

Predication and specification in the syntax of cleft sentences

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Abstract

This paper reviews the differences between predicational and specificational copular sentences in the realm of (pseudo-)cleft constructions, and proposes an analysis which treats the *it* of specificational *it*-clefts as a pro-predicate that inverts with its subject in the course of the syntactic derivation. In contrastive-focus *it*-clefts, the sentence-final relative clause is a right-dislocated headless relative dependent on a formal licensing relationship with the operator inside the relative clause and a content-licensing relationship with the focus. This dual licensing dependency explains the restrictions on the distribution of *which* as the relative clause operator in contrastive-focus *it*-clefts. Continuous-topic *it*-clefts are structurally assimilated to pseudorelative constructions, which accounts for the restrictions on the realisation of the left periphery of their relative clause.

Keywords: *it*-cleft, predication, specification, headless relative, asyndetic specification

1 A typology of cleft sentences

1.1 Pseudoclefts: Predicational vs specificational

Since Higgins' (1979) seminal work, a terminological difference between two types of copular sentences, between so-called *predicational* and *specificational* ones, is standardly made in the literature. The two pseudoclefts in (1) bring this difference out particularly clearly.

- (1) a. what Brian_i is is important to him_i
 → predicational: *important to him* predicates a property of *what Brian is*
- b. what Brian_i is is important to himself_i
 → specificational: *important to himself* specifies a VALUE for the variable in the *wh*-clause

For (1a), the term ‘predicational pseudocleft’ is really a misnomer: though ‘predicational’ is certainly appropriate, there is nothing ‘cleft’ about this kind of sentence — it represents a garden-variety predicational copular sentence, with the free relative as the subject and the postcopular AP as the predicate, entirely parallel to *Brian’s job/status is important to him*. For (1b), on the other hand, the term ‘specificational pseudocleft’ is entirely apt — (1b) ‘cleaves’ the sentence *Brian is important to himself* into two portions on either side of the copula, with *important to himself* specifying a value for the variable in the *wh*-clause.

In specificational pseudoclefts, the postcopular constituent seems to be the underlying *subject* of the predicate denoted by the *wh*-clause in precopular position (i.e., the opposite of the situation in (1a)). The two major constituents of the specificational pseudocleft in (1b) can in fact change places, as in (4a,b) — on a par with specificational copular sentences of the type in (5). Such word-order alternation is impossible in predicational ‘pseudoclefts’, *unless* the AP predicate is degree-modified — and in this respect, (1a) behaves exactly like other garden-variety copular sentences with AP predicates (see (2b) and (2b’), and compare these to (3b,b’)).

- (2) a. what Brian_i is important to him_i
 b. *important to him_i is what Brian_i is
 b’. most important to him_i is what Brian_i is

- (3) a. his job/status is important to him
 b. *important to him is his job/status
 b'. most important to him is his job/status
- (4) a. what Brian_i is is important to himself_i
 b. important to himself_i is what Brian_i is
- (5) a. the best candidate is Brian
 b. Brian is the best candidate

Word-order flexibility is thus one formal criterion for the distinction between predicational and specificational copular sentences.

A second formal criterion is control. In specificational pseudoclefts with a *wh*-clause – *be* – VALUE word order, just as in simple specificational copular sentences with a predicate – *be* – subject order, the constituent in structural subject position fails to control PRO, as shown in (6) (modelled on examples presented in Huber 2002:127, 134). In predicational pseudoclefts, on the other hand, control is unproblematic, just as in garden-variety predicational copular sentences in general. This we see in (7).

- (6) a. *[who murdered Brian]_i was Ryan, besides PRO_i being a bad guy
 b. *the murderer_i is Ryan, besides PRO_i being a bad guy
- (7) a. [who murdered Brian]_i was insane, besides PRO_i being a bad guy
 b. the murderer_i was insane, besides PRO_i being a bad guy

The third indication that a predicational/specificational distinction holds in the domain of pseudoclefts is the distribution of the copula in non-finite predications embedded under propositional attitude verbs such as *consider*. Here, predicational ‘pseudoclefts’ behave like predicational copular sentences in general in freely allowing the copula to be either present or absent (see (8) and (9)), while the specificational pseudo-

clefts in (10) pattern with the specificational copular sentences in (11) in forcing the copula to show up whenever the notional predicate precedes its subject (the VALUE), as in the b–sentences.

- (8) I consider what Brian_i is (to be) important to him_i
- (9) I consider his job/status (to be) important to him
- (10) a. I consider what Brian_i is *(to be) important to himself_i
- b. I consider important to himself_i ?(to be) what Brian_i is
- (11) a. I consider the best candidate *(to be) Brian
- b. I consider Brian (to be) the best candidate

The parallel between (10a) and (11a) (see Williams 1983; for some remarks on speaker variation, see Den Dikken 2005:§3.4) and between (10b) and (11b) is strongly suggestive of a parallel syntactic derivation for specificational pseudoclefts with *wh*-clause – *be* – VALUE order and inverse specificational copular sentences of the type in (5a).

The obligatoriness of the copula in (11b) can be made to follow from an analysis of inverse specificational copular sentences according to which the predicative noun phrase, *the best candidate*, is raised from its base position within the small-clause to a small-clause external A–position, across the base position of its subject (*Brian*), as depicted in (12b). To facilitate such apparently non-local movement, a linker (in the terminology of Den Dikken 2006) is required outside the small clause; this linker is obligatorily realised by a copular element.

- (12) a. [_{RP} [_{Subject} *Brian*] [_{RELATOR} [_{Predicate} *the best candidate*]]]
- b. [_{FP} [_{Predicate} *the best candidate*]_k [_{RELATOR_i+LINKER=be} [_{RP} [_{Subject} *Brian*] [_{t_i t_k]]]]]}

This analysis straightforwardly accommodates the obligatoriness of the copula in (10a) as well if specificat-

ional pseudoclefts are assumed to have an underlying representation in which the *wh*-clause is predicated of the VALUE. The structures in (13) embody this assumption.

- (13) a. [RP [Subject *important to himself*] [RELATOR [Predicate *what Brian is*]]]
 b. [FP [Predicate *what Brian is*]_k [RELATOR_i+LINKER=*be* [RP [Subject *important to himself*] [_i _k]]]]]

I will take (13) to be a grammatical derivation of specificational pseudoclefts. It is arguably not the only one made available by Universal Grammar (see Den Dikken, Meinunger & Wilder 2000 for discussion of an alternative Topic–Comment structure for a well-defined subset of specificational pseudoclefts), but it will be the only one of concern to us in this paper.

1.2 *It-clefts: Predicational vs specificational*

For pseudoclefts, the distinction between predicational and specificational specimens is entirely commonplace. Much less familiar is the fact that the same distinction can be made in the domain of *it*-clefts as well.

- (14) it was an interesting meeting that I went to last night (Declerck 1988)
 a. predicational — ‘the meeting I went to last night was interesting’
 b. specificational — ‘I went to the following last night: an interesting meeting’

On the specificational reading of (14), paraphrased in (14b), the entire postcopular noun phrase is the focus of the *it*-cleft and supplies new information. On the predicational reading, by contrast, only the attributive adjective *interesting* seems to supply new information (and, concomitantly, only the adjective is focally stressed): *meeting* is discourse-old in (14a).

