it is the former that establishes the relationship between the two major constituents of specificational copular sentences.[34] The constituent harboring the variable

and the value-XP are both referential (cf. his ch. 3,); neither functions as a predicate of the other.[35] In essence, then, in Akmajian's analysis the 'specification operator [=]' serves as a two-place predicate in specificational sentences – though Akmajian never spells this out in detail, [=] may be taken to take the two major constituents of a specificational sentence as its arguments. The syntactic structure of base-generated specificational sentences is simple: the pre-copular *wh*-clause (treated as a free relative) occupies the subject position of the clause, the 'specification operator [=]' projects a VP and takes the post-copular 'value'-XP as its complement, as in (181):

(181) [$_S$[$_{NP}$ *what there was in the car*][$_{VP}$[=][$_{NP}$ *the jack you gave me/my hat*]]]

(Akmajian actually assigns the same syntactic structure (*modulo* the nature of the linking operator) to predicational pseudoclefts, saying that the ambiguity of a sentence like *What John does not eat is food for the dog* is "not associated with the specific derivation of clefted sentences . . . but rather . . . is a function of the general phenomena of referentiality of nominal expressions" (p. 178). We take it, though, that Akmajian would assume that *food for the dog* on its non-referential interpretation functions as a predicate of the pre-copular constituent, and that the 'predicational operator [is]' is not a two-place predicate in its own right.)

Akmajian (1979) argues for a dual approach to specificational pseudoclefts: one analysis generates the specificational pseudocleft in the base, the other deriving them transformationally from their simple clause counterparts (via extraction; see for discussion). We have focused here on the base generation analysis (though for the extraction derivation Akmajian assumes a structure that is underlyingly almost identical, once again featuring the 'specification operator [=]'). As Akmajian stresses several times, "there is no non-ad hoc way of preventing" this duality of sources (p. 32; also cf. p. 38). In a similar vein, Den Dikken et al. (2000) also argue for a dual analysis of specificational pseudoclefts – but this time, the two structures are radically different, one involving predication, the other not.

The non-predicational analysis is proposed by Den Dikken et al. for a *subset* of specificational pseudoclefts – in particular, those specificational pseudoclefts which feature a word order in which the *wh*-clause precedes the copula and the 'value'-XP, and in which we find connectivity effects involving

negative polarity items (their so-called 'Type A' specificational pseudoclefts). For pseudoclefts of this type, Den Dikken et al. propose a 'topic-comment' structure of the type schematized in (182), where the *wh*-clause is a *wh*-question finding itself in a left-peripheral topic position, and the 'value'-XP is represented as a full IP (from which material may be elided, subject to general restrictions on ellipsis) which functions as the root clause:

(182) $[_{TopP}[_{CP}$ *wh*-clause = *wh*-question$][_{Top}$ '*be*$[_{IP}$ 'value', either full or elliptical]]]

The structure in (182) straightforwardly captures the connection between specificational pseudoclefts and question-answer pairs (see , below) and topic-comment constructions (cf. also <u>Seuren 1985</u> : 303), the ban on subject-auxiliary inversion, and the possibility of including a negative polarity item in the 'value', apparently licensed by a negation in the *wh*-clause – in actual fact, what happens in examples of this type is that the negative polarity item is licensed *within its own clause* by the negation in the elliptical root-IP:

	a.	What he didn't read was any book about clefts.
(183)	b.	$[_{TopP}[_{CP}$ *what he didn't read*$][_{Top'}$ *be*$[_{IP}$ *he didn't read any book about clefts*]]]

The topic-comment structure in (182) is available only for specificational pseudoclefts with a word order in which the *wh*-clause (the comment) precedes the 'value'– inversion of topic and comment is impossible, given the general impossibility of extraction across a topic (the 'topic island effect'). For specificational pseudoclefts with NPI connectivity, the analysis hence – correctly – predicts that they will feature only *wh* < XP orders. For the alternative XP < *wh* order of specificational pseudoclefts, a different analysis needs to be proposed: these cannot be derived from (182) via some transformation. Den <u>Dikken et al. (2000</u>) thus propose an analysis of the two-word order variants of the specificational pseudocleft in which they are structurally unrelated.

Den <u>Dikken et al. (2000</u>) assume that specificational pseudoclefts with XP < *wh* order, as well as

double-NP specificational sentences, feature a small clause structure that includes the 'value'-XP as the subject. Discussion of this kind of structure properly belongs in , on predicational approaches – to which we now turn.

4.1.2 Predicational approaches

In Higgins's (1979) characterization of specificational sentences, neither of the two constituent NPs receives the qualification 'referential' or 'non-referential'; instead, Higgins assigns NP_1 the label 'superscriptional' (paraphrasable as 'providing the heading of a list') and NP_2 the label 'specificational' (i.e., 'specifying the contents of the list'). Translating these labels into the familiar syntactic functions 'subject' and 'predicate' is not straightforward: Higgins is the only one to use these terms, and he himself is not particularly explicit when it comes to their mapping to underlying syntactic relationships. He does say, however, that the *wh*-clause of a pseudocleft is the subject of the pseudocleft. And in his discussion of the semantic representation of specificational pseudoclefts like *What we saw in the park was a man and a women* (unambiguously specificational unless reference is being made to a hermaphrodite), he writes that whereas "the subject clause specifies a set in terms of a property, the predicate expression constitutes an explicit listing of the members of the same set, and the verb *be* is the identity" (p. 118). Thus, Higgins seems to partition the specificational pseudocleft into a subject, a predicate and a copula of identity (annotated as '=', as in Akmajian's 1979 treatment of specificational sentences); cf. the semantic representation in (184b):

(184)	a.	What we saw in the park was a man and a woman.
	b.	{x: we saw x in the park}={a man, a woman}

Yet, elsewhere in his discussion of the underlying syntactic representation of specificational pseudoclefts, Higgins (1979 : 226ff.) brings up a number of syntactic tests (mostly concerning word order in questions) which lead Declerck (1988 : 46) to conclude "there appears to be ample evidence

that in specificational sentences it is the NP representing the focus [i.e., the 'value'-XP] that is the (underlying) subject." For Declerck, therefore, in a specificational sentence like *The best candidate is John* the post-copular NP *John* (the 'value'; cf. Huddleston's 1971 'identifier'), which is referential (either weakly or strongly), functions as the underlying subject of the construction. The pre-copular constituent (the 'identified' in Huddleston's 1971 terms), which is 'weakly referring' ('attributive' in the sense of Donnellan 1966), is the 'subject complement' (a term largely equivalent to 'predicate') in the underlying representation.

On the *surface*, however, things are governed (in Declerck's analysis) by a principle which says that "the initial NP of a specificational copular sentence is always interpreted as the theme and therefore as the syntactic subject of the clause" (p. 201), regardless of the order of the two NPs. On the surface, then, whichever of the major constituents of a specificational sentence occupies the pre-copular position (in declarative sentences not involving topicalization, that is) is the subject.

Even though Declerck (1988) explicitly does not avail himself of any particular theoretical framework (so that the precise theoretical status of terms like 'underlying', used by Declerck in various places, remains rather difficult to determine), it seems reasonable, in the light of the foregoing, to summarize Declerck's perspective on the underlying syntax of specificational sentences as in (185). Declerck identifies the variable (the *wh*-clause of specificational pseudoclefts) as the 'subject complement' in the underlying representation. With 'subject complement' read as 'predicate', Declerck's approach matches that of Moreau (1971), Blom and Daalder (1977), Heggie (1988), Verheugd (1990), Heycock (1994a), Den Dikken (1995b), and Moro (1997) (see also Den Dikken et al. 2000 for 'Type B' specificational pseudoclefts) when it comes to the status of the 'variable' in the underlying representation of specificational constructions.

(185)

Blom and Daalder (1977); Declerck (1988); Heggie (1988); Moro (1997) etc.:
• variable/identified = underlying predicate

(185) • value/identifier = underlying subject

With the exception of Moreau (1971) (who only shares the 'underlying predicate' part of (185), adopting an extraction analysis; see) and Blom and Daalder (1977), who avail themselves of a pre-p&p transformational framework, all of the aforementioned generativists assume a small clause structure for this underlying subject-predicate relationship, as illustrated in (186):

(186) . . . $be_{SC}[_{Subj}$ XP][$_{Pred}$ *wh*-clause]]

It is especially Heggie (1988) who provides a range of syntactically based arguments for an underlying subject-predicate analysis of specificational sentences, with particular emphasis on pseudoclefts. Some of her arguments are intended to support the predicative nature of the *wh*-clause; others seek to vindicate the underlying subject status of XP. We will go through her arguments briefly in what follows, after which we turn to the question of how to derive the surface word order in which the 'variable' precedes the 'value'.

(i) *Quantification restrictions* (cf.) Heggie's first argument for the predicativity of the *wh*-clause, based on facts of the type in (187), was also discussed in above. The upshot of it is that the impossibility of -*ever* in the *wh*-clause of specificational pseudoclefts (of whichever order; cf. (187a)) can be likened to the ungrammaticality of (187b) on the assumption that the *wh*-clause of specificational pseudoclefts is a predicate (like the post-copular noun phrase in (187b)):

		*Whatever Mary hates is Bill's tie.
(187)	a.	*Bill's tie is whatever Mary hates.
	b.	*John is every teacher.

As was argued in , this argument has no force: combined with the quantificational restrictions on the 'value'-XP of specificational sentences, it would lead to the nonsensical conclusion that *both* major constituents of specificational pseudoclefts are underlying predicates.

(ii) *ECM* (cf.) The second indication that the *wh*-clause of specificational constructions (with 'variable < value' order) is a predicate, according to Heggie, comes from constructions of the type in (179): ECM complements (see our above). Heggie points out that it is impossible to embed a specificational pseudocleft (with *wh* < XP order) under verbs like *consider*:

(188)

a.	I consider important to himself what John is.
b.	*I consider what John is important to himself.

The essence of this argument is that small clauses (like the tenseless complements of *consider* in the examples in (179) and (188)) do not make space available to perform inversion of subject and predicate; the grammatical examples in (179a) and (188a) must hence feature subject and predicate in their base order – hence, the *wh*-clause of (188) must be a predicate in the underlying representation of specificational pseudoclefts.

Once again, however, the argument is not foolproof. A clear indication that something more needs to be said about these data is that adding *to be* renders (179b) grammatical while, for most speakers at least (cf., however, Faraci 1971 ; Hankamer 1974), (188b) is irremediably bad:

(179) b'. I consider the best candidate *to be* John.

(188) b'. %I consider what John is *to be* important to himself.

(The fact that Blom and Daalder (1977) give examples of specificational constructions with predicate-initial order embedded under ECM verbs does not refute Heggie's argument: see below for

discussion.)

(iii) *Combining clefts and pseudoclefts* II (cf.) Heggie's third argument (see our , above) makes inventive use of the combinability of clefting and pseudoclefting, as in (151a). The argument kills two birds with one stone: for alongside arguing for the predicativity of the *wh*-clause, it also confirms the subjecthood of the 'value'-XP. Heggie observes that, of the four possible outputs of a combination of a cleft and a pseudocleft in (151), only the a-example actually comes out grammatical:

(151)

a.	It's coconut that is what Mary hates.	cf.	It's John that is the teacher.
b.	*It's what Mary hates that coconut is.		*It's the teacher that John is.
c.	*It's what Mary hates that is coconut.		*It's the teacher that is John.
d.	*It's coconut that what Mary hates is.		*It's John that the teacher is.

The force of the argument here comes from the independent fact that in predicate nominal constructions like *John is the teacher* or *the teacher is John*, only the non-inverted subject can be clefted (cf. the examples in the right-hand column). The parallel behavior of *what Mary hates* and *the teacher* in the two paradigms then suggests that the former, just like the latter, is a predicate in the underlying representation of copular sentences – if one assumes, of course, that *the teacher* in *John is the teacher* (a non-inverted specificational copular sentence) is in fact a predicate nominal. If one accepts the latter claim (cf. Moro 1997 ; but see Heycock and Kroch 1999 for a different perspective), the facts in (151) argue for the predicativity of the *wh*-clause of specificational pseudoclefts.

Notice that if this argument goes through, it at the same time argues that *coconut* (the 'value') in the left-hand examples is like *John* in the right-hand cases in being an underlying subject. This is confirmed further by a variety of additional arguments provided by Heggie, the first of which concerns

gapping.

(iv) *Gapping* (cf.) This argument is originally due to <u>Higgins (1979</u>), and discussed also in <u>Heycock and Kroch (1999</u>) and <u>Den Dikken et al. (2000</u>) (see , above). The key point for Heggie is that gapping of the copula linking the *wh*-clause and the 'value' fails in (189b) (while it succeeds perfectly well in (189a), featuring non-inverted XP < *wh* order):

(189)

	a.	Important to himself is what John is, and important to herself is what Mary is.
	b.	*What John is is important to himself, and what Mary is is important to herself.

Heggie makes the interesting suggestion that the ungrammaticality of (189b) reduces to the general ban on gapping in constructions featuring *movement across the subject*, as illustrated in (190):

(190) *Which man did Bill see, and which man did Gary see?

Notice, though, that while (190) involves gapping of two non-contiguous elements, (189b) incurs no such discontinuity problems; the causes of the ungrammaticality of the two examples may well be unrelated, therefore. At the very least, it is not clear that they *are* related.

(v) *Comparatives* (cf.) Noting that comparatives of the type in (191a) are "limited to predicates," Heggie goes on to construe the ungrammaticality of (191b) (also brought up in , above) as evidence that *important to himself* is **not** a predicate, hence must be a subject:

(191)

	a.	X is more important than Y is.
	b.	*What John is is more important to himself than what Bill is is.

This argument will only go through if one accepts the premise that specificational pseudoclefts are *predicational* constructions – otherwise there is no implicational relationship between the non-predicatehood of *important to himself* and its subjecthood.

(vi) *Raising* (cf.) Heggie seeks to derive further evidence for the subjecthood of the 'value' from raising (cf. Williams 1983b): (192a) is grammatical, which shows that *important to himself* behaves like subjects in allowing for raising-to-subject. However, the raising argument presents a problem for Heggie's other claim: that the *wh*-clause is a predicate. For notice that (192b) is rejected by most speakers (but cf. Faraci 1971 and Hankamer 1974), which exposes the *wh*-clause as a creature with properties distinct from those of inverted predicates in double-NP specificational copular sentences – after all, inverted predicate nominals *can* undergo raising, as (192c) shows:

(192)	a.	Important to himself seems to be what John is.
	b.	*What John is seems to be important to himself.
	c.	The best candidate seems to be John.

The grammaticality of (192c) flatly contradicts Heggie's (1988 : 301) claim that "only subjects may undergo raising," unless one is willing to treat *the best candidate* in (192c) as a subject, a view which would fatally undermine the parallelism arguments in favor of the predicativity of the *wh*-clause reviewed in the foregoing (cf. esp. (151)).

(vii) *Language variation* A last argument for the subject–predicate relationship expressed in (186) comes from interesting observations that Heggie (1988) makes about certain differences between French and English. She observes that English is reasonably flexible in the types of 'honorary NP' subjects (to borrow Safir's 1983 term) that it allows (cf. (193)), while French is much more restricted – crucially, not just in (194a) but in (194b) as well, regardless of the relative order of the *wh*-clause and the 'value'-XP. The PP 'value' of (194b) thus behaves exactly like the subject of a predicative copular

sentence, and the *wh*-clause behaves just like the predicate of a copular sentence.

(193)

a.	In the park is a good place to have a picnic.
	In the park is where John met Mary.
b.	Where John met Mary was in the park.

(194)

a.	*Dans	le	parc	est	un	bon	endroit	pour	un	pique-nique.
	in	the	park	is	a	good	place	for	a	picnic

b.	*Dans	le	parc	est	où	Jean	a	rencontré	Marie.
	in	the	park	is	where	Jean	has	met	Marie

	*Où	Jean	a	rencontré	Marie	est	dans	le	parc.
	where	Jean	has	met	Marie	is	in	the	park

Heggie's last argument, (vii), is presumably the most convincing – especially the fact that *surface* word order is inconsequential indicates that what is at issue will in all likelihood be a property peculiar to *underlying* subjects of predicates. If this argument stands up to closer scrutiny, it shows that specificational pseudoclefts – regardless of surface word order – feature a subject-predicate structure. If this is right, it also disconfirms Den Dikken et al.'s (2000) tentative suggestion that their 'Type B' specificational pseudoclefts, whose underlying structure is as in (186), do not allow inversion.

In the foregoing, we reviewed a number of syntactic considerations which have led several scholars to assume an underlying predication relationship between the two major constituents of specificational sentences. There are two further batteries of facts which have been advanced in this connection, concerning the *distribution of the copula* in and the *extraction restrictions* on inverse specificational

constructions. But since these arguments are based specifically on inverse copular sentences, we will discuss them in , which addresses the analysis of inversion from the perspective of analyses based on a predicational approach to specificational sentences.

4.2 Inversion

If one assumes a non-predicational approach to specificational sentences, one needs to spend little time on the question of how the reversibility of these constructions is to be looked upon analytically: any non-predicational analysis will assume that the two major constituents of such copular sentences are 'on an equal footing'; neither is predestined to take precedence when it comes to occupying the (surface) subject position.

If, on the other hand, one bases oneself on a predicational approach to specificational sentences, one of the two word orders of reversible copular constructions will more or less directly reflect the underlying representation, the other being derived from it via some sort of syntactic transformation. The question that arises then is what kind of transformation derives the other order.

The predicational analyses reviewed in agree that the underlying relationship between the two major constituents is such that the 'variable' is a predicate and the 'value' functions as its subject. Deriving the word orders reflected in (195) will hence be straightforward: starting out from the base structure in (186), all one needs to do is raise the underlying subject of the small clause (which may be of a variety of category types, subject to some language variation; cf. (193) vs. (194), above) to the subject position of the clause.

(195)

a.	John is the best candidate.
b.	Under the bed is the best hiding place.
c.	Important to himself is what John is.
	Write novels is what John does for a

(195) | d. | living. |

(196)

a.	The best candidate is John.
b.	The best hiding place is under the bed.
c.	What John is is important to himself.
d.	What John does for a living is write novels.

(186) . . . $be[_{SC}[_{Subj}$ XP][$_{Pred}$ wh-clause]]

To get from (186) to the word orders reflected in (196), one will need to do either or both of the following two things:

(i)   maneuver the predicate into a position to the left of the subject, and/or

(ii)   maneuver the subject into position to the right of the predicate.

Whichever (combination) of these tacks one takes, inversion in copular sentences will come down to the reversal of the underlying subject-predicate word order – an example such as (196a) thus represents an inverse construction.

(We note in passing that there is considerable confusion in the literature about the contents of the terms 'inversion' and 'reversal': while Blom and Daalder (1977), Declerck (1988) and all principles-and-parameters studies use it in the way we are using it here (see also Quirk et al. 1972 : 954), Prince (1978) and Collins (1991) refer with the term 'reverse/inverse' construction precisely to the word order pattern which, when viewed from a predicational base perspective, corresponds to the underlying subject-predicate order.)