That predicational and specificational *it*-clefts are genuinely different syntactic creatures is perhaps particularly evident from the fact that the two resist being conjoined (Declerck 1988:161). As Declerck notes correctly, the problem with (15c,d) is presumably of the same type as that with sentences such as **Brian is the tall one and also fat*.

- (15) a. specificational & specificational
 it was a BOOK that Brian gave me and a BIKE that Imogen gave me
- b. predicational & predicational
 it was an IMPORTANT meeting that I went to and an INTERESTING subject that they
 discussed
- c. ??predicational & specificational
 ??it was an IMPORTANT meeting that I went to and BRIAN who was presenting a talk
 at it
- d. ??specificational & predicational
 ??it was BRIAN who led the debate and an INTERESTING subject that they discussed

In his seminal study of cleft and pseudocleft constructions (centred mostly around facts from English), Declerck (1988:158ff.) presents twenty characteristics that (14) on its predicational reading shares with predicational sentences (see also Reeve 2007 and Patten 2008 for discussion of predicational clefts). In my discussion here, I will focus on replicating in the domain of *it*-clefts the three formal criteria discussed for pseudoclefts in the previous section.

English *it*-clefts have rigid word order: *it* is invariably in structural subject position (*it was Bill who left*, **Bill was it who left*). But in languages such as Dutch (and also German, Swedish; see Huber 2002), the *it* of an *it*-cleft can surface to the right of the copula (even in non-root, non-Verb-Second constructions), under certain circumstances. Thus, the Dutch root clauses in (16a) and (16b) alternate freely; and even in the non-

root contexts in (17), *het* ‘it’ may either precede or follow the VALUE.

- | | | | |
|------|----|--|--|
| (16) | a. | het was ZIJN VROUW die...
it was his wife who... | het waren ZIJN KINDEREN die... (Dutch)
it were his children who... |
| | b. | ZIJN VROUW was het die...
his wife was it who... | ZIJN KINDEREN waren het die...
his children were it who... |
| (17) | a. | dat het ZIJN VROUW was die...
that it his wife was who... | dat het ZIJN KINDEREN waren die...
that it his children were who... |
| | b. | dat ZIJN VROUW het was die...
that his wife it was who... | dat ZIJN KINDEREN het waren die...
that his children it were who... |

But predicational *it*-clefts do not tolerate such word-order variation: they must have the *it* in structural subject position even in languages which otherwise allow flexibility in *it*-clefts. To see this, consider the examples in (18) and (19). The former have a lead-in question that explicitly identifies the *it*-clefts as specificational, and what we find is that the word orders in (18a) and (18b) both make felicitous answers to this question. The preamble in (19), by contrast, prepares for a predicational *it*-cleft in the answer — and this time, the word order in the b–sentence is distinctly infelicitous (whereas the a–sentence still works perfectly well). This demonstrates that predicational *it*-clefts, in a language whose specificational *it*-clefts show word-order flexibility, are linearly rigid.

- (18)
- | |
|---|
| was wat je gisteravond hebt bijgewoond een interessante bijeenkomst of |
| was what you yesterday evening have attended an interesting meeting or |
| een slaapverwekkende lezing? |
| a soporific lecture |
| ‘was what you attended last night an interesting meeting or a soporific lecture?’ |

- a. het was een INTERESSANTE BIJEENKOMST die ik gisteravond heb bijgewoond
 it was an interesting meeting that I yesterday evening have attended
- b. een INTERESSANTE BIJEENKOMST was het die ik gisteravond heb bijgewoond
 an interesting meeting was it that I yesterday evening have attended
- (19) was de bijeenkomst die je gisteravond hebt bijgewoond een interessante of
 was the meeting that you yesterday evening have attended an interesting or
 een slaapverwekkende?
 a soporific
 ‘was the meeting you attended last night an interesting one or a soporific one?’
- a. het was een INTERESSANTE bijeenkomst die ik gisteravond heb bijgewoond
 it was an interesting meeting that I yesterday evening have attended
- b. #een INTERESSANTE bijeenkomst was het die ik gisteravond heb bijgewoond
 an interesting meeting was it that I yesterday evening have attended

More microscopically, the word-order flexibility in Dutch specificational *it*-clefts disappears in non-root contexts when the VALUE is pronominal, as seen in (21), where the a–sentences are strongly degraded.¹ This strikingly enhances the parallel between specificational *it*-clefts and simple specificational copular sentences, which show the same pattern: (23a) contrasts markedly with (23b) (whereas in the root context in (22) no such contrast manifests itself, once again perfectly parallel to the absence of a contrast in (20)).

¹ Google statistics support this intuition robustly: while there are thousands of tokens of type (21b), there are exactly six hits for the string *dat het zij was die* and exactly three for the string *dat het zij waren die* (Nov 2008), and the hits returned for these strings all sound highly unnatural to me. Huber’s (2002:79) observations regarding word order in German embedded *it*-clefts with the demonstrative *das* ‘that’ as the VALUE also show a restricted pattern in non-root contexts, though opposite to the one seen with Dutch personal pronouns in (21): *daß es das ist was mir Spaß macht* ‘(lit.) that it that is what me pleasure makes, i.e. that it’s that which gives me pleasure’ vs. *daß das es ist was mir Spaß macht* ‘that that it is what me pleasure makes’. For personal pronoun VALUES, Huber’s judgements show that there is actually slightly *more* word-order flexibility in the *non-root* context than there is in the root context (i.e., quite the opposite of the situation in (my) Dutch). I have nothing insightful to say about the German facts here.

- | | | | |
|------|----|---|--|
| (20) | a. | het was ZIJ die...
it was she who... | het waren ZIJ die...
it were they who... |
| | b. | ZIJ was het die...
she was it who... | ZIJ waren het die...
they were it who... |
| (21) | a. | [?] *dat het ZIJ was die..
that it she was who... | [?] *dat het ZIJ waren die...
that it they were who... |
| | b. | dat ZIJ het was die...
that she it was who... | dat ZIJ het waren die...
that they it were who... |
| (22) | a. | het grootste probleem was ZIJ
the biggest problem was she | het grootste probleem waren ZIJ
the biggest problem were they |
| | b. | ZIJ was het grootste probleem
she was the biggest problem | ZIJ waren het grootste probleem
they were the biggest problem |
| (23) | a. | [?] *dat het grootste probleem ZIJ was
that the biggest problem she was | *dat het grootste probleem ZIJ waren
that the biggest problem they were |
| | b. | dat ZIJ het grootste probleem was
that she the problem was | dat ZIJ het grootste probleem waren
that they the biggest problem were |

The fact that a contrastively stressed full pronoun does not want to stay *in situ* in the subject position of the small clause in these specificational contexts is quite surprising in light of the fact that elsewhere in the grammar, contrastively stressed pronouns typically differentiate themselves from weak pronouns precisely in being perfectly happy to stay *in situ*. Thus, in the English verb–particle construction, weak pronouns resist placement to the right of the particle (*Brian sounded <her> out <*her>*) while a contrastively stressed pronoun is welcome to be pronounced in this position (*Brian sounded out HER, not HIM*). I do not profess to have a profound understanding of the roots of the problem with (21a) and (23a). But the empirical fact that

specificational *it*-clefts pattern with other specificational copular sentences with respect to the word-order restrictions they impose in non-root clauses with a pronominal VALUE certainly enhances the conclusion that specificational *it*-clefts with *it*-initial order have the syntax of inverse specificational copular sentences like *the problem is the children*. What further underpins this conclusion are the agreement facts in the examples in the right-hand column of (17)–(18) and (20)–(23). No matter where the VALUE is placed, it always controls the agreement with the finite copula;² *het* never agrees with the copula in Dutch *it*-clefts.³ In this respect as well, *it*-clefts behave like simple specificational copular sentences: in the right-hand examples in (22) and (23), the VALUE consistently controls agreement with the copula, too.