All three tacks (i.e., (i), (ii), or (i) and (ii)) have actually been taken in the literature on copular inversion. Most authors have opted for (i) (cf. Declerck 1988 ; Heggie 1988 ; Verheugd 1990 ; Heycock 1994a ; Den Dikken 1995b ; Moro 1997), though there is disagreement among those authors when it comes to the type of position that the pre-copular predicate finds itself in: for Blom and Daalder (1977) and Heggie (1988), this is an A'-position (COMP/SpecCP), while for Heycock (1994a), Den Dikken (1995b), and Moro (1997) it is crucial that this be an A-position (the subject position of the clause, SpecIP; cf. also Den Dikken et al. 2000 for an analysis of this type for what they call 'Type B' specificational pseudoclefts). As far as option (ii) is concerned, it has been argued by Blom and Daalder (1977) that it exists as an alternative to leftward displacement of the predicate; and Guéron (1992, 1993) argues that both the underlying predicate and the subject are displaced, the latter to a right-peripheral focus position. ("Displacement" here, as well as "maneuver" in (i) and (ii), are meant to be theoretically neutral with respect to the question of whether there is movement involved or not.) The literature can hence be summarized as follows:

(197)

| *Blom and Daalder (1977):* |
| Inversion = topicalization/left-dislocation of the base predicate to COMP, or extraposition/right-dislocation of the base subject. |

(198)

| *Guéron (1992, 1993):* |
| Inversion = leftward A'-movement of the base predicate into a position adjoined to an empty-headed subject, and rightward A'-movement (focus movement) of the base subject. |

(199)

| *Heggie (1988):* |
| Inversion = leftward A'-movement of the predicate to COMP/SpecCP. |

(200)

(200)

> *Heycock (1994a),Den Dikken (1995b),Moro (1997):*
>
> Inversion = predicate raising to subject position (SpecIP).

Since Blom and Daalder's (1977) analysis is the oldest and also represents a superset of the (i)-type approaches, let us take theirs as a starting point for the discussion. For Blom and Daalder, when what is in pre-copular position corresponds to the underlying subject, the pre-copular constituent finds itself in subject position of the clause, where it is base generated (cf. (201), which uses a verb-final word order; recall that Blom and Daalder are exclusively concerned with Dutch, an OV language). However, when the *wh*-clause (the deep predicate) surfaces in pre-copular position, it is not the surface subject – it either raises to a left-peripheral A'-position (via topicalization; cf. (202a)) or it stays put and sees the deep subject extrapose around it (extraposition/right-dislocation; cf. (202b)).

(201) [$_S$ Subject [$_{VP}$ Predicate *be*]]

(202)

a.	[$_{S'}$[$_{COMP}$ Predicate]*be*[$_S$ Subject [$_{VP}$ ___]]]
b.	[$_E$[$_{S'}$ COMP [$_S$ ___ [$_{VP}$ Pred *be*]]] Subject]

Blom and Daalder stress that both topicalization/left-dislocation and extraposition/right-dislocation are independently available mechanisms in the grammar of a language like Dutch. The status of the former is indisputed and will not be commented on further; that of the latter, Blom and Daalder argue, is confirmed by the existence of constructions of the type in (203):

(203)

___ belde ineens aan: de pianostemmer

(203)

a.	'___ suddenly rang the doorbell: the piano tuner'
	___ is erg lekker: aardbeien met slagroom
b.	'___ is very nice: strawberries and cream'

It is interesting to note that what (203) and specificational sentences share in common is their list reading and colon intonation (cf. Higgins 1979). (It should be noted, however, that such examples have a stylistically restricted ring to them; they certainly are not as natural as specificational sentences in which the variable precedes the value.)

Blom and Daalder's approach to inversion in specificational sentences thus takes the 'value < variable' order as basic (subject < predicate) and derives the other order from it in either of two ways: (202a) or (202b). The former will be unavailable in embedded contexts – Blom and Daalder thus predict that in embedded clauses the only way in which the inverted order can be derived is via the (rather marked) strategy of extraposition/right-dislocation. In support of this prediction, Blom and Daalder (1977 : 111) mention the contrast between (204a) and (204b): even though Dutch embedded clauses are normally verb-final, in embedded specificational sentences in which the predicate precedes the subject, the latter must surface all the way at the end of the clause, to the right of the verbal cluster. Just like the examples in (203), the inverse construction in (204b) must have the special colon intonation characteristic of (202b):

(204)

a.	*Het	bleek	dat	nog	veel	hoger	de	aankoopsom	was.
	it	turned-out	that	still	much	higher	the	buying-sum	was
b.	Het	bleek	dat	nog	veel	hoger	was:	de	aankoopsom.
	it	turned-out	that	still	much	higher	was	the	buying-sum

The problem with this kind of approach to inversion in embedded contexts, however, is the fact that in genuine specificational copular sentences (which (204a, b) are not), it *is* in fact perfectly possible to invert the relative order of hyponym and hyperonym in such a way that the former ends up to the *left* of the verbal cluster – that is, (205b) is grammatical (alongside the stylistically marked (205c), with its characteristic colon intonation):

(205)

a.

	Het	bleek	dat	de	sollicitant	uit	NY	de	beste	kandidaat	was.
it	turned-out		that	the	applicant	from	NY	the	best	candidate	was

b.

	Het	bleek	dat	de	beste	kandidaat	de	sollicitant	uit	NY	was.
it	turned-out		that	the	best	candidate	the	applicant	from	NY	was

c.

	Het	bleek	dat	de	beste	kandidaat	was:	de	sollicitant	uit	NY.
it	turned-out		that	the	best	candidate	was	the	applicant	from	NY

Since (205b) clearly is not the product of a type (ii) analysis, and since topicalization (type (i)) is entirely impossible in embedded clauses in Dutch, Blom and Daalder (1977) seem at a loss to account for the grammaticality of this example. *Mutatis mutandis*, Heggie's (1988) analysis of inversion (phrased solely in terms of movement to SpecCP) faces the same problem – a problem that presents itself not just for Dutch but for English as well: in English, too, inversion is perfectly possible in embedded specificational copular sentences (even those not embedded under bridge verbs); no 'colon intonation' is required. (See also Heycock 1994b for discussion of this point.)

(206)

a. | It turned out that the applicant from New York was the best candidate. |
|---|

(206)	b.	It turned out that the best candidate was the applicant from New York.

Blom and Daalder (1977) also mention the ungrammaticality of inversion in yes/no-questions as an argument in favor of their approach to inversion. A paradigm first highlighted by Merckens (1961), in the classic '*kooplieden* discussion' in the Dutch linguistic literature in the fifties and sixties (cf. Bos 1961 ; Droste 1962 for other contributions to this discussion, brought together in Hoogteijling 1969), will serve to illustrate this point:

(207)	a.	Kooplieden	zijn	dat.
		merchants	are	that
		'That's what merchants are (viz., clever/thrifty/successful/mean/ . . .).'		
	b.	Dat	zijn	kooplieden.
		that	are	merchants
		'That's what merchants are.'/'Those are merchants.'		

(208)	a.	Zijn	kooplieden	dat?
		are	merchants	that
		'Is that what merchants are?'		
		Zijn	dat	kooplieden?
		are	that	merchants

(208) b. 'Are they merchants?' (*'Is that what merchants are?')

The example in (207b) is ambiguous between a reading in which *dat* 'that' is the subject of the sentence and *kooplieden* 'merchants' is its predicate (cf. English 'they/those are merchants'; for reasons that need not concern us here, Dutch systematically has the finite verb agree with the predicate nominal in such cases), and one which is the inverse counterpart of the example in (207a), in which *kooplieden* is the subject of pro-predicate *dat*. For Blom and Daalder, the latter reading of (207b) is derived via topicalization of *dat* to COMP/SpecCP (with concomitant raising of the verb; Dutch is a Verb Second language). Interes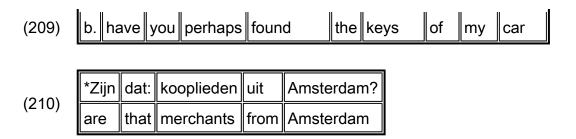tingly, now, the example in (208b), the yes/no counterpart of (207b), is not ambiguous: it only has a reading corresponding to a structure in which *dat* is the underlying subject.

The unavailability of the 'is that what merchants are?' reading for (208b) will follow if both (i) and (ii) can be blocked. For (i) this is unproblematic: topicalization is impossible in yes/no-questions. Extraposition/right-dislocation of the deep subject around the predicate is less easy to block, however – especially in the light of Blom and Daalder's (1977 : 111) own examples in (209), which show that yes/no-questions do not in general block the 'colon construction'. In the light of the acceptability of (209) with 'colon intonation', one would minimally expect (208b) to improve once the requisite intonation contour is superimposed on it. Making the clause-final subject heavier will facilitate this – but (210), with a heavy clause-final NP and 'colon intonation', is simply bad, and definitely lacks the desired inverse predication interpretation:

(209)

Is	hier	misschien	voor handen:	een	oude	damesfiets?	
a. is	here	perhaps	available	an	old	ladies' bike	

Heb	jij	soms	gevonden:	de	sleutels	van	mijn	auto?

(209)

b.	have	you	perhaps	found	the	keys	of	my	car

(210)

*Zijn	dat:	kooplieden	uit	Amsterdam?
are	that	merchants	from	Amsterdam

The radical unavailability of the inverse predication reading in Dutch yes/no-questions of the type in (208b)/(210) thus comes as a partial surprise from Blom and Daalder's (1977) dual approach.

From examples of the type in (208b) we should not draw the general conclusion, however, that inversion of subject and finite verb is never possible in inverse copular sentences (see also item (xxii) in , above). Examples of the type in (212b), derived from the inverse construction in (211b), are grammatical. Since topicalization is impossible in yes/no-questions in English as well, Heggie (1988) has no way of deriving (212b) at all. The well-formedness of this example hence stands out as an insurmountable obstacle for Heggie's analysis. Blom and Daalder (1977) would still have option (ii) at their disposal, though – and even though they do not discuss this kind of example, they might adduce the fact that (212b) seems best on a contrastive reading (cf. *or the dog*) in support of a (ii)-type analysis of this kind of example.

(211)

a.	(When we go on a holiday,) the cat is our biggest worry.
b.	(When we go on a holiday,) our biggest worry is the cat.

(212)

a.	Is the cat your biggest worry?
b.	Is your biggest worry the cat (or the dog)?

Dutch behaves like English when it comes to (212b). But it may be interesting in this context to note that when subject and predicate disagree in number features, as in (213), subject-predicate inversion in a yes/no-question still seems possible in English while in Dutch it is poor:

(213)

	a.	The children are our biggest worry.
	b.	Our biggest worry is the children.
	a.'	De kinderen zijn onze grootste zorg.
	b.'	Onze grootste zorg zijn de kinderen.

(214)

	a.	Are the children your biggest worry?
	b.	Is your biggest worry the children?
	a.'	Zijn de kinderen je grootste zorg?
	b.'	??Zijn je grootste zorg de kinderen?

The difference between Dutch and English in (214b, b') seems to be related to the difference in finite verb agreement between the two examples (cf. also (213b, b')): while in English it is the inverted predicate that determines agreement (*is*), in Dutch agreement is triggered by the underlying subject in both 'canonical' and 'inverse' copular sentences. (We will not address the question of how the difference between Dutch and English in (214b, b') can be related to the agreement difference.)

Moro (1997) and Heycock (1994b) discuss the agreement facts in detail (see also , above; Moro's work presents a perspective on language variation (English vs. Italian) in this department – see Den Dikken 1997 for a critique with particular reference to Dutch). And of course the fact that in English it is the inverted predicate that triggers agreement with the finite verb in (213b) (*Our biggest worry is/*are the children*) stands out as an important additional argument against a topicalization approach to inverse copular sentences *à la*Heggie (1988) (as Heycock 1994b also stresses).

The agreement facts, when carried over into the realm of specificational pseudoclefts, appear to furnish an argument in favor of an inverse predication approach to such constructions featuring *wh* < XP word order. Thus, consider the minimal pair in (97) (from Declerck 1988 : 80). As Declerck notes, agreement serves to disambiguate *wh*-clefts – singular agreement, as in (97a), yields a specificational reading, while plural agreement, as in (97b), enforces a predicational interpretation. Of note in this connection is also Declerck's (1988 : 79) example in (215a), which can only be assigned a specificational reading (due to the presence of the negative polarity item *any* in the 'value' constituent) – concomitantly, only singular verb agreement is possible.

(97)		What you have bought is fake jewels.	(specificational)
	a.	What you have bought are fake jewels.	(predicational)

(215)	a.	What the book does not offer is/*are any solutions to the problems that are noted.	
	b.	What you wanted was two things.	(Geluykens 1984)

We should note in this context, however, that the agreement facts in specificational copular sentences in general are not as categorical as especially Moro makes them out to be. Despite the fact that there

certainly are strong tendencies of the type just illustrated, Declerck (1988 : 79–80) points out that "in specificational sentences the number of the copula can apparently be determined by that of either the superficial subject NP or the variable NP." He quotes the following examples to illustrate:

(216)

a.	The aim of our policy is/*are improved relations with the Soviet Union.
b.	Improved relations with the Soviet Union is/$^?$are the aim of our policy.

(217)

a.	More books is/$^?$are what I need.
b.	What I need is/$^{??}$are more books.

(218)

a.	Theft and robbery is/are what I despise most.
b.	What we can't have here is/$^?$are theft and robbery.

Verb agreement is not a foolproof diagnostic, therefore; but at the very least, what we may conclude is that the very ability of the pre-copular predicate in inverse specificational sentences to trigger agreement on the finite verb is an indication that a pure topicalization analysis of inversion, *à la* Heggie (1988), is presumably untenable.

Blom and Daalder's two-pronged approach to the derivation of inversion in specificational

constructions is no better equipped to account for the English agreement facts.[36] An analysis of inverse copular sentences which treats the pre-copular variable constituent as a surface subject, by contrast, is eminently fit to explain the fact that the inverted predicate can trigger agreement on the finite verb in English examples of the type in (213b).[37] Likewise, it will straightforwardly accommodate the fact that inverted predicates of specificational sentences can undergo *raising* to ever higher subject positions, as shown in examples such as (219).[38]

(219)	a.	The best candidate could be John.
	b.	$^?$The best candidate is likely to be John.
	c.	$^{??}$The best candidate seems to have turned out to be John.

Examples of this type get less and less brilliant as the length of the raising trajectory increases (cf. also Declerck 1988 : 91), but they are certainly not ungrammatical. A raising-to-subject analysis of inversion predicts their grammaticality straightforwardly. A topicalization analysis, by contrast, cannot account for the fact that a whole string of (raising) verbs can squeeze itself in between the inverted predicate and its subject, unless, in addition, the analysis resorts to extraposition/right-dislocation of the subject. In other words, to accommodate (219), an A' predicate movement instantiation of option (i) would necessarily need option (ii) *at the same time*, and would need to apply both operations simultaneously.

Guéron (1992, 1993) presents an analysis that does indeed combine both options, taking (i) to involve A'-movement into a position adjoined to an empty-headed noun phrase base-generated in subject position (cf. (220)):

(220) $[_{IP}[_{DP0}[_{DP0}\textit{pro}]_i[_{QP}$ Op$_i$ Q $[_{DP2}t_i$ D NP$_{[+Q]}]_k]][I$ $[_{VP}[_{VP}t_j[$be $t_k]]$ DP1$_j]]]$

The key asset of Guéron's analysis, with its special articulation of the complex noun phrase structure in the subject position resulting from the predicate inversion operation, is that it can make sense of the

quantificational restrictions on inversion, illustrated in (58), repeated here:

(58)

a.	Bill is {captain of the team/a doctor/a friend of mine/the best doctor in town/my best friend}.
b.	{*Captain of the team/*a doctor/*a friend of mine/the best doctor in town/my best friend} is Bill.

For Guéron, these quantificational restrictions are part and parcel of the QP-structure which the raised predicate-DP ends up embedded under.

The rightward movement of the base subject (DP1) into a VP-adjoined position (Guéron's version of (ii)) also gives Guéron a window on the fact that the post-copular subject of an inverse copular sentence is *focused*– on the assumption that the right-peripheral VP-adjoined position is a focus position, this falls out straightforwardly. Less clear, however, is how Guéron's (1992, 1993) analysis would make sense of the agreement facts discussed above. For Guéron, the output of adjunction of the predicate to the *pro*-headed subject is essentially a free relative configuration (with the raised noun phrase coming to serve as a predicate of the *pro* heading the complex noun phrase resulting from the adjunction operation). Agreement of the copula with the raised predicate should then be mediated by *pro*, which should be made to agree in number with DP2. Guéron does not address this issue; we will not attempt a formal account here. In closing the discussion of Guéron's proposal, we add that the fact that inversion of DP2 around DP1 'creates' a free relative structure in the subject position establishes a direct parallel between inverse copular sentences and specificational pseudoclefts with *wh* < XP orders (on an account of the latter, that is, which takes the *wh*-clause of specificational pseudoclefts of this type to be a free relative; see for critical discussion of this point).

All in all, the fact that the topicalization and extraposition/right-dislocation analyses stay empty-handed when it comes to a variety of properties of inverse copular sentences stands out as a strong argument for the view that the pre-copular constituent of inverse specificational sentences finds itself in subject position. This is guaranteed by the analyses proposed by Moro (1997), Heycock (1994b) and Den Dikken (1995b) (all involving predicate raising), possibly by that of Guéron (1992, 1993) (though the

agreement facts remain to be worked out for that analysis), and also, of course, by accounts which treat these constructions as equatives (cf. Heycock and Kroch 1999). The fact that (as (97) and (215) illustrate) the agreement behavior peculiar to inverse specificational sentences seems to be shared by specificational pseudoclefts with *wh* < XP orders is a potential argument for an analysis of the latter along the same lines as that of the former (cf. Heggie 1988 ; Guéron 1992, 1993); but the topic-comment analysis of *wh* < XP (or 'Type A') specificational pseudoclefts proposed in Den Dikken et al. (2000) accommodates the facts in (215) as well: the copula, on their analysis (cf. the structure in (182), above), is a linker between the topic in SpecTopP and the comment in the complement of Top, entertaining a Spec–Head agreement relationship with the (singular) *wh*-clause in SpecTopP. (See Den Dikken et al. 2000 for more discussion of Spec–Head agreement in TopP, in connection with the tense agreement/congruence effects noted in) The fact that specificational pseudoclefts with *wh* < XP orders fail to *systematically* exhibit the same set of properties as inverse specificational sentences (cf., e.g., the difference between (219) and a pseudocleft like [%]*What John does seems to be write novels*, which is impossible for the majority of speakers), suggests that a full assimilation of such pseudoclefts to inverse specificational sentences may not be on the right track.

At this point, we may conclude that analyses of inverse specification constructions (i.e., specificational copular sentences in which the 'value'-XP follows the 'variable') in terms of topicalization (A'-movement to a left-peripheral position; COMP/SpecCP in Blom and Daalder 1977 ; and Heggie 1988) or extraposition/right-dislocation both face problems, and that an analysis which places the pre-copular 'variable' in SpecIP is preferable on a number of counts. This said, we still need to determine whether the pre-copular 'variable' ended up in SpecIP via movement or whether it was base generated there. In the next subsection we will present the arguments which have been brought up in support of a movement approach, considering their pros and cons.

4.3 Evidence for inversion as movement to subject position?

4.3.1 Embedding under ECM and raising verbs

Both Heggie (1988) and Moro (1997) have drawn attention to the fact that it is impossible for the 'variable' to precede the 'value' in the verbless (small clausal) complement of ECM verbs like *consider*; cf. (221) (see also). Similarly, raising verbs like *seem* do not allow the predicate of their small clause complement to invert with its subject – (222b) is bad even for those (largely British English) speakers who accept (222a):

(221)	a.	We consider John the best candidate.
	b.	*We consider the best candidate John.

(222)	a.	%John seems the best candidate.
	b.	*The best candidate seems John.

This follows straightforwardly from a movement analysis of inverse specificational constructions: successful movement is dependent on the presence of a landing-site for the moved element; but the structure of the small clause complement of *consider* and *seem* is not large enough to make such a landing-site available.

The argument for a movement approach to inversion based on (221) and (222) will go through regardless of whether one assumes (with Heggie 1988) an A'-movement derivation or (with Moro 1997 , etc.) an A-movement one. The argument becomes more specific, however, once we consider the fact that there is a way of salvaging the ungrammatical b-examples – by inserting *to be* in the complement of the ECM/raising verb (something which Heggie 1988 overlooks):

(221) b'. We consider the best candidate *to be* John.

(222) b'. The best candidate seems *to be* John.

Moro (1997) and Den Dikken (1995b) argue in detail that the distribution of the copula in these contexts is an argument in favor of an A-movement analysis of inversion in specificational constructions.

Of course the negative argument (against the A'-movement approach) is easy to make on the basis of (221b') and (222b') – the A'-movement analysis simply makes no appropriate landing-site available in the infinitival complement: we know that topicalization in ECM and raising infinitivals is generally impossible (cf. *We consider the best candidate, John to be*). Moreover, even if we could somehow allow topicalization in such infinitivals under limited conditions, we would still face difficulty accounting for the surface word order of the examples – how does one maneuver the infinitival copula into a position in between the topic and the subject, given that there is no subject-auxiliary inversion in infinitives (cf. *We were wondering when to be eventually/finally/ultimately there* and *When were you eventually/finally/ultimately there?*)?

The positive side of the argument (showing how an A-movement analysis can account for the distribution of the copula in this context) involves a particular outlook on the functions of the copula, in combination with a minimalist theory of locality (cf. Den Dikken 1995b). In a nutshell, the analysis runs as follows. A-movement of a predicate around its subject would – nothing else done – incur a violation of the minimalist theory of locality (based on Rizzi's 1990b Relativized Minimality): in (223), the predicate, on its way to the higher A-position, skips an intermediate A-position (that of its subject):

(223) *$[_{FP}$ pred$_i$ F $[_{SC}$ subj H $[t_i]]]$

To remedy the locality problem, one must ensure that the first position that the predicate can land in and the position that the predicate skips on its way there be rendered *equidistant* (cf. Chomsky 1995c). The way to do this is to perform an operation of domain-extending head movement – some head which has the position of the subject in its minimal domain should raise to a higher head ("F" in (223)) which has the landing-site of the raised predicate in its minimal domain. (See Den Dikken 1995b for further details.) The moving head in question is the functional head of the small clause ("H") in

(223).[39] The resulting derivation is schematized in (214).

(224) $[_{FP} \text{ pred}_i \text{ F+H}_j [_{SC} \text{ subj } t_j [t_i]]]$

This structure is well formed: the subject and the landing-site of the raised predicate are now equidistant, hence predicate raising is in conformity with the Minimal Link Condition ("make the shortest move").
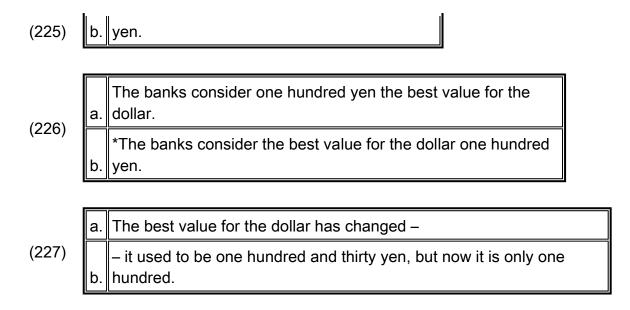
To link the obligatory head movement of (224) to the obligatoriness of the copula in (221b') and (222b'), Den Dikken makes the additional assumption that the result of domain-extending head movement of H to F is the emergence of the copula *be*. The copula, in constructions of the type at hand, is hence an overt signaler of the application of predicate raising and its concomitant domain-extending head movement.

The account of the distribution of the copula in ECM/raising complements just sketched is crucially based on the A-movement analysis of predicate raising – if either the predicate did not raise to SpecFP but was base generated there, or the predicate did so raise but not via A-movement, the obligatoriness of the copula could no longer be derived from the theory of locality along these lines. Thus, the facts in (221) and (222) provide us with an argument for an A-movement analysis of inversion in specificational constructions.

Heycock and Kroch (1999 : 373ff.) raise a number of objections to this argument in favor of an A-movement account of inversion in specificational copular sentences. First, they note that there are surface subjects which, even though they cannot be analyzed as inverted predicates, do trigger the obligatory presence of *to be* in ECM and raising contexts. Consider the following examples:

(225)	a.	One hundred yen is the best value for the dollar.
		The best value for the dollar is one hundred

(225)　　b.　yen.

(226)

a.	The banks consider one hundred yen the best value for the dollar.
b.	*The banks consider the best value for the dollar one hundred yen.

(227)

a.	The best value for the dollar has changed –
b.	– it used to be one hundred and thirty yen, but now it is only one hundred.

The distribution of the copula in (226) is the same as in the above examples; yet to analyze *the best value for the yen* as an inverted predicate on account of its 'non-referential' interpretation would seem to commit one to a predicational analysis of this noun phrase in (227a), where it likewise receives a non-referential interpretation. Heycock and Kroch (1999 : 373) admit that this batch of facts "does not, of course, entail the absence of predicate raising (i.e., 'inversion') in the copular examples, but it does greatly weaken the motivation for it." True equatives like *the Morning Star is the Evening Star* weaken it further, they go on to point out – for these, too, require the presence of *to be* in ECM/raising constructions, yet there seems to be no referentiality difference between the two NPs in equative constructions (or 'identity statements').[40]

The previous two arguments are at best circumstantial evidence against a predicate raising approach to inverse specificational constructions. A potentially much stronger argument (cf. Heycock 1994a ; Heycock and Kroch 1999 : 381) comes from ECM/raising examples featuring unquestionably specificational constructions with a variable < value order which, unlike the ones in (221b, b') and (222b, b'), do *not* trigger the presence of *to be*, as seen in (228a–c):

(228)

(228)

a.	If what you say is true, that would make the real murderer John!
b.	The best solution remains instant retreat.
c.	At this point our real problem becomes John.
d.	*I guess that makes one good doctor John.
e.	*An example of this kind becomes World War II.

The verbs *make*, *remain*, and *become* behave differently from *consider* and *seem* when it comes to their interaction with predicate raising. Heycock (1994a, 1998), Den Dikken (1995b), and Guéron (2001) all seek to relate this to the aspectual properties of the constructions involved; Guéron, in particular, argues that the verbs *make*, *remain*, and *become* take a small clause complement containing an abstract BE, an analysis which, if correct, would render (228) directly compatible with the Moro/Den Dikken analysis. Whatever the fate of such analyses, however, we should note that the verbs in question do not simply accept *any* inverse copular sentence in their complement: while *One good doctor is John* and *An example of this kind is World War II* (cf. (123a)) are grammatical, the examples in (228d, e) (due to Jacqueline Guéron) are bad. Further research into constructions of the type in (228) is clearly called for. But at least on its face, the difference between (228a–c) and the ones brought up originally in support of the 'predicate raising as A-movement' analysis raises some questions.

Further questions are raised by an observation made by Blom and Daalder (1977 : 113), in connection with their dual account of inversion in specificational sentences. They point out that their analysis allows, in principle, for inversion in ECM contexts – even though a derivation along the lines of (202a) (topicalization/left-dislocation) is unavailable, there is nothing, in principle, that would block an extraposition/right-dislocation analysis *à la* (202b). And indeed, Blom and Daalder (1977 : 113) point out that (229) is grammatical (with the same characteristic colon intonation that products of (202b) have in general); and they claim that (230) is ambiguous between a reading in which *een geboren leider* is the value and one in which it is the variable (with intonation serving as a disambiguator):

(229)

Het	blijkt	dat	hij	belangrijk	vindt:	een	goede	maaltijd.
it	turns-out	that	he	important	finds	a	good	meal

(230)

a.

	Ik	vind	een	geboren	leider	de	aangewezen	persoon.
	I	find	a	born	leader	the	appropriate	person
			hyponym/subject			hyperonym/predicate		

b.

	Ik	vind	een	geboren	leider:	de	aangewezen	persoon.
	I	find	a	born	leader	the	appropriate	person
			hyperonym/predicate			hyponym/subject		

(230b), with its characteristic colon intonation, is derived via (202b). Blom and Daalder's discussion of inversion thus indicates that a categorical rejection of inversion under ECM verbs would be too strong. The asterisk on examples such as (221b) should hence be taken to mean that, in the absence of special intonation ('list' or 'colon' intonation), these sentences are unacceptable.

On a more general plane, the movement analysis of inverse copular sentences raises questions about the *trigger/motivation* for movement (at least, if one seeks to embed the analysis in a theoretical framework like that of Chomsky 1995c). For Guéron (1992, 1993), for whom the raised predicative noun phrase adjoins to a base-generated subject noun phrase headed by *pro*, one could speculate that the motivation for movement lies in the licensing (for content, at the very least) of this *pro*; that, however, would be a trigger for movement alien to the types of triggers identified in Chomsky (1995c). Moro (2000) takes the satisfaction of Kayne's (1994) Linear Correspondence Axiom to be the motivation for movement of either of the two constituents of the small clause in the copula's complement – when the subject moves, the result is a canonical copular sentence; when the predicate moves, an inverse copular sentence results; the choice between the two options is free in principle,

but one of the two constituents has to move, or else PF would be presented with a structure (the small clause) whose subconstituents (subject and predicate) entertain a relationship of symmetric c-command, a structure which cannot be linearized. Once again, this would locate the trigger for movement outside the bounds of the set of possible triggers in Chomsky (1995c). A third option (taken in Den Dikken 1995b) is to assume that Case is what drives movement: the subject needs to check its Case-feature but is not in a configuration, prior to movement, which would facilitate a checking relationship with Infl; movement of either the subject itself or its predicate would create such a checking relationship. For movement of the subject itself, this needs no discussion; that movement of the predicate also creates a configuration in which the subject can get its Case-feature checked will follow on the assumption (made independently in Den Dikken 1995b) that subject and predicate are co-indexed,[41] and that Spec–Head agreement in IP is a case of coindexation as well: as a result (given uniqueness of indexation), raising of the predicate to SpecIP creates a syntactic configuration in which the *in situ* subject is coindexed with Infl; checking of the subject's features against those of Infl thus becomes possible.

This Case-based account of the trigger of predicate raising has the advantage of capturing the fact that the post-copular subject receives/checks the Case assigned by Infl without further ado. Other possibilities exist, however: one would be to assume that the copula is a Case-assigner (either of an inherent (partitive) Case, *à la* Belletti 1988 , or of a structural one); another would be to assume that the post-copular subject does not need Case because it is a focus (cf. Guéron 1992 ; Kayne 1994 on Heavy NP Shift as a case of *in situ*, non-Case checking noun phrases). We leave this issue open here.

4.3.2 Extraction restrictions

Already in Grosu (1972) it was noted that in specificational pseudoclefts with *wh* < XP order, extraction from the post-copular 'value'-XP is impossible (cf. 3.2 above). He also notes that the same is true for specificational copular sentences in general. The example in (231b) illustrates this for double-NP inverse specificational sentences. Moro (1997) points out, in addition, that not just extraction *out of* but also extraction *of* the post-copular 'value'-XP is impossible in inverse specificational sentences:

(231)	a.	I think that the cause of the riot was a picture of the wall.
	b.	*What do you think that the cause of the riot was a picture of *ec*?
	c.	*Which picture do you think that the cause of the riot was *ec*?

These two extraction restrictions have been brought up as definitional properties of inverse specificational constructions. Italian exhibits cliticization facts which parallel the *wh*-extraction data presented here; see Moro (1997 : 28–29) for discussion. Note that Moro (1997 : 59) claims that the predicate of canonical (i.e., non-inverted) copular sentences is also unextractable – but Heycock and Kroch (1999 : 377) point out that this claim runs counter to the general facts (his particular example being unacceptable for reasons tangential to the subject/predicate issue).

For Heggie (1988), the ungrammaticality of (231b) (and, by the same token, although she does not discuss this explicitly, of (231c) as well) fits in with her topicalization analysis of inverse specificational constructions – the deviance of these examples will then illustrate the familiar 'topic island' effect (cf. Ross 1986). However, the degree of deviance of the examples in (231b, c) is substantially stronger than that of a garden variety topic island effect (cf. ??*What do you think that to Mary, John would never give?*). It is likely, therefore, that the deeper roots of the ungrammaticality of these examples has to be sought elsewhere.

One possibility would be to look for the deeper roots in the domain of focus. What inverse specificational constructions all share in common is the fact that the post-copular constituent (or a subconstituent thereof) is in focus. One may wish to translate this structurally into the hypothesis that it is in a special, right-peripheral focus position, and that it is this which blocks extraction of and from the post-copular noun phrase. Guéron (1992, 1993) presents an analysis along these lines (see also Heggie 1988 for the suggestion that the post-copular noun phrase is in some sort of 'constructional focus' position in at least some inverse specificational sentences; also cf. Blom and Daalder's 1977 extraposition/right-dislocation approach to these constructions). The assumption that the post-copular

constituent is in a focus position (an A' island position) will readily make sense of the ban on *sub*extraction from it. It is less clear, however, that it will also successfully rule out *wh*-extraction of the *entire* constituent: *wh*-constituents are themselves foci, and in languages (like English, unlike Hungarian) in which they must raise to SpecCP they may well do so, systematically, via a stop-over in the focus position (which is the surface position of *wh*-constituents in languages like Hungarian) along the way, to check their focus feature. If so, movement from the focus position on to SpecCP should be allowed in general; it will then be unclear why the post-copular focus of inverse copular sentences should be unable to undergo *wh*-movement.

Moro (1997) presents an alternative account of these facts which capitalizes on his raising-to-subject analysis of predicate inversion. Den Dikken (1995b) presents a variant of this account, based on the same overall analysis of inversion in specificational sentences. The key to both analyses is that the post-copular constituent in an inverse specificational construction is a structural *subject* – i.e., finds itself in a specifier position. We are familiar from early transformational work (cf. Ross 1986) with the fact that specifiers (left branches) are strong islands – the 'subject condition' severely penalizes extraction from subjects. The ungrammaticality of (231b) then follows, from the subject condition (Subjacency). That of (231c) can also be made to follow from the subject status of the post-copular deep subject, if one assumes that in its base position, the trace of the extracted 'value'-NP in (231c) cannot be properly governed, which causes an ECP violation. Den Dikken (1995b) presents a different analysis of (231c), one which does not resort to the ECP but capitalizes on the co-indexation of subject and predicate and the Principle C effect (strong crossover) resulting from extraction of the subject across its A-raised predicate (but see n. 40).

Central to the account of (231b, c) sketched in the previous paragraph is the idea that the post-copular constituent in inverse specificational sentences is in a subject position. It is in this respect that this account rests crucially on the movement analysis of inversion in specificational constructions: if this order were base generated, the post-copular NP would not be a subject. Den Dikken's (1995b) crossover approach to the ungrammaticality moreover capitalizes on the idea that the fronted predicate lands in an A-position (rather than some A'-position).

Heycock and Kroch (1999 : 376–378), in their repartee of the raising analysis of specificational

sentences, object, however, that "true equative sentences" exhibit the same extraction restrictions, despite the fact here there is no sense in which one of the two NPs can be singled out as an underlying predicate (but cf., once again, Blom and Daalder 1977 : 76 for a different perspective):

(232)

a.	*Who is your attitude towards Jones my attitude towards?
b.	*Whose attitude towards Davies would you say that your attitude towards Jones is?

They go on to point out that "in inverse (and equative) sentences the extraction of the surface subject is just as ungrammatical as the extraction of the post-copular noun phrase" (p. 377) – a point overlooked by Heycock (1994a); Den Dikken (1995b); Moro (1997) and others.
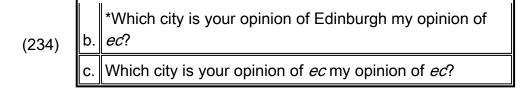
(233)

a.	*Which of the themes do you think *ec* is that phrase of music?
b.	*Whose opinion of Edinburgh do you think *ec* is your opinion of Philadelphia?

Heycock and Kroch are right to point out that these facts seriously undermine the extraction argument.

While they do not present a new account of the extraction facts, Heycock and Kroch (1999 : 378, n. 9) do make a potentially interesting suggestion which needs to be looked into in future research. They suggest that it might be fruitful to look for an account of the extraction restrictions in the domain of "the only other symmetric constructions in natural language syntax: coordination." The following examples show that there is indeed a close parallel between coordination constructions and equatives – even in the domain of across-the-board extraction:

(234)

a.	*Which city is your opinion of *ec* my opinion of Philadelphia?

(234)

b.	*Which city is your opinion of Edinburgh my opinion of *ec*?
c.	Which city is your opinion of *ec* my opinion of *ec*?

(235)

a.	*Which city does John love *ec* and Mary despise Philadelphia?
b.	*Which city does John love Edinburgh and Mary despise *ec*?
c.	Which city does John love *ec* and Mary despise *ec*?

This parallel suggests that what we are dealing with in the domain of extraction restrictions is constraints on 'symmetric constructions'. If this is right, it strongly enhances an account of inverse specificational sentences as equative sentences, not as inverse predicational constructions.

4.4 Reversibility: concluding remarks

In this section we have discussed approaches to what is perhaps the most conspicuous earmark of specificational copular sentences: the reversibility of their major constituents. There are two basic questions that come up in the accounts of reversibility offered in the literature:

• Does reversal involve movement or not?