When it comes to control, the *it* of predicational *it*-clefts behaves exactly like the proleptic *it* of ‘clausal extraposition’ constructions, as shown by the facts in (24) and (25).⁴

- (24) a. it_i was an INTERESTING meeting I went to last night, despite PRO_i being poorly organised
- b. it_i was, despite PRO_i being poorly organised, an INTERESTING meeting I went to last night
- (25) it_i finally became clear, after PRO_i having been explained ten times, that the earth is round

The fact that the *it* in (25) can control PRO is perhaps Bennis’s (1986) strongest argument to the effect that

2 For thoughtful discussion of the problem of agreement in specificational copular sentences, see also Heycock (2009).

3 Though *het* never itself controls phi-feature agreement with the finite verb, it apparently prevents the postcopular subject from controlling phi-feature agreement if the postcopular subject is specified for first or second person: **het ben ik die...* ‘it am I who...’ and **het ben jij die...* ‘it are you who...’ are sharply ungrammatical (as are **het is ik/jij die...*); uninverted *ik ben het die...* and *jij bent het die...* are the only option with first and second person VALUES. The root of the agreement problem with **het ben ik/jij die...* remains unclear to me; but it seems to lie specifically in the fact that the inverted predicate in *it*-clefts is pronominal: in inverse copular sentences with a full-nominal predicate, such as *de beste kandidaat ben ik/jij* ‘the best candidate is me/you’, the form *ben* ‘am/are(2SG-INV)’ is perfectly fine.

4 Of the pair of sentences in (24), (24b) presumably makes the point more strongly than does (24a): in (24a), *an interesting meeting* could be understood as the controller of PRO, resulting in a reading that would not make the text point. But in (24b) it would be hard for *an interesting meeting* to control PRO (such would have to be backward control of a PRO in a sentence-internal adjunct).

the proleptic *it* of ‘clausal extraposition’ constructions is not an expletive but a referential pronoun. Now the fact that the predicational *it*-cleft in (24) allows *it* to serve as a controller as well leads us to the conclusion that the *it* of predicative *it*-clefts is likewise an argumental, referential pronoun.⁵

By contrast, the specificational *it*-cleft in (26) (cf. Huber 2002:136) patterns with our earlier examples in (6) in resisting control: (26) is ungrammatical with the indexation provided there.^{6 7}

(26) **it*_i was Ryan who murdered Brian, besides PRO_i being a bad guy

This suggests that the *it* of specificational *it*-clefts is not an argumental, referential pronoun, but instead behaves like the raised predicates of inverse specificational copular sentences and specificational pseudoclefts.

Finally, let us examine the distribution of the copula in the two types of *it*-clefts to fully round out our demonstration of the fact that *it*-clefts come in two types: predicational and specificational. Declerck (1988:171) observes the parallel between (27) and (28).

5 Support for this conclusion comes from Ball’s (1978) observation that predicational clefts with a plural VALUE take a plural pronoun/demonstrative rather than *it* (*those are real eye glasses that Micky is wearing*), whereas specificational clefts with a plural VALUE stick with *it*. Many of the examples of ‘predicational *it*-clefts’ in Declerck (1988) involve postcopular noun phrases that are predicable of non-humans, so *it* as the subject of these predicates is perfectly feasible for those cases. But there are also predicational *it*-clefts that have postcopular predicates that should be predicated of humans, like *it’s no RELIABLE man that you have hired, but a crook!* (p. 160). The use of referential *it* as the subject here raises some questions; I cannot address them here.

6 The qualification ‘with the indexation provided here’ is quite important: it does not seem to be impossible for the postcopular VALUE of a specificational *it*-cleft to control the PRO subject of an adverbial clause. Thus, *it is Brian who is teaching without PRO actually being a teacher* is certainly grammatical; but it is demonstrably *Brian* (the VALUE) and not *it* that is controlling PRO here: when we make the adverbial clause finite, the only grammatical choice of subject is *he*, not *it* (*it is Brian who is teaching though he/*it isn’t actually a teacher*). In the example in (26), the adverbial clause is supposed to contain a truncated cleft (cf. *it is a bad guy who...*).

7 Note that Reeve (2007) presents (ia,b) as grammatical, contradicting the text claim. I cannot weigh in on the English judgments here, but want to point out that my informants (speakers of American English, unlike Reeve) find (i) quite impossible. I add here that Dutch clearly resists control by *het* in specificational *it*-clefts. I will take such control to be generally impossible, leaving Reeve’s examples aside. While one could in principle take (26) to indicate that the *it* of contrastive/stressed-focus *it*-clefts is an ‘expletive’, Huber (2002:140) shows that in German it really does not behave as such. As is well known, ‘truly expletive’ *es* in German (as found e.g. in (ii)) occurs only in SpecCP of root clauses: (iib) is ungrammatical. By contrast, the *es* of German *it*-clefts does occur in non-SpecCP positions, as (iii) shows (see also Reeve 2007). So the *es* of *it*-clefts is certainly not an ‘expletive’.

- | | | | | |
|-------|----|---|----|--|
| (i) | a. | <i>it</i> _i was John who Bill spent all his time with [despite PRO _i being Mary the day before](Reeve 2007) | | |
| | b. | <i>it</i> _i was the furniture that annoyed John on Sunday [despite PRO _i being the décor the day before] | | |
| (ii) | a. | <i>es</i> spielen Kinder auf der Straße | b. | Kinder spielen (* <i>es</i>) auf der Straße |
| | | <i>it</i> play children on the street | | children play <i>it</i> on the street |
| (iii) | a. | <i>es</i> ist Peter, der kommt | b. | Peter ist *(<i>es</i>), der kommt |
| | | <i>it</i> is Peter who comes | | Peter is <i>it</i> who comes |

- (27) a. I consider Brian (to be) his best friend
 b. I consider his best friend *(to be) Brian
- (28) a. I consider it (to be) an INTERESTING subject that they are discussing tonight
 b. I consider it *(to be) BRIAN who is his best friend

The predicational *it*-cleft in (28a) does not force the presence of *to be*, which makes it behave on a par with canonical, non-inverted, predicational copular sentences of the type in (27a). This confirms what we had taken the control facts to indicate already: that *it* in (28a) is the subject of the predicate *an INTERESTING subject*, just as *Brian* in (27a) is the subject of the predicate *his best friend*. The *it* of (28b), by contrast, patterns with the inverted predicate of inverse specificational copular sentences of the type in (27b). So *it* in (28b) is the *predicate* of the VALUE *Brian*, its subject, just as *his best friend* in (28b) is the predicate of *Brian*.