• If so, is it movement of the 'variable' to the left or of the 'value' to the right (or both), and what kind of movement (A or A') are we dealing with?

Approaches which take inverse specificational sentences to be a subtype of equative copular sentences (or 'identity statements') answer the first question negatively. Underlyingly predicational approaches to inverse specificational sentences of necessity give a positive answer to this question,

and have come up with a variety of ways of deriving the surface word order from an underlying subject-predicate base. Evidence has been presented in the literature in favor of the underlying predicativity of inverse specificational sentences, as well as for leftward predicate movement and rightward subject displacement accounts of the inverted order. None of these accounts is flawless, however: many of the individual arguments face difficulties, as we have seen. This raises questions about the transformational account, and, concomitantly, about the predicational base of inverse specificational sentences as well.

The predicativity of the pre-copular constituent is also potentially called into question by the fact that there are severe restrictions on what qualifies as an 'invertible predicate' (cf. (58), above). Heycock and Kroch (1999 : 379–380) review these restrictions (see also Declerck 1988 ; Guéron 1993, 2001) and conclude that what they show is "that it is not possible to treat any constituent appearing in [SpecIP] as predicated of a postcopular argument." This stands out as perhaps the most serious obstacle to a predicate raising analysis of inverse specificational sentences. Guéron (1993, 2001), however, presents a concrete perspective on how to analyze these restrictions (which are mostly of a quantificational nature) from a perspective of an approach which starts out from an underlying subject-predicate relationship.

On the other hand, an analysis of inverse specificational sentences which treats them on a par with equative copular constructions (or 'identity statements') will need to face the fact that, despite their similarities in the domains highlighted by Heycock and Kroch, there are differences between the two as well – see .

With these conclusions concerning the analysis of specificational copular sentences drawn, we have now reached the final destination of the code-share flight operated by double-NP specificational sentences and specificational pseudoclefts. From this point on, we will leave constructions of the type *The best candidate is John* behind, and focus instead on two questions arising specifically in the context of specificational pseudoclefts, concerning:

- the status of the *wh*-clause,
- the relationship between specificational pseudoclefts and their simple clause counterparts.

We will address these two questions in turn, in sections 5 and 6, respectively.

5 The *wh*-clause: Question or free relative?

We are gradually making our way towards a discussion of the theoretical approaches to the relationship between specificational pseudoclefts and their simple clause counterparts. But before we can assess these, we will need to address another question: what is the status of the *wh*-clause of specificational pseudoclefts? Since *wh*-clauses with *what* as their first constituent (the canonical realization of the *wh*-clause of specificational pseudoclefts; on the limited possibility of other *wh*-elements, see) without subject-auxiliary inversion come in two general varieties, what we need to determine is which of the two, if either, we are dealing with in a specificational pseudocleft:[42]

	The wh-*clause of specificational pseudoclefts:*
a.	a free relative, (cf. *What John did is a disgrace*.)
(236) b.	an embedded *wh*-question, (cf. *I wonder what John did*.)
c.	a third type.

In the literature on specificational pseudoclefts, both positions in (236a, b) have in fact been taken – see Akmajian (1979), Blom and Daalder (1977), Heggie (1988), Declerck (1988), Guéron (1992), and references cited there for proponents of (236a); see Clifton (1969), Faraci (1971), Ross (1972a), Seuren (1985), Den Dikken et al. (2000), and references cited there for adherents of (236b).

The issue is certainly not straightforwardly settled. The fact that it has turned out to be extremely contentious finds its roots in the fact that neither (236a) nor (236b) fits the bill like a glove – on both sides there are familiar properties which fail to be matched by the *wh*-clause of specificational pseudoclefts. We will structure the discussion as follows. will discuss general theoretical and conceptual arguments in favor each of the two approaches in (236a) and (236b). is subsequently devoted to specific empirical pros and cons of the free relative approach, which, as we will see, typically can be cashed in as arguments in favor of the *wh*-question analysis. then presents a list of problems for the *wh*-question approach, which, conversely, fall into place on the free relative approach. Finally, addresses problems shared by both approaches, and considers option (236c).

5.1 General theoretical and conceptual issues

For proponents of a predicational approach to specificational pseudoclefts (of all sorts) according to which the *wh*-clause functions as a (small clause) predicate (cf. above for discussion), a free relative approach to the *wh*-clause is of course the only option – we are not aware of any *wh*-questions being used predicatively:

(237)

a.	Home is where the heart is.
b.	*Home is whether you like it there.

On the other hand, for those who do not subscribe to a predicational analysis, there is no argument here in favor of a free relative approach to the *wh*-clause.

Adherents of the free relative approach may also capitalize on the fact that the *wh*-clause of specificational pseudoclefts typically alternates with a headed relative, with heads like *one/thing/reason/time/way*, etc. (the '*th*-clefts' of Collins 1991). The properties of such '*th*-clefts' are very similar to those of specificational *wh*-clefts; as a result, scholars have generally analyzed them on a par. If they are indeed identical in their distribution, this may be taken as an argument to liken the

wh-clause of *wh*-clefts to a relative clause construction. Hankamer (1974) stresses more than once, however, that the two, though similar, are not identical, saying that the headed relative cases "*identify* rather than predicate; and that the allowable subjects of these constructions are very restricted, and do not include [headed relative] clauses" (n. 9). It may be wrong, therefore, to attach too much weight to the fact that there are contexts in which the *wh*-clause of a specificational pseudocleft can be replaced with a headed relative.[43]

As for the *wh*-question approach, its general advantage is that it captures the connection between specificational pseudoclefts and question-answer pairs, which many scholars have drawn a good deal of attention to (see Faraci 1971 ; Ross 1972b ; Akmajian 1979 ; Higgins 1979 ; etc., and more recently, Ross 1999 ; Den Dikken et al. 2000 ; and Schlenker 2003b); cf. (238). Ross (1999) points out specifically that the *wh*-clause of a specificational pseudocleft corresponds to what he calls a 'conjunctive question', as distinct from a 'disjunctive question'– these are different in that the answer to the former "is presupposed to be known to someone in the sentence . . . whereas for disjunctive questions, no answer is known" (Ross 1999).

(238)

a.	What John does for a living is write novels.
b.	What does John do for a living? – Write novels.

Of course, the connection between specificational pseudoclefts and question-answer pairs can in principle be established in ways other than one which takes the *wh*-clause of the former to be a *wh*-question: the link could, for instance, be established at the level of semantics or even pragmatics.

Akmajian (1979 : 78ff.) argues, however, that exactly when it comes to the semantics, the *wh*-clause of specificational pseudoclefts is in fact *not* identical with *wh*-questions in one important respect: referentiality. He makes this point – that the *wh*-clause of specificational pseudoclefts is referential while a *wh*-question is not – on the basis of empirical arguments which we will address in more detail below. On a higher theoretical plane, however, matters of referentiality are extremely contentious

precisely in the domain of specificational copular sentences (cf. the discussions in Blom and Daalder 1977 ; Higgins 1979 ; Declerck 1988 ; and Keizer 1992 ; see , above, for an overview).

In themselves, these broad theoretical or conceptual arguments will not tip the balance in favor of or against either of the two approaches in (236a) and (236b). What we need is explicit empirical arguments for or against them. This is what we turn to next.

5.2 Empirical evidence against free relatives and in favor of *wh*-questions

(i) *The ban on* -ever (cf.) One respect in which the *wh*-clause of specificational pseudoclefts differs empirically from free relatives, and instead patterns with *wh*-questions, concerns the distribution of -*ever*. We have come across this fact in : while free relatives freely allow the addition of -*ever*, the *wh*-clause of specificational pseudoclefts does not (cf. (239) with (241)); in this respect it is like a *wh*-question (cf. (240)):

(239) What(ever) John does is interesting. (free relative)

(240) I wonder what(*ever) John does. (*wh*-question)

(241) What(*ever) John does is write novels. (specificational pseudocleft)

Heggie (1988) and Iatridou and Varlokosta (1998) seek to derive this fact from a predicate approach to the free relative, but as was discussed in , this line of thought is problematic. As far as we can tell, the ban on -*ever* stands out as an unresolved problem for an analysis of the *wh*-clause as a free relative. (See also Dayal 1997 for an attempt at empirically undermining the problem; her examples do not successfully alleviate the problem, however: see n. 22 for discussion.)

(ii) *PP pied-piping* (cf.) Another property of the *wh*-clause of specificational pseudoclefts that has been noted before in this work (cf. , above) and which plays a role in the debate concerning the analysis of the *wh*-clause is the fact that PP pied-piping is allowed inside this clause in some

languages (though not in all), crucially despite the fact that those languages strictly forbid pied-piping in free relatives (cf. esp. Den Dikken et al. 2000 : 72 for discussion).

(242)

Free relative:								
*Mit	wem	Maria	gesprochen	hatte	kam	gerade	ins	Zimmer.
with	whom	Maria	spoken	had	came	just	into-the	room

(243)

Wh-question:				
Mit	wem	hat	Maria	gesprochen?
with	whom	has	Maria	spoken

(244)

Specificational pseudocleft with wh < XP order:							
Mit	wem	Maria	gesprochen	hatte,	war	mit	Peter.
with	whom	Maria	spoken	had	was	with	Peter

It should be pointed out, however, that PP pied-piping works only in those specificational pseudoclefts that have a word order in which the *wh*-clause precedes the 'value'-XP. (245) is ungrammatical:

(245)

Specificational pseudocleft with XP < wh order:							
Mit	Peter	war	mit	wem	Maria	gesprochen	hatte.
with	Peter	was	with	whom	Maria	spoken	had

This is one of a variety of ways in which specificational pseudoclefts with *wh* < XP order are different

from their congeners with XP < *wh* order. We will encounter more of these in what follows. For Den Dikken et al. (2000) these mismatches are an important argument for an analysis which assigns different underlying syntactic structures to the two types of specificational pseudocleft: a topic-comment structure for *wh* < XP and a free relative structure for XP < *wh*. The latter analysis will of course straightforwardly relate the ill-formedness of (245) to that of the free relative construction in (242), while a topic-comment structure in which the *wh*-clause is analyzed as a *wh*-question accommodates the link between (243) and (244).

(iii) *Multiplicity* Free relatives in languages like English do not allow multiple *wh*-elements inside them – (246) is ungrammatical. Multiple interrogation, on the other hand, is perfectly possible in such languages, as shown in (247). The distribution of multiple *wh*-elements thus constitutes another testing ground for the hypotheses in (236a) and (236b).

(246) *[Who ordered what] should come fetch it at the counter. (free relative)

(247) I would like to know [who ordered what].   (*wh*-question)

Testing the hypotheses against this criterion actually turns out to be somewhat tricky, however. What one needs here is examples involving a rather complex 'value'-XP: one which contains values for all the *wh*s in the *wh*-clause. The kinds of pseudoclefts one is then confronted with are the kinds of cases which involve a full-clausal post-copular constituent (which, if the conditions are met, may undergo some degree of ellipsis). Such pseudoclefts (illustrated in (248)) do not meet with general enthusiasm among native speakers, however: while Ross (1972a) accepts them, Akmajian (1979) does not like them, and Higgins (1979 : 86) finds them "irremediably anacoluthic." In (249), we present some attested examples from Geluykens's (1984) corpus-based study of English clefted sentences.[44]

(248) %What Tom ordered was Tom ordered a beer.

(249)

| | | All you do is you turn it in to the red |
|---|a.| mark. |

b.	All I did was I did Montaigne.

(249)

c.	What you do is you look at the return.
d.	What you do is you go.

In the light of this (see also , below), it therefore will not surprise the reader that Ross's judgment of multiple *wh*s in specificational pseudoclefts differs from that reported by Akmajian and Higgins – the following examples reproduce their respective illustrations:

(250)

a.	$^{\%}$Who ordered what was Tom (ordered) a beer and Jim a watermelon flip.
b.	$^{\%}$Who ate what was Jane ate spaghetti and Chica (ate) hamburger. (Ross 1999)

(251) *Who kissed whom was John kissed Mary.   (Akmajian 1979 : 76)

(252) *What Mary gave who was John a book.   (Higgins 1979 : 67)

It may well be that there is substantial dialectal and idiolectal variation when it comes to multiplicity. Thus, while for Dutch, Blom and Daalder (1977) report that it fails (cf. (253)), Meinunger (1997) presents grammatical examples for German (cf. (254)):[45]
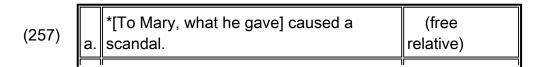
(253)

*Wat	zij	waar	gekocht	heeft	zijn	twee	aandelen	Haagse	Hopjes	op	de	beurs.
what	she	where	bought	has	are	two	shares	'Haagse	Hopjes'	on	the	stock-exchange

(254)

?												

Wer	hier	wem	geholfen	hat	war	die	Hilde	dem	Heinz	(und	nicht	umgekehrt).
who	here	whom	helped	has	was	the	Hilde	the	Heinz	and	not	reversed

(254)

The variation among speakers certainly raises questions. But what one may conclude at the very least is that multiplicity is not universally rejected in specificational pseudoclefts – at least, not in those with *wh* < XP word order; it is entirely impossible in XP < *wh* cases (cf. (255), (256)). When one compares this to the fact that there is no variation among speakers at all when it comes to the ungrammaticality of multiplicity in free relatives in the languages considered (English, Dutch, German), examples like (250) and (254) present us with at least a weak case against the free relative approach to the *wh*-clause of specificational pseudoclefts with *wh* < XP order. At the same time, the categorical unacceptability of (255) and (256) tells us that specificational pseudoclefts with the order XP < *wh* do not feature a *wh*-question; the properties of their *wh*-clause are in fact similar to those of free relatives. (See Den Dikken et al. 2000 for discussion.)

(255) *Tom (ordered) a beer and Jim a watermelon flip was who ordered what.

(256) *Die Hilde dem Heinz war wer hier wem geholfen hat.

(iv) *Topicalization inside the* wh-*clause* Free relatives categorically disallow topicalization – regardless of whether the topic is placed to the left or to the right of the *wh*-word (cf. (257)). English *wh*-questions, on the other hand, have been noted to be compatible with topicalization – and as Pesetsky (1989) notes, the position of the topic is different in root and embedded *wh*-questions: in the former, the topic must precede the *wh*-phrase, while in the latter, the topic follows the *wh*-phrase (cf. (258) and (259)). The *wh*-clause of specificational pseudoclefts differs radically from free relatives: it allows topicalization. As a matter of fact, it allows it on either side of the *wh*-word (cf. (260)). This was first pointed out in Den Dikken et al. (2000 : 71).

a.	*[To Mary, what he gave] caused a scandal.	(free relative)

(257)

(257) b. *[What to Mary, he gave] caused a scandal.

(258)

	(root *wh*-question)
a. ?To Mary, what will he give?	
b. *What <will> to Mary, <will> he give?	

(259)

	(emb. *wh*-question)
a. *He is wondering [to Mary, what he will give].	
b. ??He is wondering [what to Mary, he will give].	

(260)

	(spec. pseudocleft)
a. ?[To Mary, what he will never give] is any wine.	
b. ??[What to Mary, he will never give] is any wine.	

Interestingly, then, while the *wh*-clause of specificational pseudoclefts certainly does not behave like a free relative when it comes to topicalization, it seems to blend the properties of root and embedded *wh*-questions. Den Dikken et al. conclude from this that the *wh*-clause of specificational pseudoclefts is indeed a *wh*-question – but it is neither a root question nor an embedded question; it is a hybrid case with properties of both types of question.

We stress this here because most of the arguments against the *wh*-question analysis have been

directed specifically towards an analysis of the *wh*-clause of specificational pseudoclefts as an *embedded* question, as we will see in the next section.[46]

5.3 Empirical evidence against *wh*-questions and in favor of free relatives

(v) *Determiners* (Izvorski 1997 ; Alexiadou and Giannakidou 1998 ; Ross 1999) While the previous section concerned itself with problems for a free relative approach to the *wh*-clause of specificational pseudoclefts, something which seems to stand out as a strong recommendation for such an analysis is the fact that in languages like Bulgarian (Izvorski 1997), Greek (Iatridou and Varlokosta 1998 ; Alexiadou and Giannakidou 1998 ; the latter also refer to Spanish and Catalan), and Portuguese (Ross 1999), the *wh*-clause of these constructions is obligatorily adorned with an affixal definite determiner (cf. (261) for Bulgarian, (262) for Greek, (263) for Portuguese). Such an affixal determiner is typical of free relatives in these languages; on the other hand, it never occurs on *wh*-questions in Bulgarian and Greek (though it does in Portuguese: *O que é que aconteceu?* 'What happened?').

(261)

Kakvo-* (*to*)	*pro*	kaza	bese	ce	Maria	e	umna.
what-def		said	was	that	Maria	is	smart
'What he said was that Maria is smart.'							

(262)

Afto	pu	ipe	o	Kostas	ine	oti	i	ji	ine	epipedi.
this	that	said	the	Kostas	is	that	the	earth	is	flat
'What Kostas said is that the earth is flat.'										

(263)

(263)

O	que	Boris	roubou	foi	o	Lavoris.[47]
the	what	Boris	stole		was	the	Lavoris
'What Boris stole was the Lavoris.'

As Den Dikken et al. (2000 : 71, n. 23) point out, however, specificational pseudoclefts in these languages are characterized by two further properties which make them different from their English congeners: (i) they never allow full-IP 'values', and (ii) they never exhibit connectivity with respect to negative polarity item licensing. They might hence instantiate their 'Type B'.[48]

(vi) *No yes/no-questions* (Huddleston 1971 : 243; Akmajian 1979 : 76) The second problem for an assimilation of the *wh*-clause of specificational pseudoclefts to (embedded) *wh*-questions springs to mind immediately. While *wh*-questions come in two flavors (constituent questions and yes/no-questions), the *wh*-clause of specificational pseudoclefts comes only in one:

(264)

a.	What John did was unclear.
b.	Whether John did it (or not) was unclear.

(265)

a.	What John did was kiss Mary.
b.	*Whether John did it (or not) was {yes/he did}.
	*Whether John did it (or not) was {no/he didn't}.

From the perspective of proponents of the view that there is a close syntactic relationship between question-answer pairs and specificational pseudoclefts (with *wh* < XP orders), the ungrammaticality of

(265b) is surprising – after all, yes/no question-answer pairs of the type in (266) are perfectly well formed. (Notice, though, that (266) involves a *root* question, not an embedded question.)

(266)

Did John do it (or not)?	
a.	(Yes,) he did.
b.	(No,) he didn't.

Of course, a free relative approach to the *wh*-clause of specificational pseudoclefts encounters no difficulty accounting for the deviance of (265b): there are no free relatives with *whether* (for the same reason that there are no relative clauses with *whether* either).

That *if* does not occur in the *wh*-clause of specificational pseudoclefts either is less of a surprise: *if* is ruled out as the complementizer of subject questions as well:

(267) *If John did it (or not) was unclear.

(268)

*If John did it (or not) was {yes/he did}.
*If John did it (or not) was {no/he didn't}.

(vii) *No adverbs* (Blom and Daalder 1977 : 22; Akmajian 1979 ; *contra* Faraci 1971) Faraci (1971), who is an early champion of the *wh*-question analysis, mentions as one of the arguments in its favor the fact that adverbs like *exactly* can be added to both the *wh*-clause of specificational pseudoclefts and *wh*-questions, but not to free relatives. Akmajian (1979 : 75) points out, however, that he does not accept Faraci's pseudocleft example in (269); likewise, Blom and Daalder (1977 : 22) present a Dutch

triplet which makes the pseudocleft pattern with free relatives rather than with *wh*-questions (cf. (272–274); in (273) we have corrected a word order mistake in Blom and Daalder's original example):

(269) [%]What, exactly, John bought was a car.

(270) What, exactly, John bought is not clear.

(271) *I threw out what, exactly John bought.

(272)

*Wat	ik	precies	gezegd	heb	was	dat	samenwerking	niet	meevalt.
what	I	exactly	said	have	was	that	cooperation	not	with-falls
(i.e., isn't easy)									

(273)

Ik	herinner	me	niet	wat	ik	precies	gezegd	heb.
I	recall	me	not	what	I	exactly	said	have

(274)

*Wat	ik	precies	gezegd	heb	gelooft	hij	niet.
what	I	exactly	said	have	believes	he	not

(viii) *No clefting inside* wh-*clause* ([Blom and Daalder 1977] : 22; [Akmajian 1979] ; *contra*[Faraci 1971])
(cf.) [Faraci (1971]) also claims that the *wh*-clause of specificational pseudoclefts can contain a cleft. But most authors (cf. [Akmajian 1979] for English, [Blom and Daalder 1977] for Dutch) disagree and find such combinations impossible.

(275) [%]What it is that John bought was a car.

For those speakers (the vast majority) for whom (275) is bad, it appears at first sight that there is a difference between the *wh*-clause of specificational pseudoclefts and *both wh*-questions *and* free relatives (*contra* Blom and Daalder 1977 : 22) – (276) is grammatical, and so are the free relative examples in (277) (cf. Akmajian 1979 : 80):

(276) I don't know what it is that John bought.

(277)	a.	Whatever it was that John bought cost him a lot of money.
	b.	She threw away whatever it was that John bought.

Thus, while Faraci (1971) construes (275) (which he finds grammatical) as an argument in favor of a *wh*-question approach, and while Blom and Daalder (1977 : 22) bring up a Dutch example like (275) (which they find ungrammatical) as evidence in favor of a free relative approach to the *wh*-clause of specificational pseudoclefts, neither argument goes through unscathed: as Akmajian points out, the *wh*-clause of specificational pseudoclefts is identical neither with *wh*-questions nor with free relatives.

As Akmajian goes on to point out, however, it is not just any free relative that accepts internal clefting: replacing *whatever* with *what* in (277) delivers a substantially degraded result. The generalization seems to be that "*non-referential* clauses may occur in clefted form" (Akmajian 1979 : 81; original emphasis); and addition of *-ever* makes free relatives non-referential. If this is correct, the fact that clefting inside the *wh*-clause of specificational pseudoclefts is impossible will reduce to the same factor that is responsible for the impossibility of *-ever* in such clauses: their referentiality (see also (ix), immediately below). In having the ability to be referential, the *wh*-clause does indeed pattern with free relatives rather than with *wh*-questions, which obviously cannot be referential in any context.

(ix) *Appositive relative clauses* (Akmajian 1979 : 80) In the same context in which he assesses the cleft-*cum*-pseudocleft argument, Akmajian (1979 : 80) also brings up an additional argument (original with him) that casts doubt on the *wh*-question status of the *wh*-clause of specificational pseudoclefts, and enhances their free relative-hood. The argument is based on the fact that appositive relative

clauses can be added to the *wh*-clause of specificational pseudoclefts but not to *wh*-questions (cf. (278) vs. (279)). The same argument can be built on the distribution of parentheticals (cf. Akmajian 1979 : 102, n. 28); this will not be shown here.

(278) What John got from his father yesterday, which was very expensive, was that Jaguar XKE.

(279) *What John got from his father yesterday, which was quite expensive, is a mystery.

(280) What John got from his father yesterday, which was very expensive, was broken two days later.

Once again, the *wh*-clause of specificational pseudoclefts patterns with free relatives (see (280)) rather than with *wh*-questions – as a function of its referentiality, according to Akmajian.

(x) *Else/ever* (Akmajian 1979 : 75) Problematic for the question analysis of the *wh*-clause of specificational pseudoclefts as well is the fact that, pointed out by Akmajian, that *else* and *ever*, while fine in *wh*-questions, are impossible in pseudoclefts:

(281)

a.	*What else he bought was a car.
b.	*What he ever worked on was his thesis.

(282)

a.	What else he bought is not clear.
b.	What he ever worked on is simply not known.

(283)

a.	*What else he bought was very expensive.
	*What he ever worked on took him a long time to

(283) | b. | finish. |

Though Akmajian does not provide free relative examples, the sentences in (283) show that what we are dealing with here is another property of the *wh*-clause of specificational pseudoclefts which makes it pattern with free relatives and not with *wh*-questions.

(xi) *Any* (Akmajian 1979 : 76) Akmajian makes a similar point by drawing attention to the distribution of negatively polar *any*– it is found in *wh*-questions but not in the *wh*-clause of specificational pseudoclefts, nor (though Akmajian does not show this himself) in free relatives:

(284)   *What makes any sense is not John's theory.

(285)   What anyone can do about the war is unclear.

(286)   *What anyone can do about the war is not important.

This argument is dependent more on the relationship between the *wh*-constituent and the external negation, it seems, than on the internal syntax of the *wh*-constituents themselves (cf. the fact that even (285) becomes unacceptable when *unclear* is replaced with *clear*). It may be important in this context that *unclear* in (285) is an ergative adjective (cf. Cinque 1990b), hence will c-command the *wh*-clause in the underlying representation of this example; in (284) and (286) we presumably do not find such a c-command relationship at any point in the derivation. The force of this particular argument is therefore less than crystal clear.

Be that as it may, in the foregoing we have found that there are a number of reasons to use care when assessing the claim that the parallelism between question-answer pairs and specificational pseudoclefts suggests an analysis of the *wh*-clause of the latter as a *wh*-question. There are a number of respects in which the two differ; and in some of those cases we actually find that there is in fact a closer kinship between the *wh*-clause of specificational pseudoclefts and free relatives (though the relationship between those two is by no means one of identity either).

5.4 Problems either way

No matter which tack one takes when it comes to the analysis of the *wh*-clause, one inevitably runs up against the problem that there at least two respects in which it behaves neither like a free relative nor like a *wh*-question.

(xii) *No complementizers* (Blom and Daalder 1977 : 22) While, as we saw in (267–268), English *if* does not occur in subject questions and the *wh*-clause of specificational pseudoclefts alike, its cognate *of* in Dutch does occur in subject questions. But according to Blom and Daalder (1977 : 22) it still fails to rear its head in the *wh*-clause of Dutch specificational pseudoclefts – interestingly, not just when it is 'on its own' (in a yes/no-question) but also when it follows a *wh*-word (in constituent questions, which in spoken varieties of Dutch allow sequences of a *wh*-word/phrase and the complementizer *of*, see e.g. Zwart 1997 for exemplification):

(287)

	Wat	Jan	gedaan	had	was	onduidelijk.
a.	what	Jan	done	had	was	unclear
b.	Of	Jan	het	gedaan	had	was	onduidelijk.
if	Jan	it	done	had	was	unclear
	Wat	of	Jan	gedaan	had	was	onduidelijk. (= (287a))
c.	what	if	Jan	done	had	was	unclear

(288)

a.	Wat	Jan	gedaan	had	was	Marie	kussen.
	what	Jan	done	had	was	Marie	kiss
	*Of	Jan	het	gedaan	had	was	{ja/inderdaad}.

(288)

b.	if	Jan	it	done	had	was	yes/indeed
	? *Wat	of	Jan	gedaan	had	was	Marie kussen.
c.	what	if	Jan	done	had	was	Marie kiss

Blom and Daalder (1977 : 22), who draw attention to the deviance of (288c), point out that in this respect the *wh*-clause of specificational pseudoclefts bears a resemblance to free relatives, which likewise do not allow *wh- of* sequences:

(289)

*Wat	of	ik	zeg	valt	niet	in	goede	aarde.
what	if	I	say	falls	not	in	good	earth

However, while we agree that (288c) is deviant, it does seem that it is noticeably less bad than the free relative case in (289), which is entirely impossible. If this is right, it makes the *wh*-clause of specificational pseudoclefts a kind of hybrid of free relatives and embedded *wh*-questions.

It is important to point out at this time that Blom and Daalder's argument based on (288) is built on the premise that, if the *wh*-clause of a specificational pseudocleft is to correspond to a *wh*-question to begin with, it should resemble an embedded *wh*-question rather than a root *wh*-question – a premise which, in its turn, is based on the impression that the *wh*-clause finds itself in clause-internal position, hence cannot itself be a root clause.

But we have seen in the examples in (262) (from Den Dikken et al. 2000) that the *wh*-clause of specificational pseudoclefts is neither a pure embedded clause, nor a perfect copy of a root clause: it has properties in common with both (in particular, it allows topics to be positioned either to the left or to the right of the *wh*-element in English). *Tertium datur*, in other words: there seem to be *wh*-questions which are neither root nor embedded clauses, thanks to their unique position in the syntactic tree structure (the SpecTopP position of Den Dikken et al. 2000). In this respect, option (236c) is

presumably closer to the truth than pure versions of (236a) or (236b).

This said, the fact that the complementizer *of* is not perfect in Blom and Daalder's example (288) is less of a surprise than Blom and Daalder made it out to be. In effect, we may want to liken the *wh*-clause of specificational pseudoclefts to echoic *wh*-questions of the type illustrated in (290b), which likewise seem to have a status in between root and non-root clauses – non-root when it comes to word order; root with respect to the fact that it does not appear to be embedded under any predicate. In both these respects, it matches the *wh*-clause of pseudoclefts on the analysis of 'Type A' specificational pseudoclefts propounded in <u>Den Dikken et al. (2000</u>). It may be interesting to note, therefore, that adding *of* to (290b) seems somewhat less felicitous than it is in run-of-the-mill embedded *wh*-questions:[49]

(290)

		Speaker A:			Wat	heb	je	gedaan?		
a.					what	have	you	done		
	Speaker B:	Wat	(? of)	ik	gedaan	heb? –	De	auto	gewassen.
b.		what	if	I	done	have	the	car	washed

Whatever the precise outcome of this discussion, it seems clear that, if the *wh*-clause of specificational pseudoclefts is to be likened to *wh*-questions at all, it must be assumed to be a cross-breed of a root and a non-root question. Possibly, this hybrid root/non-root clause could embody precisely those properties of free relatives that are shared by the *wh*-clause of specificational pseudoclefts. It seems unlikely, though, that it will also help us explain one other respect in which the *wh*-clause of specificational pseudoclefts is like no other *wh*-construction in the grammar:

(xiii) *Restrictions on* wh (cf.) Most speakers do not accept *who*– or at least not very readily – as the *wh*-element of the *wh*-clause of specificational pseudoclefts; the only exception is constituted by pseudoclefts featuring *that* in pre-copular position (*That's who I meant*). Likewise, the *wh*-words *why*

and *how* are severely restricted in pseudoclefts, as noted in . All of these three *wh*-elements occur readily, however, in free relatives with *-ever* (though the presence of *-ever* seems essential here). 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.

This concludes our discussion of the vicissitudes of the free relative and *wh*-question analyses of the *wh*-clause of specificational pseudoclefts. On balance, the following tentative conclusions seem legitimate:

- The *wh*-clause of specificational pseudoclefts of 'Type A' (see) is a hybrid type of *wh*-question, with properties of root and embedded *wh*-questions combined.
- The *wh*-clause of specificational pseudoclefts of 'Type B' is a free relative (see esp. the facts from Bulgarian and Greek discussed at the beginning of).

Clearly, though, neither free relatives nor *wh*-questions fit the bill perfectly. Further research will be needed to clarify the precise status of the *wh*-clause of specificational pseudoclefts. (For completeness' sake, we note in passing that for *predicational* pseudoclefts there is no doubt about the fact that the *wh*-clause of these constructions is a free relative.)

6 Analyses of the relation between specificational pseudoclefts and simple sentences: transformation or base generation?

The reason why generative linguists became interested in specificational pseudocleft sentences in the early days of transformational grammar is not difficult to see – specificational pseudoclefts have a close relationship with their simple clause counterparts, and it seemed clear that a transformational theory of grammar should somehow be able to capture this relationship in transformational terms. The

urge to meet this desideratum led to two competing types of transformational approach to specificational pseudoclefts:

- the deletion analysis (Peters and Bach 1969; Clifton 1968b; Emonds 1970 ; Ross 1972a ; Seuren 1985 ; Kayne 1998 : 26; Schlenker 2003b ; Den Dikken et al. 2000),
- the extraction analysis (Chomsky 1972 ; Akmajian 1979 ; Moreau 1971 ; Grosu 1972, 1973 ; Verkuyl 1972 : 146).

In response to these two transformational analyses, for which he listed a variety of problems, Higgins (1979) defended a non-transformational account, adopted also by Blom and Daalder (1977):

- the base generation analysis (Higgins 1979 ; Blom and Daalder 1977).

In the more recent principles-and-parameters literature, the restrictions on movement transformations are substantially stricter than they were in the sixties and seventies. Not surprisingly, therefore, the extraction analysis (which picks the 'value'-XP up from out of the *wh*-clause and raises it to post-copular position) has been abandoned in current GB-based work almost without exception – a notable non-conformist approach being presented by Bošković (1997a), which in a sense reverses the classic extraction analysis by lowering the 'value'-XP into the *wh*-clause (in covert syntax), thereby creating the simple sentence covertly out of its complex overt counterpart. Heycock and Kroch (1999) propose a different type of covert operation (later in the covert component, beyond LF 'proper') with the same effect of covertly reshaping the pseudocleft into its simple sentence paraphrase. We may refer to these two approaches jointly as follows:

- the covert reconstruction analysis (Bošković 1997a ; Heycock and Kroch 1999).

All the various approaches to the (overt and covert) syntax of specificational pseudoclefts are meant to serve, in one way or another, the general purpose of accounting for the parallels between these and their simple clause counterparts – especially when it comes to connectivity/connectedness effects, which have played a major role in the discussion throughout the decades.

It is our purpose in what follows to give brief outlines of the various types of analysis of specificational pseudocleft constructions summed up in the previous paragraphs, with short discussions of their pros and cons (as they have been noted in the extensive literature on the construction). For detailed discussions, we refer the reader to the references provided at each point.

6.1 Deletion analyses

We will start our discussion with some remarks about the deletion analysis. It was first proposed by Peters and Bach (1968), and also adopted by Emonds (1970), Ross (1972a) and Seuren (1985); in recent years, Ross (1997), Den Dikken et al. (2000), and Schlenker (2003b) have revamped the account (the last-mentioned only for one particular subset of specificational pseudoclefts: their 'Type A' cases, which feature *wh* < XP exclusively, and are characterized by the fact that they and only they allow for NPI connectivity between the *wh*-clause and the post-copular 'value').

The deletion analysis is easy to describe in general terms. It assumes that the post-copular constituent of a specificational pseudocleft such as *What John read was novels* is a full-fledged clause corresponding to the clause contained in the *wh*-constituent in pre-copular position. Ellipsis rules subsequently come in to reduce the underlying full clause to that subpart of it which is pronounced on the surface:

(291) [[*What John read ec*][*was*[*John read novels*]]].

Ellipsis inside the full-clausal post-copular constituent is optional in principle: when it does not apply, the result is a specificational pseudocleft of the type in (292b), which, as Ross (1972a : 89, 1999) has stressed in particular (see also Clifton 1969 : 38; Kayne 1998 : 26; Den Dikken et al. 2000 ; Schlenker 2003b), is acceptable in spoken varieties of English – though this is a topic of some debate in the literature. To Higgins (1979 : 86) these sentences sound "irremediably anacoluthic" (see also Blom and Daalder 1977 : 20 for the claim that they are impossible in Dutch; but see Drubig 1997 for attested examples from German). But Seuren (1985 : 297) declares in characteristically eloquent terms that "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." See also the spontaneously produced examples in (249), from Geluykens's (1984) corpus-based study.[50]

(292)

a.	What John read was novels.
b.	What John read was he read novels.

(249)

a.	All you do is you turn it in to the red mark.
b.	All I did was I did Montaigne.
c.	What you do is you look at the return.
d.	What you do is you go.

The occurrence of full-clausal 'values' in specificational pseudoclefts serves as one of the key arguments for the deletion analysis.

Blom and Daalder's (1977) attempt as discrediting this argument for the deletion analysis based on the fact that the post-copular clause may not contain a complementizer (cf. *What John read was that he read novels*) has little force – it seems to be built on the premise that the only thing the post-copular clause could be is an *embedded* clause; but on Den Dikken et al.'s (2000) deletion analysis, it actually functions as the *root* of the pseudocleft construction as a whole.

Another argument that has been taken to recommend this analysis is the fact that it straightforwardly captures the links between specificational pseudoclefts and question-answer pairs. We discussed these links in , above; see especially Den Dikken et al. (2000) for a detailed investigation of the parallels between the two construction types.

Apart from these considerations, Peters and Bach (1968) mention the grammaticality of such specificational pseudoclefts as (293) as a further argument in favor of the deletion analysis:

(293) What I saw was Mary.

On the deletion analysis, the selectional restrictions of the verb are met in both the *wh*-clause (by *what*) and the (underlyingly clausal) post-copular 'value' (by *Mary*); no clash in features will arise between *what* and *Mary*, simply because *what* is not actually a 'replacement' of *Mary* on the deletion analysis (it *would* be on the extraction analysis – see (309) below).

Blom and Daalder (1977 : 17–18) (who also refer to Daems 1974 : 85 in this context) take care to reject this argument for the deletion analysis, however. They stress that for them, the Dutch counterpart of (293) fails (cf. (294); note that Akmajian 1979 : 99, n. 18 also notes that (293) for him is not perfect), and that even in English it is by no means generally possible to use *what* as the *wh*-word of specificational pseudoclefts with a [+human]'value' (cf. (295)). What the facts show, according to Blom and Daalder, is that *what* works well in specificational pseudoclefts with a [+human]'value'*only* on a 'non-specific' interpretation of the 'value' NP (paraphrasable as 'anyone who . . .'– see (296); cf. also Akmajian 1979 : 100, n. 18: "*Mary* . . . is abstract in that particular context"). Blom and Daalder suggest (without elaborating) that this non-specific interpretation neutralizes the feature [+human] for the NP in question; and they then go on to point out that, if this is right, Peters and Bach's original argument in favor of the deletion analysis actually mutates into an argument *against* it: if we do find, after all, that there are general correspondences (when it comes to the feature [+human]) between the *wh*-word and the 'value', such is unexpected on a deletion approach to specificational pseudoclefts.