The discussion of the word-order, control and copula distribution facts leads us to the partial derivation in (29) for specificational *it*-clefts. This derivation parallels the ones in (12), for inverse specificational copular sentences, and (13), for specificational pseudoclefts with a word order in which the *wh*-clause precedes *be*, which in turn precedes the VALUE.

- (29) a. $[_{RP} [_{\text{Subject}} \text{VALUE}] [_{\text{RELATOR}} [_{\text{Predicate}} \textit{it}]]]$
 b. $[_{\text{FP}} [_{\text{Predicate}} \textit{it}]_k [_{\text{RELATOR}}_i + \text{LINKER} = \textit{be}} [_{\text{RP}} [_{\text{Subject}} \text{VALUE}] [t_i t_k]]]]]$

The central claim of (29) about the syntax of *it*-clefts is that the *it* of specificational *it*-clefts is an underlying *predicate* that (in *it*-initial cases) inverts with its subject (cf. Moro's 1997 analysis of *it's that S* constructions, and Cheng & Downing's 2008 account of Zulu clefts), and *be* is a linker (in the sense of Den Dikken 2006).⁸

8 While the arguments reviewed in this section all robustly support the conclusion that the *it* of specificational *it*-clefts is the underlying predicate of a small clause that inverts with its subject (the VALUE) in the syntactic derivation, there is one important respect in which specificational *it*-clefts behave very differently from inverse specificational copular sentences — *wh*-extraction:

- (i) a. I think the most important item on the reading list is this book
 b. *which book do you think the most important item on the reading list is *t*?
- (ii) a. I think what every linguistics student should read is this book

It will be obvious, however, that the derivation in (29) is incomplete: we still need to find a way to incorporate the right-peripheral clause into the structure. This is the topic of section 2, to which I now turn.

2 Integrating the relative clause

For specificational *pseudoclefts*, (13) gives us everything we need: the *wh*-clause is the small-clause predicate (a free relative); and it inverts (optionally) with its subject, the VALUE. But for specificational *it*-clefts, (29) gives us too little. Semantically, (29) seems rather uninformative: *it* by itself does not appear to be a very meaningful predicate for the VALUE. The relative clause at the end of the sentence would seem to be a natural predicate for the VALUE; but syntactically, this relative clause is hard to fit in: the structure in (29) provides no home for it as one of the major constituents of the structure.

One logical possibility would be to represent the relative clause of specificational *it*-clefts as a satellite specifying the content of *it*, as in (30a). The alternative would be to construe the relative clause with

- | | | |
|-------|----|--|
| | b. | *which book do you think what every linguistics student should read is <i>t</i> ? |
| (iii) | a. | I think it is this book that every linguistics student should read |
| | b. | which book do you think it is <i>t</i> that every linguistics student should read? |

While the postcopular notional subject of an inverted predicate in specificational predicate nominal constructions like (i) and specificational pseudoclefts like (ii) is ineligible for *wh*-extraction, the postcopular VALUE of a specificational *it*-cleft is perfectly capable of undergoing A'-fronting, as seen in (iii). There is reason to believe, however, that this does not undermine the otherwise very robust syntactic parallelism between specificational *it*-clefts and other inverse specificational copular sentences.

Den Dikken (2006:125) claims that the ban on (ib)/(iib) is reducible to the 'frozenness' of foci: 'A constituent that ends up in a syntactic configuration that leads it to be interpreted as a focus will inevitably be interpreted as the focus of the clause that it is in, and will literally be frozen in place'. Developing this account somewhat further, I believe there is a way of rendering (iib) compatible with the general picture regarding extraction of the focus in specificational copular sentences. In all of the a-examples in (i)–(iii), focus is assigned in postcopular position. But only in (ia) and (iia) does the postcopular focus surface to the right of the topic. In the *it*-cleft in (iiia), the focus is to the *left* of the topic (i.e., the material in the *that*-clause): the *it* of *it*-clefts evidently is not itself the topic of the *it*-cleft (*it* is a mere pro-predicate, not serving as the meaningful topic of the sentence); the meaningful topic is the material in the relative clause, which *follows* the focus. So leftward *wh*-extraction of the focus of an *it*-cleft leaves the information-structural articulation of the sentence ('focus before topic') intact, precisely thanks to the fact that in *it*-clefts, the raised predicate does not represent the topic — unlike in other inverse specificational copular sentences such as (i) and (ii), whose raised predicates *are* the topics of the sentences. In (ib) and (iib), therefore, the focus is extracted *across the topic*, *reversing* the special information-structural pattern assigned as a result of predicate inversion. In (iib), by contrast, extraction of the focus does NOT lead to a reversal of the information-structural pattern of the predicate inversion construction: the focus still precedes the topic after *wh*-extraction has taken place. On the assumption that extraction of the focus of a specificational copular sentence is grammatical so long as the information-structural pattern (FOC<TOP or TOP<FOC) of the input to extraction is kept intact, it then follows that *wh*-extraction of the VALUE of an *it*-cleft is grammatical while extraction of the VALUE of other inverse specificational copular sentences (whose inverted predicate has information-structural content, unlike the proform *it* of *it*-clefts) systematically fails.

the VALUE of the *it*-cleft, as in (30b). In the latter case, we then have two further options in principle: the relationship between the relative clause and the VALUE could either be established *indirectly*, roughly as in (30b.i), or *directly*, roughly as in (30b.ii).

- (30) a. $[_{FP} [_{Predicate} \textit{it}]_k [\text{RELATOR}_i + \text{LINKER} = be [_{RP} [_{Subject} \textit{VALUE}] [t_i t_k]]]] [\text{RELATIVE CLAUSE}]$
- b.i $[_{FP} [_{Predicate} \textit{it}]_k [\text{RELATOR}_i + \text{LINKER} = be [_{RP} [_{Subject} \textit{VALUE}] [t_i t_k]]]] [\text{RELATIVE CLAUSE}]$
- b.ii $[_{FP} [_{Predicate} \textit{it}]_k [\text{RELATOR}_i + \text{LINKER} = be [_{RP} [_{Subject} \textit{VALUE} [\text{RELATIVE CLAUSE}]] [t_i t_k]]]]$

In what follows, I will show that (more detailed structures close to) (30b.i) and (30b.ii) are both available in principle, but that they result in different *subtypes* of specificational *it*-clefts: *indirect* association between the relative clause and the VALUE, à la (30b.i), delivers a *contrastive it*-cleft, while *direct* association, à la (30b.ii), yields a *continuous-topic it*-cleft. The difference between these two subtypes of specificational *it*-clefts is perhaps easiest to appreciate by looking at the pair of examples in (31a,b), where underlining marks new information.

- (31) a. contrastive or stressed-focus *it*-clefts
 what got you interested in clefts? — it was Brian's book that got me interested in clefts
- b. continuous-topic *it*-clefts
 do you know Brian's book? — yes, in fact it was Brian's book that got me interested in clefts

None of the data that I will discuss in the remainder of this section would fall out from a structure of the type in (30a), in which the relative clause is associated with *it*. It seems to me, therefore, that (unless some other subtype of *it*-cleft is found for which (30a) could provide the right structure), (30a) should be rejected as a grammatical structure underlying clefts (*contra* esp. Percus 1997; also Hedberg 2000).

2.1 *The relative clause of contrastive it-clefts: A headless relative*

In my search for an analysis of the relative clause of contrastive *it*-clefts, I will take as my starting point the important (but easily overlooked) question of why this clause must obligatorily occur in right-peripheral, ‘extraposed’ position. The reason why I say this question is easily overlooked is that for English, it is not immediately evident that the relative clause must indeed be radically final.⁹ But for an OV-language such as Dutch, this is plain from the facts in (32a,a’), which contrast markedly with (32b), involving a garden-variety headed relative (see Smits 1989 for an important antecedent of this observation).

- (32) a. dat het ZIJN ZOON <*die zojuist belde> was <✓die zojuist belde> (Dutch)
 that it his son who just called was who just called
- a’. dat ZIJN ZOON <*die zojuist belde> het <*die zojuist belde> was <✓die zojuist belde>
 that his son who just called it who just called was who just called
- b. dat ik met zijn zoon <die zojuist belde> heb gestudeerd <die zojuist belde>
 that I with his son who just called have studied who just called

⁹ Reeve (2007) presents empirical evidence for English *it*-clefts as well, however, to support the conclusion that the relative clause must be extraposed.

The key question that needs to be addressed in this connection is whether there are any contexts, outside the realm of *it*-clefts, of obligatory relative clause extraposition. It is certainly not the case that a relative clause associated with the VALUE of an inverse specificational copular sentence is forced to extrapose. In the inverse predicate nominal constructions in (33a) and (34a), extraposition is perhaps preferred but by no means obligatory.¹⁰

- (33) a. dat het probleem zijn zoon <^(?)die zojuist belde> is <✓die zojuist belde>
 that the problem his son who just called is who just called
- b. dat zijn zoon <die zojuist belde> het probleem is <[?]*die zojuist belde>
 that his son who just called the problem is who just called
- (34) a. dat wat op tafel ligt het boek <^(?)dat Jan me gegeven heeft> is <✓dat Jan me gegeven heeft>
 that what on table lies the book that Jan me given has is that Jan me given has
- b. dat het boek <✓dat Jan me gegeven heeft> wat op tafel ligt is <*dat Jan me gegeven heeft>
 that the book that Jan me given has what on table lies is that Jan me given has

So the relative clause of an *it*-cleft does not behave like a garden-variety restrictive relative clause associated to the subject of a predicate nominal construction — and more specifically, it does not even behave like a garden-variety restrictive relative clause associated to the VALUE of an inverse specificational copular sentence.

10 The preference for extraposition in (33a) and (34a) mostly has to do with the fact that the verbal cluster in these examples is very light: not extraposing the relative clause delivers a word order in which the only thing that follows the relatively bulky relative clause is the single-word, stressless copula that rounds out the matrix clause. But there are no restrictions on the composition of the verbal cluster in inverse specificational copular sentences — so this ‘orphan effect’ can be ameliorated by making the matrix verbal cluster bulkier: *dat het probleem zijn zoon die zojuist belde geweest zou kunnen zijn* ‘that the problem his son who just called been would could have, i.e., that the problem could have been his son who just called’ is perfectly fine. No matter how bulky the verbal complex of an *it*-cleft is made, however, the relative clause there can *never* precede it: it is systematically extraposed.

One context in which extraposition of something that looks like a relative clause is indeed obligatory is right dislocation, illustrated by English (35a–d) and their direct Dutch counterparts in (36a–d).¹¹

- (35) a. it was an explosion, what Bill heard
 b. it's apples, what I have enough of
 c. it was Alice, the one who just had the baby
 d. it was a model train, what I bought
 d'. it was a model train {that/which} I bought
- (36) a. dat het een explosie <*wat Bill gehoord heeft> was, <✓wat Bill gehoord heeft>
 b. dat het appels <*waar ik genoeg van heb> zijn, <✓waar ik genoeg van heb>
 c. dat het Alice <*degene die net een baby heeft gekregen> was, <✓degene die net een baby heeft gekregen>
 d. dat het een modeltrein <*wat ik gekocht heb> was, <✓wat ik gekocht heb>
 d'. dat het een modeltrein <*die ik gekocht heb> was <✓die ik gekocht heb>

The examples in (35) are from Gundel (1977), who takes them to be the source for *it*-clefts. I will not follow her in literally transformationally deriving *it*-clefts from right-dislocation constructions; but Gundel's (1977) insight that the relative clause in *it*-clefts is in the same structural position as right-dislocated constituents is certainly of significant interest. While a parallel treatment of, say, (35d) and (35d') appears at first to be contradicted by the absence in clefts of the prosody typical of right-dislocation, it seems to be supported by the fact that the relative clause of clefts must indeed be radically final, like right-dislocated constituents.

To be able to gauge the syntactic significance of the parallel between right-dislocated constituents and the relative clause of *it*-clefts, we should now ask what the analysis of right dislocation is, and how it sheds light on the syntax of *it*-clefts. Here, I will adopt one specific approach to right dislocation — the

11 On the link between *it*-clefts and right-dislocation constructions, see also Frascarelli & Ramaglia (2008:§4.2).

- b. dat het een modeltrein <*die ik gekocht heb> was <✓die ik gekocht heb>
 that it a model train that I bought have was that I bought have (= (36d'))
 *[:_P [_{DP} een modeltrein] [: [die ik gekocht heb]]
 [:_P [_{IP} het een modeltrein was] [: [die ik gekocht heb]]

The ban on ‘intraposition’ of the relative clause in (38) will now follow analogously to the ban on ‘intraposition’ of the free relative in (37) if the relative in (38) is essentially a free relative.

The link between (35d') and (35d), the latter unquestionably featuring a free relative, is certainly enhanced by the fact that *it*-clefts resist non-finite relatives (as pointed out by Declerck 1988:152): non-finite relatives are grammatical in ‘headed’ contexts, but not in *free* relatives; so the fact that they are ungrammatical in *it*-clefts as well may give us an important clue to the effect that the relative clause in an *it*-cleft is very much like a free relative.¹²

- (39) a. he was the third man to be arrested
 b. *it was the President to be arrested
 c. it was the President who was (to be) arrested
- (40) a. what to do was unclear (infinitival *wh*-question)
 b. *what to do was important (free relative)

12 Declerck also notes that the relative clause of an *it*-cleft may not be a reduced relative (*it was BRIAN *(who was) working in the garden*). This, too, carries over to free relatives (though rather trivially so: reduced relatives never have an overt operator in their left periphery, while free relatives demand an overt operator). At this time, I do not understand why the relative clause of English *it*-clefts and free relatives is always finite and non-reducible. Note that it does not seem to be a universal that the relative clause of *it*-clefts is always finite: Sleeman (2008) shows that, unlike English and French, Italian allows *it*-clefts with infinitival subject relatives:

- (i) è stato Gianni a darmi la chiave (Italian)
 is been Gianni to give-me the key
 ‘it was Gianni who gave me the key’

Sleeman relates the contrast between Italian, on the one hand, and French and English, on the other, to the claim that Italian *it*-clefts always have a *contrastive* focus (whereas *it*-clefts in French and English have an *identificational* focus unmarked for contrastiveness), and that infinitival subject relatives are licensed specifically by contrastive focus. As a *general* claim about infinitival (subject) relatives this latter claim seems false (*I'm looking for a man to fix the sink* plainly does not require contrastive focus on *a man*). Note also that infinitival relatives remain ungrammatical in English/French *it*-clefts *even* when the VALUE is actually contrastive.