(294)

*Wat	we	zagen	was	je	moeder.
what	we	saw	was	your	mother

(295) *What I amazed was Mary.

(296)

(296)

a.

Wat	ze	moeten	zien	te	vinden	is	iemand	met	een	rijbewijs.
what	they	must	see	to	find	is	someone	with	a	driver's license.

'What they will need to find is someone with a driver's license.'

b.

Wat	we	nodig	hebben	is	iemand	met	geld.
what	we	needy	have	is	someone	with	money

'What we need is someone with money.'

So we see that one of the arguments presented in favor of the deletion analysis may actually turn against it in the end. Other problems for the account that have been noted include:

- *there*-sentences (cf. (297); Blom and Daalder 1977 ; Akmajian 1979):

(297)

a.	What there was in the car was my hat.
b.	*There was my hat in the car.

- *do* (cf. (298); Blom and Daalder 1977):

(298)

a.	What he did was kiss Mary.
b.	*He did kiss Mary.

These two arguments both assume that the post-copular 'value'-clause is identical in all respects with the *wh*-clause – it contains exactly the same lexical material found in the *wh*-clause. There is no *a priori* reason to expect, however, that semantically meaningless material in the *wh*-clause should be

represented in the post-copular clause as well – once one assumes that the post-copular clause in (297a) and (298a) lacks the dummies (*there*, *do*) found in the *wh*-clause, the problems highlighted by the deviance of the b-examples do not present themselves. (See also Den Dikken et al. 2000 : for discussion of 'indirect answer' pseudoclefts, in which there is no direct match between the IP in the *wh*-clause and the post-copular IP.)

(In connection with the *do* used in specificational pseudoclefts of the type in (298a) one may wonder whether it is a dummy verb or the lexical verb *do*. The fact that it combines with the dummy *do* in negative *wh*-clauses of specificational pseudoclefts and cannot itself host the negation shows that it is not the dummy *do*; on the other hand, the fact that – contrary to what is claimed in Collins 1991 : 128 – it can combine with stative 'value'-VPs, as in Higgins's 1979 : 194 (299), Heggie's 1988 : 346 examples in (300), and Geluykens's 1984 (301), raises questions about the status of *do* as a lexical ('activity') verb:

(299) The very first thing he did when he got there was *be* rude to the chairman.

(300)	a.	What John did was *be* pampered by his mom.
	b.	What John did was *be* sick all day.

(301) The thing to do seems to me is to *be* eminently reasonable.

We leave the status of *do* in the *wh*-clause of specificational pseudoclefts for further research.)

An argument that is related to the previous one based on the distribution of *do* is the following, which concerns the possible occurrence of the infinitival marker *to* in the 'value' of specificational pseudoclefts with *do* in the *wh*-clause:

- *to* (cf. (302b), Heggie 1988 : 346ff.).

(302)

(302)

a.	What he did was write a letter.	
b.	What he did was *to* write a letter.	

From a deletion perspective, the occurrence of *to* in (302b) is unexpected: **He did to write a letter* is impossible. Plausibly, however, the *to*-infinitive in post-copular position in (302b) should be analyzed as a *nominal infinitive* (as in *To err is human, to forgive divine*). The categorial status of the 'value'-XP (the remnant of ellipsis) in the examples in (302a, b) would then be different; the former would involve a bare VP while the latter would feature a nominal *to*-infinitive. Analyzing the *to*-infinitive as a nominal infinitive still would not help one out on a 'pure' deletion approach to specificational pseudoclefts (*do* does not take nominal *to*-infinitival complements); but a deletion analysis is never forced for pseudoclefts whose 'value'-XP is nominal, on the assumption that a base-generation analysis is always available as an alternative in such cases (cf. the discussion in , below): nominal constituents can readily be base generated across the copula.

Another objection that has been levelled at the deletion analysis in the literature concerns

- disagreement (cf. (303); [Blom and Daalder 1977]( )):

(303)

	Wie	daar	staat	ben	ik.
a.	who	there	stands	am	I
	* Ik	staat		daar.	
b.	I	stands		there	

Here again (as in the case of *there* and *do*), the premise on which the argument is based is that there is complete formal identity between the *wh*-clause and the post-copular clause, and that hence an agreement problem arises in the latter (in the light of the deviance of (303b)). Agreement is a surface

phenomenon, however. Even if verbs enter the syntactic derivation fully inflected (Chomsky 1995c), agreement will involve a checking operation that is performed late enough in the derivation to cause no trouble in (303a): by the time feature checking should be executed, the verb in the post-copular clause will already have been elided (cf. Lasnik 1995 on similar cases of avoidance of checking clashes as a result of ellipsis).

- lack of ambiguity (cf. (304); Blom and Daalder 1977):

(304)

	Wat	hij	zich	aantrekt	is	het	onschuldigste	grapje.
	what	he	se	onpulls	is	the	most-innocent	joke
a.	'What gets him upset is the most innocent joke.'							

	Hij	trekt	zich	het	onschuldigste	grapje	aan.
	he	pulls	se	the	most-innocent	joke	on
b.	'He gets upset by the most innocent joke.'						

The upshot of this argument is that the fact that (304a) is not ambiguous (cf. , above) while (304b) is, is unexpected if the post-copular constituent in the pseudocleft is in fact identical with (304b). This argument is valid in principle; but conceivably, the breakdown of ambiguity in (304a) could be blamed in its entirety on the *wh*-clause in pre-copular position, with reference to the fact that (for obvious reasons) *Wat hij zich aantrekt* 'What gets him upset' is not ambiguous in the way that (304b) is.

All in all, then, the empirical arguments concerned specifically with the *deletion* part of the deletion analysis are not overwhelming. What remains is the general question of the robustness of the connection between question-answer pairs and specificational pseudoclefts (see , above); if, as proponents of the deletion analysis claim, this is indeed robust, it serves as an important argument in favor of this analysis – along with the fact that it provides a straightforward account of the connectivity

effects characteristic of specificational pseudoclefts (which reduce to the dependencies found in simple clauses).

Some of the counterarguments that have been leveled at the deletion analysis are shared by the other transformational approach to specificational pseudoclefts, to which we turn next.

6.2 Extraction analyses

The extraction analysis of specificational pseudoclefts was first proposed by Chomsky (1972) (which first appeared in 1970) and Emonds (1970). The key ingredient of this analysis is the idea that the 'value'-XP of a specificational pseudocleft starts out as a constituent of an NP-dominated clause base generated in the subject position of the pseudocleft construction as a whole, and is raised into a post-copular position, which is generated empty. The analysis is schematically presented in (305):

(305)

a.	$[_S[_{NP}it[_{S'}that \ldots [_{XP}`value'] \ldots]][_{VP}be \underline{\quad}]] \rightarrow$ extraction $\rightarrow$
b.	$[_S[_{NP}it[_{S'}that \ldots [+PRO,+WH] \ldots]][_{VP}be[_{XP}`value']]] \rightarrow$ wh-fronting $\rightarrow$
c.	$[_S[_{NP}it[_{S'}[+PRO,+WH] (=what) \ldots \underline{\quad} \ldots]][_{VP}be[_{XP}`value']]]$

The process of extraction of the 'value'-XP leaves behind a *wh*-pronoun (cf. [+PRO,+WH] in (305b)), the same kind of creature which early transformational analyses of relativization postulated; this *wh*-pronoun is ultimately fronted to a position at the left edge of the NP-dominated S', replacing the complementizer *that* (cf. (305c)).

The extraction analysis runs up against a variety of theoretical and empirical problems, which have been duly noted in the literature (cf. esp. Higgins 1979 ; Blom and Daalder 1977). One clear theoretical difficulty concerns the cycle (though see Hankamer 1974 for the view that whatever derives specificational pseudoclefts must be a *post*cyclic rule: it does not feed raising, for example); but we will

not belabor this point here (depending as it does on assumptions concerning the cycle and the nature of transformations which are specific to the theory in vogue at the time at which the extraction analysis was first proposed). Instead, we will draw attention to a theoretical issue which Blom and Daalder (1977) stress in their discussion of the vicissitudes of the extraction analysis: the fact that the extracted element is raised to a position which is not structurally superior to its extraction site, hence does not c-command the extraction site. This problem is insurmountable unless 'sideways movement' is allowed as a theoretical option (see Nunes 1995 ; Bobaljik and Brown 1997 ; Kayne 1999 for the suggestion that such movement is indeed feasible).

Moreau (1971) presents a variant of the extraction analysis which avoids this c-command problem, by reversing the underlying hierarchical relationship between the major constituents – rather than placing the 'variable' in subject position and base generating an empty slot in the complement of the copula, she generates the 'variable' in post-copular position, as the predicate of the construction. This allows her to raise the 'value'-XP out of the *wh*-clause into a position that does indeed c-command the extraction site: the subject position of the matrix clause. (Note that by generating the 'variable' in post-copular position as a predicate, Moreau's analysis is a precursor of Blom and Daalder's 1977 and Heggie's 1988 analysis of specificational pseudoclefts.)

Whatever the theoretical (de)merits of an analysis along the lines of (305) or its reverse counterpart (i.e., one in which 'NP' is the predicate in post-copular position), however, there are certain empirical properties of specificational pseudoclefts which threaten an analysis of these constructions strictly in terms of extraction. One is the fact that there are specificational pseudoclefts for which there simply is no simple clause counterpart – because of the fact that the *wh*-clause contains material which cannot occur in the simple clause paraphrase of the pseudocleft. Examples of this type typically involve *about*-PPs (cf. Green 1971 ; Higgins 1979 ; Heggie 1988):

	a.	What I like *about Sara* is her courage.
(306)	b.	*I like <*about Sara*> her courage <*about Sara*>.

An extraction analysis of specificational pseudoclefts would have to start out from the ill-formed (306b) and transform it into the grammatical surface output in (306a). (As long as it is less than crystal clear, however, what exactly is responsible for the deviance of (306b), it is difficult to assess the strength of this kind of objection. Note, in any event, that the deletion analysis is immune to it: the post-copular IP would simply lack the *about*-PP from the start.)

Other threats to the extraction analysis are posed particularly by specificational pseudoclefts which, while exhibiting connectivity effects (which serve as an important argument for any transformational account), do not seem to make an extraction analysis available on theoretical grounds. Akmajian (1979), Higgins (1979), and Blom and Daalder (1977) draw attention to such constructions as (307–308) (cf. Akmajian 1979 : 47 and 118):

| (307) | a. | What there was next to *Bill* was {the/that} photograph of *himself* which was taken last summer. |
| | b. | *There was {the/that} photograph of *himself* which was taken last summer next to *Bill*. |

| (308) | a. | The one who has to protect {**myself*/ himself*} is *me*. |
| | b. | *I* have to protect {*myself*/* himself*}. |

The problem with (307a) is that the 'value'-XP, because it is definite, would not seem to be generable inside the *wh*-clause; and (308) presents a clear person agreement problem: while the 'value' in (308a) is first person singular, the anaphor in the pre-copular 'variable' clause may only be third person singular. These facts are unexpected from an extraction perspective.

Higgins (1979 : 121–122, n. 7) is "not convinced of the cogency" of the argument against extraction based on the *there*-sentences in (307). As he points out, "the 'picture-noun' *photograph* brings with it added complications. It seems to me to be equally acceptable if *himself* is replaced by *him*." Akmajian (1979 : 93–

98, n. 16) also suggests a possible ground for setting (307) aside as a problem for the extraction analysis: one might (as Ken Hale pointed out to Akmajian) want to assimilate (307a) to *there*-sentences with a 'list reading', which likewise form an exception to the indefiniteness requirement on *there*-sentences (cf. the fact that (307b) with a word order in which the associate of *there* is clause final and set off from what precedes it by 'colon intonation' is grammatical). Akmajian ultimately rejects this option, but in the light of the close kinship of specificational sentences and lists (cf. Higgins 1979), it would certainly be worth investigating further. At the very least, we should conclude from the above that the problem for an extraction analysis posed by *there*-sentences of the type in (307a) is not insurmountable.

Perhaps more interesting is the problem posed by (308), which concerns agreement in phi-features between the anaphor and the 'value'-XP. If the post-copular focus in (308a) were to be base generated inside the relative clause and raised to post-copular position via extraction, one would not expect the anaphor to be *himself*; instead, one would expect *myself* (but *myself*, while good in (308b), is entirely impossible in (308a); cf. Akmajian 1979 : 119). The force of this argument is substantially reduced, however, by Akmajian's (1979 : 120–121) observation that when the order of examples such as (308a) is *reversed* the anaphor *can* agree in all phi-features with its clause-external antecedent (though it does not have to):

(308) a'. *I* am the one who has to protect {*myself/ himself*}.

There are three different reflexivization patterns, therefore: the one represented by the simple sentence in (308b) (with full phi-feature agreement as the only option), the one seen in the specificational pseudocleft with a post-copular 'value' in (308a) (with obligatory person disagreement), and the one found in pseudoclefts with a sentence-initial 'value' such as (308a') (where both possibilities deliver a grammatical result). Akmajian (1979 : 121) takes these facts to "suggest that the reflexive forms in [(308)] arise under certain surface structure conditions" (which, he adds on p. 123, he does not understand). If he is right that we are dealing here with a surface phenomenon, the reflexive agreement facts tell us little if anything about the underlying representation of specificational pseudoclefts – they would be compatible, therefore, with an extraction approach. We will take the reflexive agreement argument to be moot, therefore – though it may ultimately support Akmajian's dual

analysis of specificational pseudoclefts like (308a'): person agreement would be obtained via extraction, lack of agreement via base generation.

More importantly, however, there is one clear indication that an extraction analysis – whatever its merits for those cases to which it is indeed applicable – will not be sufficient for the entire battery of specificational constructions. In particular, it will fail to capture the parallelism between specificational pseudoclefts and other specificational copular sentences. This point is raised by Akmajian (1979 : 51–52), Blom and Daalder (1977 : 59–60), and Heggie (1988), among others (cf. also Higgins 1979 : 145–149). Consider the following pair:

(309) What *John* contributed was a poem about *himself*.

(310) *John*'s contribution was a poem about *himself*.

As is clear from the examples, simple specificational copular sentences exhibit the same connectivity effect with respect to anaphors which pseudoclefts display. If one believes that connectivity effects are an argument for an extraction analysis, therefore, one seems forced to adopt a complex clausal analysis of nominalizations like *contribution* in (310). Chomsky (1970), however, has presented cogent evidence against such an approach to nominalizations. An extraction approach to (310) will hence be unavailable; consequently, anaphor connectivity cannot be used as an exclusive argument for an extraction analysis.

It is particularly in the light of the parallel between (309) and (310) that Akmajian (1979) comes to the conclusion that a base generation analysis for specificational sentences should be available as well. We will turn to this kind of analysis in the next section.

6.3 Base generation analyses

Throughout the decades, the base generation analysis has served as a home base for scholars who found that transformational approaches to specificational pseudoclefts fail to be descriptively and

explanatorily adequate. Higgins (1979) adopts such an account, and so do Blom and Daalder (1977); both also mention the similarities between their base-generated structures of specificational pseudoclefts and the structure of specificational copular sentences in general. As Akmajian (1979), who adopts the base generation analysis for a subset of specificational pseudoclefts, points out in various places, the base source is a structure which "there is no non-ad hoc way of preventing" (p. 32; also cf. p. 38) in any event; so one would certainly expect it to exist.

Akmajian (1979) argues for a dual approach to specificational pseudoclefts: one analysis derives them transformationally from their simple clause counterparts (via extraction; see , above), the other generates the specificational pseudocleft in the base. The base generation analysis is argued to be required for those kinds of specificational pseudoclefts for which an extraction analysis would run into trouble:

- [±human] clashes (cf. (293)),
- *there*-sentences (cf. (307)),
- agreement clashes (cf. (308)).

For Akmajian, specificational pseudoclefts with 'value'-XPs whose categorial status is NP are always ambiguous in principle between an extraction analysis and a base-generated structure. But specificational pseudoclefts with non-NP 'values' are not derivable via base generation, according to Akmajian: there are no non-cleft specificational sentences with non-NP post-copular constituents:[51]

(311)	a.	What John did was kiss Mary.
	b.	*John's action was kiss Mary.

When it comes to the analysis of connectivity effects (the key argument for transformational approaches), Higgins's (1979 : ch. 3) base generation approach looks for the account in the realm of

'the meaning of specification' (rather than in the workings of some transformation), and points out that such an approach has the advantage of predicting, correctly, that connectivity arises in specificational constructions regardless of the verb used (mentioning the occurrence of connectivity with *lie in*, *consist in*, *constitute* in support of this prediction; p. 99). Faced with this, a transformational analysis would need to mention explicitly a list of verbs which 'trigger' the transformation involved; and that list would be arbitrary, according to Higgins, unless the meaning of specification can somehow be referred to – but once one needs to refer to the meaning of specification anyway, one might as well derive the connectivity effects directly from it *without* postulating a transformation to derive the pseudocleft construction, so Higgins's argument goes. In other words, "a transformational analysis would be not merely clumsy but also unnecessary" (p. 117).

Higgins's own attempt to account for them purely in terms of the semantic notion of 'specification' remains rather vague, however. He states explicitly (p. 97) that when it comes to the analysis of reflexive connectivity, at least two factors are involved:

(i)   "the establishment of some designated noun phrase in the subject clause which can act as a controller (in Postal's sense (1970 : 443))";

(ii) "the application of the properties of specification to the semantic reading so that the controller is specified as the understood subject of the predicate complement phrase."

But when it comes to "devising mechanisms for establishing understood subjects in the complements to nominalizations" (p. 98), he leaves the details open. Blom and Daalder (1977) are quite a bit more explicit in this regard. They develop an analysis which, recast in present-day theoretical terminology, hinges on postulating a null subject PRO inside the post-copular constituent:

(312)

a.	What *John* should do is [PRO protect *himself*].
b.	What *John* was reading was [a PRO story about *himself*].

Assigning specificational pseudoclefts structures of this type will make it possible to use the pro subject of the 'value'-XP as an intermediary in the establishment of the interpretive relationship between subconstituents of the *wh*-clause and the post-copular XP.

It predicts, at the same time, that the only contexts in which specificational pseudoclefts could feature connectivity effects are the ones in which these effects can be mediated by a PRO. Blom and Daalder themselves present this as a correct prediction: they point out that anaphor connectivity breaks down in examples in which the 'value' is *constituted* by the anaphor itself (cf. their examples in (313)); and they also claim that connectivity with respect to negative polarity item licensing is impossible (at least in Dutch; cf. their (314) and (304), the latter repeated from):

(313)

	?							
	*Wie	hij	op	het	oog	had	is	*zichzelf.*
a.	who	he	on	the	eye	had	is	himself
	*Wie	zij	tartten	was/	waren	*elkaar.*		
b.	who	they	pestered	was	were	each other		

(314)

	Hij	weigerde	*ieder*	geneesmiddel.		
a.	he	refused	every	medicine		
	*Wat	hij	weigerde	was	*ieder*	geneesmiddel.
b.	what	he	refused	was	every	medicine

(304)

	Wat	hij	zich	aantrekt	is	het	onschuldigste	grapje.
							most-	

	what	he	se	onpulls	is	the	innocent	joke
a.	'What gets him upset is the most innocent joke.'							

(304)

	Hij	trekt	zich	het	onschuldigste	grapje	aan.
	he	pulls	se	the	most-innocent	joke	on
b.	'He gets upset by the most innocent joke.'						

As we pointed out in , however, each of these empirical claims is problematic – it is not in general impossible for anaphors to constitute the 'value' of specificational pseudoclefts; and connectivity effects exist for a variety of phenomena other than anaphora. And even if Blom and Daalder's (1977) claims about Dutch were entirely accurate, one would still be in need of some other approach to connectivity for languages other than Dutch.

We should mention here as well that Higgins (1979) explicitly takes issue with an Equi-NP Deletion (i.e., Control) approach to anaphor connectivity effects in specificational sentences. Referring to Chiba (1971), he states that it would be impossible to postulate a PRO subject for the post-copular constituents in the examples in (315):

a.	*John*'s biggest worry is having to photograph *himself* without a tie on.
b.	The greatest source of embarrassment that *John* has to endure is having to photograph *himself* without a tie on.

(315)

If Chiba and Higgins are right on this score, the prospects for a control approach to anaphor connectivity in specificational copular sentences are gloomy – and at best, a control approach would be a way of moving the problem into a different department anyway: after all, once one postulates a PRO subject inside the 'value'-XP, one will need to face the question of how this PRO, in turn, could be controlled by a subconstituent of the 'variable'.

If a syntactic approach along the lines of control fails, therefore, other ways of capturing the connectivity

effects on a base generation analysis should be found outside the syntax. Higgins (1979) makes vague suggestions along these lines (as we have seen); more specific proposals are found in Jacobson (1995) and Sharvit (1997a), where connectivity in specificational pseudoclefts is treated as a purely interpretive phenomenon, arising wholly without syntactic c-command. In their approach, binding dependencies and other such dependencies involved in the domain of connectivity are viewed as side effects of semantic composition – an area in which the semantic properties of *what* and *be* play a key role. (We refer to , above, for remarks about the semantic vacuity of the copula. If the discussion there stands up to careful scrutiny, it counts as an argument against semantic approaches which attribute an important role to the semantic properties of *be*.) We will not discuss these semantic accounts to the general problem of connectivity any further here.

6.4 Reconstruction analyses

Recent (principles-and-parameters) approaches to specificational pseudoclefts have largely adopted a base generation analysis (see Heggie 1988 ; Iatridou and Varlokosta 1998 ; Alexiadou and Giannakidou 1998 ; also the semantically oriented, syntactically simple approaches in Jacobson 1995 ; Sharvit 1997a), eschewing the postulation of movement operations which would raise the 'value'-XP from out of the *wh*-clause into a position on the other side of the copula – operations which would contravene broadly accepted views on what constitutes possible movement (but cf. the discussion in , above, on the possibility of 'sideways movement'). Apart from the re-emergence of the deletion analysis (in Den Dikken et al. 2000 ; Schlenker 2003b), however, there are two noteworthy exceptions to the base generation approach in the recent literature –Bošković (1997a) and Heycock and Kroch (1999). Both propose a kind of analysis which we may characterize as the reconstruction approach – the simple sentence paraphrase is 'reconstructed' out of the complex surface construction. In a sense, these reconstruction approaches (esp. Bošković's) are the opposite of the early transformational analyses. But even though they are motivated by the same overall desire (viz., to capture the connectivity effects manifest in specificational pseudoclefts), in the details of their execution they are quite different – both from the early transformational accounts and from one another. We will discuss them one by one.
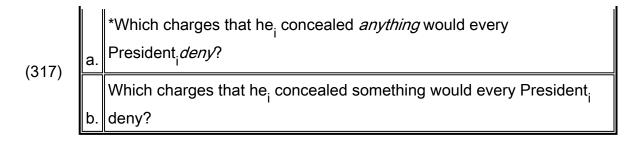
6.4.1 Move at LF (Bošković 1997a)

Bošković (1997a) presents an analysis of specificational pseudoclefts which is based on the idea that the *wh*-element in the *wh*-clause is replaced with the 'value'-XP at LF as a result of Move.[52] Replacement of *what* is triggered by the assumption that what *what* is is a 'surface anaphor' in the sense of Hankamer and Sag (1976) – an anaphor that has to be replaced by its linguistic antecedent at some level of representation. (See Lødrup 1994 for related discussion of Norwegian *det*.)

(316)

	Hankamer:	I'm going to stuff this ball through the hoop.
a.	Sag:	I don't think you'll be able to do *it/ so*.
		[Hankamer is trying to stuff a ball through a hoop]
b.	Sag:	I don't think you'll be able to do *it/* so*.

Just like *so*, but unlike *it*, the *what* of a specificational pseudocleft needs a linguistic antecedent, and must be replaced by this antecedent by the end of the derivation. Bošković takes the point at which such replacement obtains (in any event in pseudoclefts) to be LF. At LF, therefore, the representation of a specificational pseudocleft will no longer contain *what*– in its place we find the 'value'-XP which appeared on the other side of the copula in the overt syntactic structure; this XP is moved into the *wh*-clause via Move.

With the 'value' at LF inside what used to be the *wh*-clause, the connectivity effects will follow, so the argument goes. But note that for NPI connectivity, things seem to happen 'too late': negative polarity items generally want to be c-commanded by their licensors at S-structure – cf. the ungrammaticality of (317a), from Den Dikken et al. (2000 : 50): though reconstruction is possible in this kind of context (cf. the grammaticality of (317b)), negative polarity item licensing nonetheless fails here.[53]

(317)

(317)

a.	*Which charges that he$_i$ concealed *anything* would every President$_i$ *deny*?
b.	Which charges that he$_i$ concealed something would every President$_i$ deny?

One of Bošković's (1997a) key arguments for the idea that the 'value' is actually moved via an instantiation of the syntactic operation Move is the fact that extraction of and from the 'value' is impossible (cf. for discussion):

(318)

a.	I think that what caused the riot was a picture of the wall.
b.	*What do you think that what caused the riot was *ec*?
c.	*What do you think that what caused the riot was a picture of *ec*?

For Bošković, the cause of the ungrammaticality of (318b, c) lies in a general restriction on Move: it is impossible, in general, to have Move apply either to a trace or to a constituent containing a trace. (318b, c) fall under this restriction – at LF, Move will need to replace the *what* of the pre-copular *wh*-clause with the 'value'-XP; but at that time, the 'value'-XP has already been reduced to either a trace (318b) or a constituent containing a trace (318c), as a result of overt-syntactic *wh*-extraction. The ban on movement of (constituents containing) traces thus makes it impossible for the *what* of the pseudocleft to be replaced in (318a, b), which is why these examples are ungrammatical.

Den Dikken et al. (2000 : 64) find fault with this account of (318) (which, in any event, is by no means an exclusive argument in favor of the Move analysis; see for other approaches) by pointing out that *covert* extraction from the 'value'-XP is also impossible in specificational pseudoclefts:

(319)

(319)

a.	*Who thinks that what caused the riot was which picture of the wall?
b.	*Who thinks that what caused the riot was a picture of which wall?

Here, there has been no overt-syntactic extraction from the 'value'-XP: the *wh in situ* will not move toward the overtly extracted *wh*-element *who* until LF. There should be no problem, therefore, with a derivation of (319) which first has the intact 'value' replace *what* (by which the pseudocleft is reshaped into a simple clause) and subsequently performs LF *wh*-movement on (a subconstituent of) the 'value'. Hence there is no reason, on Bošković's analysis, to expect there to be anything wrong with (319) – contrary to fact.

The ban on movement of a constituent containing a trace, Bošković argues, is also responsible for the ungrammaticality of the examples in (320) (cf. also Higgins 1979 : 67):[54]

(320)

a.	*What John gave was Mary a book.
b.	*What John gave was a book to Mary.

Bošković follows Larson (1988 b) in assigning a structure to triadic constructions according to which they contain two VPs, the lower one of which includes the direct and indirect objects and *a trace of the verb*. It is precisely this lower VP that one would need to move into the *wh*-clause to derive the examples in (320) – and since one is not allowed to move a constituent containing a trace, the ungrammaticality of these examples follows directly.

Once again, however, this argument for a Move derivation overlooks an essential fact. For, as Den Dikken et al. (2000 : 78) point out, examples of the type in (320) become grammatical once the *wh*-clause of the pseudocleft is given *two* variables – one corresponding to each of the two post-copular

objects:

(321) [?]What John gave to whom was (John gave) a book to Mary and a CD to Sue.[55]

The ungrammaticality of (320) thus turns out to have nothing to do with restrictions on Move – instead, it is a consequence of the lack of parallelism between the *wh*-clause and the post-copular 'value' (see also Boeckx 1998). In this respect, (320) seems to be on a par with Akmajian's (1979 : 26) examples in (322b, c):

(322)

a.	What I forced Bill to do was leave.
b.	*What I forced was Bill to leave.
c.	*What I forced Bill was to leave.

Den Dikken et al. (2000 :) draw attention to a variety of other 'parallelism effects' in specificational pseudoclefts, largely shared by question-answer pairs. (320) thus by no means stands on its own.

As far as we can see, there are no properties of specificational pseudoclefts which argue unambiguously in favor of a LF Move approach to these constructions as proposed by Bošković (1997a). On the other hand, there do exist some general considerations which suggest that such an approach (regardless of the theoretical vicissitudes of the instantiation of Move that this analysis needs to invoke) is presumably not on the right track. These considerations are all concerned with the fact that Bošković's analysis turns on an instance of Move which is triggered by a property of the *wh-*element *what*, which he treats as a surface anaphor in the sense of Hankamer and Sag (1976).

Interestingly, *what* is the *wh*-counterpart of *it*– and *it*, unlike *so* (which does have the property of being a surface anaphor), is not a surface anaphor (but a 'deep' one instead): as (316b) shows, *it* can take a situation as its antecedent; it does not need a linguistic antecedent, hence does not need to be (in fact, cannot be) replaced at LF. Given the morphological link between *it* and *what*, it is at the very least

surprising that (if Bošković's approach to *what* is right) the two should part ways so radically when it comes to the 'deep/surface anaphor' dichotomy.

Surprising as well is the fact that, even though it is true that *what* is by far the most common *wh*-element in specificational pseudoclefts, it is not just *what* that can be used in these constructions – see for examples featuring *wh*-words other than *what*. Though in actual fact it is basically only *who* that is practically impossible in specificational pseudoclefts, Bošković predicts that only *what* should be permissible.

Even more importantly, the fact that Bošković's analysis of specificational pseudoclefts is built entirely on a property of the *wh*-element *what*, which is absent from non-cleft specificational sentences, prevents it from extending to the larger set of specificational copular sentences. Such an extension is nonetheless called for, in the light of the syntactic and semantic parallels between specificational pseudoclefts and their non-cleft congeners (see the discussion in for a list of such parallels).

It is in the light of general considerations like this that we should conclude that an LF Move analysis of specificational pseudoclefts along the lines of Bošković (1997a) must be rejected.

6.4.2 Iota reduction (Heycock and Kroch 1999 ; cf. also Partee 1986 ; Guéron 1992, 1993)

Recall from , above, that for Heycock and Kroch (1999), specificational pseudoclefts are equative copular constructions (cf. 'identity statements'). Such an approach to their deep and surface syntactic structure does not give one a handle on the connectivity effects exhibited by these constructions, it would seem. So, Heycock and Kroch (1999 : 388) argue, "the connectedness effects in pseudoclefts are evidence that neither surface structure nor anything close to it can be the level at which crucial aspects of semantic interpretation are determined." They postulate "a quite abstract level of logical form" at which "pseudoclefts must have a structure identical in relevant respects to that of their canonical paraphrases."

The essence of Heycock and Kroch's (1999) analysis is aptly summarized with the aid of the above

quotations. What is left to be determined is how the surface syntactic form of specificational pseudoclefts can be converted into a 'logical form' representation which is similar to that of their simple clause paraphrases, such that the connectivity effects can be accommodated.

Heycock and Kroch propose a semantic representation of specificational pseudoclefts which is obtained via 'iota abstraction'. In this regard, their approach is very similar to that of Guéron (1992, 1993), which also postulates an iota operator in the *wh*-clause of specificational pseudoclefts,[56] and has this variable replaced (just as in Heycock and Kroch's approach) at a very late and abstract point in the derivation (her metalinguistic level of the *commentaire*). Though different in detail, the Guéron and Heycock and Kroch approaches are of kindred spirit; we will key the discussion to the latter, more readily accessible paper.

Following Jacobson (1995), Heycock and Kroch take the *wh*-clause of a specificational pseudocleft to be a noun phrase with the semantic denotation of an individual rather than a set – in particular, the *wh*-clause/free relative *what Fiona bought* in the specificational pseudocleft in (323) is taken to "denote the maximal individual (a plural individual in the sense of Link (1983)) of which the sentence *Fiona bought y* holds." The semantic representation of *what Fiona bought* thus reads as in (324), and the concomitant semantic representation of the entire pseudocleft in (323) as in (325):

(323) What Fiona bought was that ancient dictionary.

(324) y[Fiona bought y]

(325) y[Fiona bought y]='that ancient dictionary'

Crucially, now, the Russellian 'iota operator' used in (324), defined as in (326), will allow us to alter the structure in (325) by applying the definition in (326) to the equative formula. Via this procedure (dubbed 'iota reduction' by Heycock and Kroch), the iota operator is eliminated from the representation in (325), and the iota-bound variable is replaced with the 'value' of the pseudocleft. The result is as in (327):

(326) $\iota y[f(y)]$ denotes a iff $f(a)$ and $(\forall z)(f(z)$ iff $za)$

(327) Fiona bought that ancient dictionary and $(\forall z)$(Fiona bought z iff z'that ancient dictionary').

What we now have is a representation of (323) which, as its first conjunct, contains precisely the simple clause of the pseudocleft's paraphrase. (327) which will therefore allow us to capture the connectivity effects of specificational pseudoclefts –*if* we can ensure that the dependency relations involved in the relevant set of connectivity effects all apply no sooner than at the level of the grammar at which (327) is obtained (and if the second conjunct of (327) can be eliminated from the logical form relevant for connectivity; but as Heycock and Kroch point out later in their discussion, that second conjunct is actually unnecessary, so we need not be concerned with this condition).

It should be noted that 'iota reduction' must be taken to be obligatory – for pseudoclefts feature no 'antireconstruction effects': Principle C effects are not circumvented in these constructions (cf. *What* he_i *had said to Mary was that she had been lying to John$_i$; see). The same is true for specificational sentences in general. One must assume, therefore, that (i) 'iota reduction' applies to all specificational sentences (regardless of whether they feature a *wh*-clause or not; i.e., noun phrases like *Fiona's purchase* must have a representations of the type in (324), which 'iota reduction' takes as its input); *and* (ii) the only representation of specificational sentences which is available at the interface with the conceptual system is the one obtained by 'iota reduction'.

The point at which 'iota reduction' takes place is a very late one – it must be, according to Heycock and Kroch, since its effects are noticeable even across stretches of discourse (cf., e.g., question-answer pairs; see Heycock and Kroch 1999 : 390–391, and also , above). In other words, "the syntactic derivation of the LF interface representation relevant for such phenomena as binding follows operations that are part of discourse interpretation" (Heycock and Kroch 1999 : 391).

Heycock and Kroch's (1999) approach to connectivity effects thus relegates them to a late stage in the derivation of the semantic representation of specificational sentences. The desired connection with the simple clause paraphrases of specificational pseudoclefts is obtained as a result of the operation of 'iota reduction' performed on the logical formula of equation that is part of the semantic

representation of all specificational sentences –*all* specificational sentences, regardless of their surface word order.

This account of connectivity effects in specificational copular sentences (and across discourse chunks as well; cf. Heycock and Kroch's 1999 : 390–391 discussion of question-answer pairs) hence predicts that such effects should be totally oblivious to linear order. As Den Dikken et al. (2000) stress, however, there are connectivity effects in these constructions which are highly sensitive to the relative order of the 'variable' and its 'value'– NPI connectivity effects, to be specific: *What nobody bought was any wine* is grammatical while **Any wine was what nobody bought* is not.[57] It is true, of course, that not all connectivity effects in specificational sentences are sensitive to word order; in fact, the bulk of them are not. But an overall approach to connectivity effects in specificational sentences which relegates *all* of them exclusively to a late discourse-semantic level of representation will not be able to make the desired cut.

Of course, the lateness of 'iota reduction' also makes Heycock and Kroch's (1999) analysis run up against the same problem which we noted in the previous subsection for Bošković's (1997a) approach: the fact that, in general, NPIs need to be c-commanded by their licensors at S-structure (see (317)).

Thus, while it seems likely that many of the connectivity effects known from the literature could and probably should be dealt with at a semantic level of representation, semantic accounts of connectivity will need to be supplemented by a (presumably syntactic) analysis of the fact that some of these connectivity effects (notably, NPI connectivity) have a much more limited distribution than a general 'reconstruction' or 'iota reduction' approach would lead one to expect. A dual, syntax-and-semantics analysis of specificational pseudoclefts along such lines is the ellipsis approach proposed in Den Dikken et al. (2000). It makes immediate sense of the contrast in (328) (on account of the fact that full-clausal 'values' are systematically impossible in the pre-copular position of specificational pseudoclefts), and relegates order-insensitive connectivity effects to a semantic (or even 'metalinguistic') level – perhaps indeed via something like Heycock and Kroch's 'iota reduction', or for that matter Bošković's LF reconstruction (Jacobson 1995 ; and Sharvit 1997a present alternative semantic perspectives).

ACKNOWLEDGMENT

The author would like to thank Jacqueline Guéron and Caroline Heycock for their detailed comments on a previous manuscript.

NOTES

1   Blom and Daalder (1977 : 77) seek to support their approach with reference to the claim that the post-copular noun phrase of such constructions is *pronominalized* with *it* rather than *(s)he*– a claim which they illustrate for Dutch with the aid of (i), which, however, is not an unequivocal case of an identity statement. The argument fails to be convincing, therefore.

	Is hij de burgemeester van Amsterdam?	Nee, maar hij wordt *het*/* *hij*/ *hem*.
(i)	Is he the mayor of Amsterdam?	No but he becomes it/he/him.