- c. what they should/would do was important

But a free relative approach to the relative clause of *it*-clefts would appear to be seriously compromised by the fact that typical free relatives are never introduced by *that*, *which* or Dutch *die*.

There is evidence, however, that *which* in the relative clause of *it*-clefts behaves differently from the way it does in garden-variety relatives. Something which, to my knowledge, has not been noted before in the literature on *it*-clefts is that *which* qua introducer of the relative clause seems to assert its inherent *specificity/D-linking* in ways that it systematically does not do when it is the relative operator in ordinary relatives. This specificity effect seems to underlie not just the relatively familiar observation that the relative clause of a contrastive *it*-cleft, when construed with a predicate nominal VALUE, can only be introduced by *that*, never by *which* (cf. Declerck 1988:152; Reeve 2007), as shown in (41) and (42), but also the novel observations built on (43)–(48), which I will go through step by step.¹³

- (41) a. it is the president of the club that he has always wanted to be
 b. Brian is the president of the club, { *which*/**that* } Imogen has in fact always wanted to be
- (42) a. *it is a doctor which I want to become, not a baker
 b. it is a doctor that I want to become, not a baker

The aggregate of the examples in (43)–(48) tells us that the relative clause of an *it*-cleft, when construed with a(n aggressively) non-specific/non-D-linked non-human VALUE, cannot be introduced by

13 Arguably in the same ballpark as the facts in (42) and (43)–(48) is Reeve's (2007) observation that, while idiom chunks are possible in *it*-clefts (unlike in pseudoclefts), they work only if *that* is chosen as the introducer of the relative clause. That *which* fails in (i) presumably has the same cause as the ungrammaticality of *which* in (42b), (43b), (44b) and (48b): a specificity mismatch between the VALUE and *which*.

- (i) it was careful track {*that*/**which*} she kept of her expenses

Reeve presents the possibility of idiom chunks in *it*-clefts as evidence for a raising analysis of the *it*-cleft. The analysis of the intimate relationship between the VALUE and the operator of the relative clause presented below should be able to preserve the desired result that idiom chunks are grammatical in *it*-clefts with an appeal to CONCORD rather than raising.

which, whereas a garden-variety relative clause with a non-specific/non-D-linked non-human head certainly can be so introduced. The examples in (43) and (44) show this with reference to *it*-clefts with *anything at all* or *nothing at all* as the VALUE: the a-sentences here are modelled on attested examples on the internet; and while the a-pattern is not common, it seems to me significant that the b-pattern is not found at all.¹⁴

- (43) a. it is very unlikely that it is anything at all that you are doing wrong
 b. *it is very unlikely that it is anything at all which you are doing wrong
- (44) a. it is nothing at all that you are doing wrong
 b. *it is nothing at all which you are doing wrong

The effect can perhaps be observed more clearly for *it*-clefts with *wh-the-hell* as the VALUE. *It*-clefts with a [+WH] VALUE generally disprefer a *wh*-operator in the relative clause (hence prefer *that*). But examples of the type in (45b), with *who*, and (47b), with *which*, can be found (though they tend to be rarer than corresponding examples with *that*).¹⁵ By contrast, examples of the type in (48b), with *which*, are not found

14 There are very few examples of the type in (43a) and (44a) on Google, and my informants do not find it hugely natural to have *anything* or *nothing* as the VALUE of an *it*-cleft. But there are zero hits for “it is/was anything at all which” and “it is/was nothing which”, and speakers sense a clear contrast between the a-examples and the b-sentences. It is this relative contrast that matters.

15 The more contentious case here is the *which*-example in (47b). The number of hits for (47b) (search: “what is/was it which”) is not huge (there are plenty of results that have “it” and “which” in separate clauses, such as *what is it? which type is best?* — but the number of clefts among the results is relatively small, and it may be significant that the bulk of the attested cases are *subject* clefts: (i.i), below, is one of the rare cases of an object cleft with *which*), but there definitely are numerous examples of this type, so it would not be right to exclude (47b) altogether. Below are some attested examples, culled from the internet with the aid of Google. For good measure, I have also included some attested examples of type (45b) (search: “who is/was it who”). Note that example in (ii) has a clearly non-specific/non-D-linked interpretation for *who* qua VALUE: so *who* does not have to be read as a D-linked element to make a relative clause introduced by *who* legitimate in an *it*-cleft.

- (i) a. what is it which makes your product stand out from the rest?
 b. what is it which draws her into anger?
 c. what is it which makes say gold denser than aluminum?
 d. what is it which, if changed, makes a document essentially different?
 e. what is it which saves a soul?
 f. what was it which led him to be such an effective double-agent?
 g. what was it which we set out to accomplish?
 h. what was it which got you interested in photography?
- (ii) a. who is it who gets expensive jeans? is it Tutter or Malory?
 b. who is it who still thinks George W. Bush has the judgement, maturity, and emotional stability required to lead the most powerful nation on earth?

at all, and are judged to be sharply worse than (48a) and also distinctly worse than (47b), though *it*-clefts of the type in (46b) *are* found.¹⁶

- (45) a. who is it that keeps sending me anonymous E-mails all the time?
 b. ?who is it who keeps sending me anonymous E-mails all the time?
- (46) a. who the hell is it that keeps sending me anonymous E-mails all the time?
 b. ?who the hell is it who keeps sending me anonymous E-mails all the time?
- (47) a. what is it that is bothering you? what is it that you want?
 b. ?what is it which is bothering you? ?what is it which you want?
- (48) a. what the hell is it that is bothering you? what the hell is it that you want?
 b. *what the hell is it which is bothering you? *what the hell is it which you want?

So the specificity or D-linking effect seems to manifest itself only in *it ... which* clefts, not in *it ... who* clefts.

This can plausibly be related to the fact that *which* is itself [+specific]/D-linked in *wh*-phrases like *which book*, whereas *who* is not inherently marked for specificity or D-linking. But the specificity of *which* does not normally ‘assert itself’ on the head of a relative clause introduced by *which* — that is, in (49a) *as well as* (49b) we see an ambiguity between *de dicto* (non-specific) and *de re* (specific) interpretations. The same is true for (50): though, to my knowledge, no specific book exists that actually solves the mystery of *it*-clefts, (50b) is perfectly felicitous, which, if *which*-relatives were to force a specific interpretation on the relativised noun phrase, would be difficult to reconcile with our (or, at least, *my*) knowledge of the world.

- (49) a. he wants to buy a car that is easy to park in small spaces

16 Though (46b) may be much rarer than (46a) (just five hits on the web for “who the hell is it who”, and a few more than five for “who the hell was it who”; but several thousands of the type in (46a)), it is significant that it is not radically impossible for *who* to be used as the relative operator in *it*-clefts with *who the hell* as the VALUE.

- b. he wants to buy a car which is easy to park in small spaces
- (50) a. he wants to find a book that solves the mystery of *it*-clefts
- b. he wants to find a book which solves the mystery of *it*-clefts

These observations taken together suggest that *which* is, in some way, in a concord relationship with the VALUE of the cleft. Specifically, I propose that the structure of the extraposed relative of an *it*-cleft involves a null head that shows obligatory concord in specificity (*a*) with *which* (even though heads of relative clauses do not normally ‘agree’ with *which* in specificity) and (*b*) with the VALUE of the *it*-cleft. The structure in (51) sums it up.

- (51) $[_{iP} [it's \text{VALUE-XP}^{[\alpha\text{SPEC}]}] [':'] [_{XP} \emptyset^{[\alpha\text{SPEC}]} [_{CP} \{which_i/Op_i\}^{[\alpha\text{SPEC}]} [_{C'} \{that/\emptyset\} [_{IP} (...) t_i (...)]]]]]]]$

Assuming that *which* is inherently specified as [+SPEC], and that the \emptyset head of the relativised XP must show CONCORD for the feature $[\alpha\text{SPEC}]$ with both the operator in SpecCP and the VALUE-XP, we now derive the fact that whenever *which* is chosen as the operator of the relative clause in *it*-clefts, the VALUE-XP must be [+SPEC]: because *which* is inherently [+SPEC], and because it is in a concord relationship with \emptyset , \emptyset must also be [+SPEC], to ensure feature matching under concord; and because \emptyset is in turn in another concord relationship with the VALUE, the VALUE must have a matching value for $[\pm\text{SPEC}]$ as well, which prevents it from being non-specific whenever *which* is chosen as the operator in the relative clause. This correctly rules out (42a), (43b), (44b), and (48b): in all of these cases, the nature of the VALUE-XP is such that it radically resists being in a concord relationship with a [+SPEC] element. When the VALUE is radically non-specific, \emptyset is also [-SPEC], and in turn the operator in the left periphery of the relative clause must [-SPEC] as well, all as a result of concord. The inherently [+SPEC] operator *which* is incompatible with the [-SPEC] specification imposed via concord, so *which* cannot be used in (42a), (43b), (44b), and (48b). By contrast, the versions of these

examples featuring *that* instead of *which* are grammatical because, unlike *which*, the null operator in the specifier of *that* is not inherently specified for specificity, hence may assume any specification for [α SPEC] that is appropriate in the structural environment.

The structure in (51) is a more detailed instantiation of the schema in (30*b.i*), repeated below. The obligatory concord relationship that we have found to hold between *which*, \emptyset , and the VALUE supplies a powerful argument against approaches to *it*-clefts that take *it* and the relative clause to form a ‘discontinuous constituent’ (esp. *à la* Percus 1997, but see also Hedberg 2000), as represented by (30*a*).

- (30) a. $[_{FP} [_{Predicate} \textit{it}]_k [_{RELATOR_i+LINKER=be} [_{RP} [_{Subject} \textit{VALUE}] [t_i \ t_k]]]] [_{RELATIVE \ CLAUSE}]$
- b.i $[_{FP} [_{Predicate} \textit{it}]_k [_{RELATOR_i+LINKER=be} [_{RP} [_{Subject} \textit{VALUE}] [t_i \ t_k]]]] [_{RELATIVE \ CLAUSE}]$

Three serious questions arise at this point: (*a*) why must the null head \emptyset necessarily be in a concord relationship with the relative operator and the VALUE-XP; (*b*) what is the difference between the relative clause of an *it*-cleft (which (51) treats as null-headed) and a free relative; and (*c*) what is the nature of \emptyset , the null head of the relativised XP in *it*-clefts? I will address these questions in order.

The first question should be teased apart into two subquestions — one about the concord relation between \emptyset and the relative operator, and the other about the concord relation between \emptyset and the VALUE-XP. Regarding the former, I would like to present the following hypothesis: \emptyset must show concord with the relative operator in order to be *formally licensed*. \emptyset is a null category that, like other null categories, is in need of formal licensing. It cannot be licensed all by itself, nor can the head in its immediate structural environment, the ‘:’ head in (51), help it out — ‘:’ cannot formally license anything because it is itself featureless.¹⁷ The

17 It is here that my adoption of Koster’s ‘:P’ analysis is significant, even though it is otherwise mostly a matter of representational convenience.

radically null head of the relative clause in extraposition is structurally too distant from the VALUE-XP (embedded within the specifier of ‘:P’) to be able to be formally licensed by it. So only one possibility remains: the \emptyset head depends for its formal licensing on the relative operator, with which it must entertain a concord relation in order for formal licensing to be in effect. And as regards the obligatory concord relationship between the null head and the VALUE, I hypothesise that it is this concord relationship that allows the \emptyset head to be *content-licensed*. So \emptyset depends for its licensing on *both* the relative operator *and* the VALUE-XP: the former takes care of *formal licensing*, and the latter of *content licensing*.

How then is the relativised XP in (51) different from a *free* relative (which cannot be used in an *it*-cleft)? Or put differently: what makes *which-* or *that-*relatives the only grammatical choice in the *it*-cleft in (52a) while a *what*-relative (a *free* relative) is the only grammatical choice in the pseudocleft in (52b)?

- (52) a. it’s KIMCHI { which/that/*what } I’d like to have
 b. { what/*which/*that } I’d like to have is KIMCHI

In the *it*-cleft in (52a), the relationship between the null-headed relative and (the container of) the VALUE-XP is established via asyndetic specification (see (55a), further below). Asyndetic specification of this type is subject to a strict concord requirement, as is evident from (54): the intraclausal plural pronouns can only be associated with right-dislocated asyndetic specifiers that match their number feature. By contrast, nominal predication constructions are well known for allowing number mismatches between subjects and predicate nominals perfectly happily, as for instance in (53).

- (53) dat zij ons grootste probleem zijn
 that they our biggest problem are
 ‘that they are our biggest problem’

- (54) a. dat zij me irriteren, {die kinderen/*ons grootste probleem}
 that they me irritate those children/our biggest problem
- b. dat ik hen haat, {die kinderen/*ons grootste probleem}
 that I them hate those children/our biggest problem

It is this strict concord relationship characterising asyndetic specification that facilitates the licensing of the \emptyset head in the *it*-cleft in (55a). In the pseudocleft in (55b), on the other hand, the relationship between the free relative and the VALUE-XP is established via predication, which, as we saw in (53), is not subject to strict concord between the subject and the predicate. Due to the lack of a strict concord relationship, the \emptyset head cannot be licensed in pseudoclefts. Since the head of the relativised noun phrase is not allowed to be radically empty, something that has feature content must head the relativised noun phrase in a pseudocleft. That ‘something’ is a phonologically null but semantically contentful operator: \forall or Def(inite) (cf. ‘maximisation’ effects in free relatives; this is naturally related to the ‘exhaustivity’ property of specificational pseudoclefts); cf. Percus (1997) (who extends this to clefts, wrongly so if I am right).