2   Declerck also claims that the Blom and Daalder type approach to specificational sentences (which treats them as predicational underlyingly) is incompatible with Givón's (1973 : 119) universal that "a

predicate may never be less general than its subject"– but this is a mistake on Declerck's part: for advocates of the inversion approach to specificational copular sentences, the pre-copular NP$_1$ (the hyperonym) is indeed the predicate underlyingly, with the post-copular NP$_2$ (the hyponym) being its subject.

3   Guéron (1992) makes a difference between the *récit* and the *commentaire*, two levels of interpretation (a distinction which does not correspond to that between overt syntax and LF). In the *récit* of an inverse (specificational) copular sentence like *The culprit is John*, the copula is a part of the predicate, along with the non-verbal part; in the *commentaire* (a "metalinguistic" level, according to Guéron) it is an identificational operator.

4   As Partee (1999) points out, "in the Slavic literature, it has long been noted that insofar as differences in the semantics of different copular sentences can be predicted from differences in the semantics of the 'arguments' of the copula, it should not be necessary to posit ambiguities in the copula itself"; she refers to Chvany (1975) and Padučeva and Uspenskij (1979) in this context.

Irrelevant in the context of specificational copular sentences and pseudoclefts but significant in the broader context of copular sentences in general is the fact that languages may use different linker elements in copular sentences with an individual-level predicate (like *intelligent*) and ones with a stage-level predicate (like *sick*). Spanish and Portuguese are such languages (cf. the *ser*/*estar* distinction, where *estar* goes back to the Latin verb *stare* 'stand'). We will not be concerned with this question here. See Schmitt (1996) and references cited there for discussion of the distribution of *ser* and *estar*.

5   The term is spelled variably as "pseudo-cleft" (cf., e.g., Huddleston 1971 ; Akmajian 1979 ; Higgins 1979) or "pseudocleft" (cf. more recent work); we will use the non-hyphenated spelling in what follows.

6   (28) is taken from Ross (1999), where the 'nouniness' of *Jerry drunk* is noted (cf. Safir's 1983 'Honorary NPs').

7   On the scope of the term 'pseudocleft' (or '*wh*-cleft'), see .

8   Reversal of the order of (44a) is not ungrammatical, however; but when reversed (*What I need is that*) it takes on the guise of a specificational pseudocleft, and is not identificational/descriptionally identifying anymore.

9   The term 'discontinuous pseudocleft' is adapted from Declerck (1988 : 222), who uses 'discontinuous cleft'; the adjective 'discontinuous' does not refer to discontinuous constituency; though Declerck does not elaborate on the rationale for using this adjective to define pseudoclefts of the type in (48), what seems to be behind this term is the fact that in these constructions *both* the focus and the *wh*-clause are accented and represent new information, as indicated in (49).

10   For the meaning of this term and other names for the relevant constituent, see (53) and the text immediately following it.

11   Note in this context that it is precisely the link between specificational pseudoclefts and question-answer pairs that has led Declerck 1988 : 8 to call the answer clause of a question-answer pair such as *Who opened the door? – John opened the door* a 'specificational sentence' (i.e., for Declerck, the scope of the term 'specificational sentence' includes non-copular answers to questions; see also Akmajian 1979 : 178–180 for a wider application of the term 'specificational' than the one used here). Declerck's extension of the term 'specificational' mistakes the 'value'-XP (the answer) for an entire 'variable-value' pair –*John opened the door* is not a specificational sentence per se: it is the 'value' of a specificational question-answer pair.

12   A problem arises here only for specificational readings of (58a); predicational and identificational copular sentences never invert to begin with (cf. (17) and (19) above). Declerck treats (58a) with *captain of the team* as a specificational copular sentence and has no answer to the question of why (58b) is ungrammatical; Higgins (1979) analyzes the same sentence as an *identificational* copular sentence; a third (and plausible) option is to treat it as a garden-variety predicational copular sentence.

13   Den Dikken et al. (2000) give XP < *wh* pseudoclefts with full-clausal 'values' a * uniformly

(though they do not mention cases with *do* in this context). Ross (1999, 2000) notes the contrast between *bought* and *did* in (59b), and points out furthermore that not all speakers seem to reject (59b) even with *bought* (though it does seem to be substantially worse than both (59b) with *did* and (59a)). Ross (1999) makes the further observation that, for those speakers for whom (59b) with *bought* is good, the construction can be input to Sluicing as well, yielding sentences like (i), which are "used only in colloquial spoken English".

(i)   %He bought some wine, is what.

14   The contrast in (60) is due to Heggie (1988). Not all speakers find this contrast equally strong, however – some, in fact, find it very weak at most. Pseudoclefts with *how* are usually not very good to begin with; for many speakers the choice of word order does not seem to add further complications above and beyond the use of a *how*-pseudocleft.

15   When reversed, specificational copular sentences (double-NP and pseudocleft alike) resist deletion of the pre-copular constituent (Ross 1999): *even if ___ tofu, what he likes is interesting; *even if ___John, the best candidate is not very intelligent.

16   The data in (71–72) are from the published sources mentioned; many speakers find (72b) with *someone* grammatical, on a par with *I doubt that someone needs this money*– positive polarity items like *someone* are generally allowed to scope below extraclausal NPI-licensers like *doubt* (cf. Von Fintel 1999). The key fact in (72b), however, is the grammaticality of *anyone*.

17   Though more like a 'free choice item' (FCI) than like an NPI, this reading qualifies as a polarity reading on the understanding (see Giannakidou 1998) that FCIs are polarity items.

18   The contrast between *say* and *say to me* is reported in Hankamer (1974); not all speakers share this judgment, many finding the example perfectly acceptable with *to me* included. It remains unclear how to account for the contrast if it is real.

19   In Akmajian (1979 : 169), the asterisk on (100c) has inadvertently been omitted.

20   The a- and b-examples in (101) are taken from Akmajian (1979); (101c) was added here, for the sake of completeness.

21   The examples and judgments here are taken from the sources given; not all speakers seem to agree.

22   Dayal (1997) presents the grammaticality of [?]*Whatever she bought was not Barriers* to refute the claim that the *wh*-clause of specificational pseudoclefts does not allow -*ever*. Her example does not seem to instantiate a specificational pseudocleft, however: (i) it features sentential negation, which is otherwise impossible in specificational pseudoclefts (cf. (111)); (ii) it is irreversible (cf. **Barriers was not whatever she bought*); and (iii) it is uniformly deemed unembeddable under ECM-verbs taking *to*-infinitival complements (cf. **I consider whatever she bought not to be Barriers*, to be contrasted with [%]*I consider what John is to be important to himself*, which, though judgments vary substantially, is acceptable to at least some speakers; see item (xix) in , below).

23   See Seuren (1985 : 297) for the observation that the same quantificational restrictions hold of *in situ* foci: *Henry sold (*few) postcards*; and see Declerck (1988 : 87–88) for contexts in which these restrictions on specificational sentences can be alleviated.

24   Collins capitalizes both *poured* and *Tom*, but this reflects an intonation contour which seems very awkward for (120b). We assume the capitalization of *Tom* was an error and have taken the liberty of correcting it here.

25   The text discussion reproduces Declerck (1988 : 32), where the definiteness and singularity of the variable is capitalized on. Notice, however, that adding *only* to the examples in (123), which do not have definite singular variables, is equally bad with the word order given there (**An example of this kind is only Word War II*). When reversed, (123) does allow the addition of *only* to the 'value' (cf. *Only World War II is an example of this kind*). Here is where a difference between (123) and (124) continues to manifest itself: **Only my neighbour is the one who murdered Smith* is impossible.

26   Note, however, that Seuren's (126b) is a marked construction: as Higgins (1979 : 321) points out,

root negation in specificational pseudoclefts triggers a 'contradiction negation' reading; it is this which may be responsible for the truth-conditional effect noted by Seuren with reference to negated pseudoclefts. See item (vi), example (111), above.

27   One might question the status of these Spanish examples as genuine pseudoclefts. An alternative analysis of them as cleft sentences (with a null counterpart of *it*; Spanish is a *pro*-drop language) is readily conceivable; cf. Higgins's translations in terms of *it*-clefts.

28   If indeed it is a fact – the specificational reading, while perhaps dispreferred, does seem to be available for (136b): cf. *Where John is going is that city over there*, which seems acceptable, features P-drop, but cannot be predicational.

29   Ross (1999) mentions in the context of (158) and (161) the impossibility copula-drop in absolute constructions with *wh* < XP pseudoclefts (cf. (i) below). Double-NP specificational copular sentences seem to be grammatical with copula-drop in these contexts only on their canonical order (cf. (ii)). This potentially enhances a parallel treatment of *wh* < XP specificational pseudoclefts and inverse specificational copular sentences (cf. Heggie 1988):

	a.	With what he likes *(being) tofu, I doubt that he'll pass.	
(i)	b.	*What he likes tofu?!	
(ii)	a.	With John (being) the murderer, . . .	with the murderer *(being) John, . . .
	b.	John the murderer?!	*The murderer John?!

30   Notice, though, that inserting *only* in front of *the conversion of chloride ions into hypochlorite and hydrogen ions* is grammatical. In the light of the discussion under item (xi), above, this would seem to indicate that (165a) is not (necessarily) a specificational pseudocleft.

31   Related to this case is the one in (ib) below, also from Ross (1999), involving comparative

ellipsis. Ross also mentions the ungrammaticality of subject deletion (*Even if __ tofu, what he likes is interesting; *Though __ a drunk, what he was is well-known); this is common to reverse specificational copular sentences as a class (*Though ___ John, the best candidate is intelligent); n. 15.

	a.	Barbara is more often a sadist than Bartholomew is.
(i)	b.	*What he writes is more often that he is brilliant than what he says is.

32   The ungrammaticality of the primed examples in (170) and (171) is not surprising in the light of the exhaustiveness reading which characterizes specificational sentences; see item (xi) above.

33   The status of $^?$Is your best friend John? seems to be somewhat degraded, however (Jacqueline Guéron, p.c.; she suggests that the difference between (174c) and the example just mentioned may have to do with the animacy of the first of the two NPs).

34   Akmajian points out, though, that his 'predicational operator [is]' occasionally links the variable and the focal material of specificational pseudoclefts as well.

35   It should be noted, however, that in the tree structures in his first chapter Akmajian does systematically label the post-copular node 'Pred'– cf., e.g., pp. 27, 40.

36   It should be noted, of course, that their analysis was exclusively designed for Dutch; it is only in a brief appendix that they consider the possibility of extending it to English.

37   See Moro (1997) for discussion of the difference between English and Italian; see Den Dikken (1997) for a critique with reference to Dutch.

38   Note that, for most speakers in any event, specificational pseudoclefts with wh < XP orders behave differently in this respect (cf. Hankamer 1974 ; Halvorsen 1978); see above for illustration and discussion.

39   Den Dikken identifies this head as Agr; Moro (1997) objects that if the functional head of small clauses is Agr, one would not expect it to be possible to find disagreement in phi-features between subject and predicate – but such disagreement is in fact possible: cf. the examples in (213), for instance. We will leave the question concerning the nature of 'H' open here.

40   See, however, Blom and Daalder's (1977 : 76) predicational analysis of equatives, mentioned in above.

41   But see Postal (1971), Guéron (1992) for arguments against this; for Guéron, subject and predicate are counter-indexed in the *récit* and co-indexed in the *commentaire* (a metalinguistic level which is created out of the *récit* in the covert component): "une chaîne non pas syntaxique mais sémantique. Deux NP non coincidés sont mis dans un rapport d'équivalence"["not a syntactic chain but a semantic one. Two non-co-indexed NPs are put in a relationship of equivalence"; p. 90].

42   Ross (1999) points out that in Brazilian Portuguese ("though apparently not in all varieties of Portuguese"), constructions of the type in (i) below are found. These superficially look like pseudoclefts from which the *wh*-element has been deleted. If that is what they are, they may be brought to bear on the question of the status of the *wh*-clause of specificational pseudoclefts. Ross himself does not assume an approach to (i) which derives it from (ii) via deletion. We cannot go into the issue here.

	Boris	roubou	foi	o	Lavoris.
(i)	Boris	stole	was	the	Lavoris

	O	que	Boris	roubou	foi	o	Lavoris.
(ii)	the	what	Boris	stole	was	the	Lavoris

43   See also Den Dikken et al. (2000 :) for a way of extending the *wh*-question analysis to '*th*-clefts', by treating examples like *The (one) thing he didn't do was drink any wine* as reduced variants of *wh*-clefts of the form *What the (one) thing he didn't do was, was drink any wine* (see also Ross 1999 on what he calls 'nominalised questions'); as they point out, such an analysis may afford one a

perspective on the 'double *is*' phenonemon in sentences like *% The reason is is (that)* . . . We will not discuss these issues any further here.

44 Notice that these corpus examples all involve *do* in the *wh*-clause; pseudoclefts with full-IP counterweights whose *wh*-clause features *do* rather than a substantive verb are much more widely accepted, and, as was pointed out in (59), also behave differently when it comes to reversibility.

45 It may be important that the 'counterweight' in (253–254) features only a *single* pair of values for the *wh*-phrases in the *wh*-clause, whereas in Ross's examples in (250) a pair list is provided in the 'counterweight'. The difference between Dutch (253) and German (254) may then be related to that between Hungarian (i) and (ii) below (cf. Kiss 2002): in (i), regular multiple *wh*-questions with fronting of all the *wh*-phrases to a left-peripheral focus position, the *wh*-constituents do not have to operate on the same domain (e.g., humans) and a pair-list answer is required; in (ii), only one *wh*-constituent fronts, the other remaining *in situ*, and here the *wh*s must operate on the same domain (e.g., humans) and a pair-list answer is not required. Going back to (253) vs. (254), we note that in the former the *wh*-constituents ('what' and 'where') do not operate on the same domain, whereas in the latter they do; in the light of the Hungarian facts, only the latter will hence be compatible with a single-pair 'counterweight'.

		Ki	kivel	verekedett?	(pair-list required)
	a.	who	who-with	fought	'Who fought with whom?'
		Ki	mit	mondott?	
(i)	b.	who	what	said	'Who said what?'
		Ki	verekedett	kivel?	(single-pair possible)
	a.	who	fought	who-with	
		*Ki	mondott	mit?	

(ii)	b.	who	said	what	(Hungarian; adapted from Kiss 2002)

46   Before moving on to the next section, we add here one further respect in which the *wh*-clause of specificational pseudoclefts seems to pattern with *wh*-questions rather than free relatives. When free relatives undergo coordination, it is possible (as Jespersen 1909 : vol. III, p. 61) points out, for the *wh*-element of the second conjunct to be *which* rather than *what* (cf. (i) below). When, on the other hand, the *wh*-clause of a specificational pseudocleft is conjoined with another *wh*-clause, it seems impossible to use *which* in the second conjunct, *what* being the only possibility. The examples in (ia, b) with *what* are taken from Declerck (1988 : 220) and Geluykens (1984), respectively (the latter being a corpus-based study); replacing *what* with *which* in these examples seems to render the sentences ungrammatical, just like it would in coordinated *wh*-questions:

(i)		To assert what cannot be proved and *which*, were it true, annihilates all hope of existence after death. (Percy B. Shelley)
	a.	What we have always wanted to know but *what*/*which* the government has never wanted to tell us is what exactly happens at secret conferences.
(ii)	b.	What they are thinking of and *what*/*which* they will probably come up with at the end of the day is a proposal for a cassette tape of the whole bloody issue.

47   In Brazilian Portuguese, *o que* can be left out in constructions of this type, yielding *Boris roubou foi o Lavoris*; see n. 42 above, and Ross (1999) for discussion – Ross argues against the hypothesis that this construction literally results from (263) via deletion of *o que*.

48   Note, though, that the *wh* < XP word order that these pseudoclefts display would be incompatible with a 'Type B' analysis on Den Dikken et al.'s (2000) assumption that 'Type B' pseudoclefts can only have a XP < *wh* word order.

49   The parallelism between (288c) and (290b) can presumably be strengthened by considering the distribution of the complementizer *dat* 'that' in combination with (*of* and) *wh*-phrases: *Wat of dat ik gedaan heb* 'What or that I done have' is good in embedded questions (in those varieties that allow these constructions to begin with), but it seems impossible in a context such as (290b) or in specificational pseudoclefts. These data have not, to our knowledge, been discussed in the literature before; further research is called for.

50   Recall the differences between such examples (with *do*) and ones with a substantive verb in the *wh*-clause; cf. e.g. (59).

51   Higgins (1979) seeks to counter Akmajian's claim about the non-ambiguity of specificational pseudoclefts with non-NP 'counterweight'/'value' by drawing attention to the existence of non-cleft specificational copular sentences with a gerund as post-copular constituent (such as *John's biggest worry is having to photograph himself without a tie on*), which he claims feature a VP to the right of the copula. Higgins's point is not well-taken, however: these gerunds arguably are NPs.

52   Guéron (1992) seems to be a predecessor of this approach, though she does not conceive of the operation that reconstructs the focus into the *wh*-clause as a syntactic movement operation: for her, it is an operation ensuing in the mapping of the *récit* onto the *commentaire*, the latter a metalinguistic level of representation. To quote her directly (p. 103): "Le focus remplace la tête de la relative . . . Ensuite le focus est *reconstruit* à la place de la variable dans DP2 [i.e., the free relative which includes the *wh*-clause]"[original emphasis; "The focus replaces the head of the relative . . . Subsequently the focus is reconstructed into the position of the variable in DP2"]. By taking the reconstruction to happen *beyond* syntax Guéron is in fact closer to Heycock and Kroch (1999).

53   We refer the reader to Den Dikken et al. (2000) for discussion of cases in which the point at which NPI licensing takes place is indeed LF; these cases behave in interesting ways when converted into specificational pseudoclefts.

54   The ungrammaticality of (320a) is also noted in Ross (1999), who blames it on the non-constituency of *Mary a book*; on approaches to double object constructions *à la* Kayne (1984a) or

Larson (1988b), however, this sequence *is* a constituent (see the main text immediately below for discussion of Larson's account, invoked by Bošković). Ross contrasts the ungrammaticality of (320a) with the well-formedness of (i) (= (28) from , above). Here, *Jerry drunk* is unquestionably a constituent – an Honorary NP in the sense of Safir (1983):

(i) What we need is Jerry drunk.

55   See the discussion in for other examples of multiplicity in specificational pseudoclefts. Not all authors find such examples grammatical (see Higgins 1979 : 67 for explicit rejection of an example with a structure similar to that of (321)); the point, however, is that for those speakers for whom multiple *wh*s are possible in the *wh*-clause of specificational pseudoclefts to begin with, examples of the type in (321) are acceptable.

56   In fact, Guéron's approach is more general in that it postulates such an operator in the representation of inverse specificational copular sentences of the double-NP type (like *The best candidate is John*) as well: see (220) in , above.

57   They also point out that the restrictions on gapping in specificational pseudoclefts (which played a role in an earlier manuscript version of their paper, Heycock and Kroch 1996 ; see) are another context in which linear order effects play a key role, without the Heycock and Kroch approach managing to accommodate them.

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