- (55) a. $[_{IP} [it's \text{ VALUE-XP}] [: \quad [_{XP} \emptyset \quad [_{CP} \{which_i/Op_i/*what_i\} \quad [_{C'} C \quad [_{IP} (\dots) t_i (\dots)]]]]]]]$
- b. $[_{RP} \text{ VALUE-XP} \quad [\text{RELATOR } [_{XP} \forall/\text{Def} \quad [_{CP} \{what_i/*Op_i/*which_i\} \quad [_{C'} C \quad [_{IP} (\dots) t_i (\dots)]]]]]]]$

\forall/Def is an ‘unusual’ external head of a restrictive relative, forcing *what* as the relative operator (see, for instance, Dutch *alles wat/*dat je ziet* ‘everything what you see’ and *dat wat/*dat je ziet* ‘that what you see’). A classic approach to the *what* of English free relatives is to treat it as the surface realisation of the combination of *it* (the pronominal external head) and *which* (‘*what = it+which*’) — an approach that of course makes very little morphophonological sense (there is no plausible way to get from physical *it+which* to *what*) but hits the nail on the head when it comes to (at least one side of) the semantics of *what*. With *what* analysed as *what = $\forall/\text{Def} + which$* , we have the outlines of an account of why free relatives are introduced by a ‘special’

operator.¹⁸ The null head in (55a), on the other hand, is for all intents and purposes a ‘regular’ external head of a restrictive relative, being relativised with *which* or the null operator. So when the external head is radically empty (\emptyset), the relative operator is the one expected for a garden-variety restrictive relative; it is only when the external head is phonologically null but semantically specified (as \forall or Def) that the form of the relative operator is ‘unusual’.

At this point let me add up what we have so far discovered regarding the null head of the relative clause of *it*-clefts: (i) it is obligatorily null (i.e., it does not alternate with anything overt); (ii) it is in need of formal licensing; and (iii) it is itself contentless, hence fully dependent on its environment for content licensing. Where does this leave us when it comes to determining the nature of the null head \emptyset ? Is there anything elsewhere in the grammar of English and/or other languages that resembles or is identical to this null element?

Null nouns lacking descriptive content certainly exist. Panagiotidis (2003), surveying the literature, discusses a variety of them, including such cases as *the poor* [*e*] in (56a), or *the tallest/shortest* [*e*] in (56b).

- (56) a. the poor [*e*] are usually ignored by politicians because they tend not to vote
 b. as for basketball players, the tallest [*e*] are usually paid more than the shortest [*e*]

But though there is a venerable tradition in the literature to treat the null head of such expressions as *pro* and to require of it that it be formally licensed and content-licensed (see esp. Kester 1996 and Sleeman 1996), Panagiotidis argues against the idea that empty nouns require licensing, at least in any of the ways suggested in the literature on null nouns (i.e., null nominal complements to D). Panagiotidis’ strongest argument to this effect comes from the distribution of so-called Indefinite Argument Drop in Greek (Giannakidou & Merchant 1996), as in *i Maria puluse ftina isitiria_i ki o Phoevos aghoraze e_i* ‘Maria was selling cheap tickets and Phoevos was buying (them)’. Giannakidou & Merchant assign ‘*e_i*’ (which can be understood either as ‘cheap tickets’ or simply ‘tickets’) a DP structure in which an empty noun is embedded in a null-headed DP: $[_{DP} \emptyset$

18 The details of the analysis of free relatives are certainly beyond the scope of this paper.

[_{NP} *e*]]. Panagiotidis points out that with such argument drop, ‘there do not seem to exist any special requirements for determiners’ (p. 405): the form and distribution of the null determiner ‘are those required for LF reasons in ordinary indefinite DPs’, and the nullness of the determiner would make it difficult to pin down the licensing of the null noun e_N on specific properties of the determiner. This is well taken. It probably would not be right to impose D-related formal licensing requirements on the empty noun e_N (whether analysed as *pro* or something else) within the null-headed DP of Greek Indefinite Argument Drop constructions. But the distribution of Indefinite Argument Drop in Greek is certainly not unrestricted — though not subject to licensing restrictions that differ from those of ordinary null-headed DPs, the null D-head in Indefinite Argument Drop contexts (just like null D in general) must appear in a structural context in which it is formally licensed to be null; and the content of the null noun e_N in the complement of D must, in turn, be recoverable as well (in the Greek case, from the discourse antecedent, as marked by the coindexation). Viewed this way, formal licensing and content licensing do actually remain as hallmarks of empty nominal phrases (i.e., ‘doubly null’ noun phrases, whose NP and DP layers are both null-headed) — but the two requirements are distributed over two different ingredients: formal licensing becomes a requirement imposed on the D portion of the structure of the dropped argument, and content licensing is identified as a requirement imposed on the N portion. In (51)/(55a), the relative clause is headed by a nominal phrase that is ‘doubly null’ in this sense, and in this respect it resembles the DP in Greek Indefinite Argument Drop; and like the DP in Greek Indefinite Argument Drop constructions, its N- and D-heads are both subject to licensing requirements, but each to a different one: the empty noun N must be content-licensed (in the *it*-cleft case by being in a concord relationship with the VALUE), and the null D must be formally licensed (by being in a concord relationship with the operator in the relative clause).

In the free relative case in (55b), the D-head of the noun phrase heading the relative clause is not empty: it has semantic features, and depending on one’s analysis of the way *what* comes about, it might even have some phonological features as well. So D here is not subject to a formal licensing requirement. And the fact that D has semantic content allows it to content-license the null noun in its complement. In free relatives,

therefore, no concord requirements arise, and a predicational structure of the sort in (55b) converges.

In sum, what I have tried to argue in this section is that there are significant structural similarities but also important differences between the relative clauses in *it*-clefts and pseudoclefts. In particular:

- (i) both *it*-clefts and pseudoclefts feature a null-headed relative clause
- (ii) in *it*-clefts, the null head is *radically* empty (i.e., devoid of both phonological and semantic features), hence dependent for its *licensing* on a concord relation with the relative operator and the VALUE-XP
- (iii) the concord relation between the \emptyset head, the relative operator, and the VALUE-XP is responsible for the *specificity effects* seen in *it*-clefts featuring *which* as the relative operator (see (42)–(44) and (48))
- (iv) the fact that a strict concord relation is established in an asyndetic specification structure but *not* in a predication structure (a ‘small clause’) is responsible for the unavailability of the \emptyset -headed relative (the default option) in pseudoclefts

2.2 *Explaining the properties of it-clefts with the aid of the headless relative analysis*

Now that we have the analysis of the *it*-cleft in place, let me briefly demonstrate how it accounts for some of the key properties of the construction — besides the specificity effect that has driven the analysis.

Declerck (1988:152) points out that the relative clause of an *it*-cleft ‘can follow a uniquely referring “antecedent” such as a personal pronoun (*I, me*) or a proper name not preceded by an article, whereas a restrictive relative clause cannot’ (Declerck 1988:152), as illustrated in (57).

- (57) a. it is me that they invited
- b. they were thinking of {a linguist/*me} that they could invite
- c. it is John that they invited

- d. *(the) John that they invited (was John Smith, not John Jones)

This would be puzzling from the point of view of an analysis of *it*-clefts that treats the relative clause as *directly* related to the VALUE. But on the analysis proposed in section 2.1, the relative clause is *not* construed directly with the VALUE: instead, it is associated with a \emptyset -head that entertains a concord relationship with but is not identical to the VALUE. The facts in (57) thus fall into place.

Also relatable to the null-headedness of the relative clause construction in the *it*-cleft is the relatively microscopic observation (again made in Declerck 1988:152) that the relative clause of an *it*-cleft, when construed with a VALUE containing *such*, cannot be introduced by *as* and must be introduced by *that* instead, whereas a garden-variety restrictive relative clause construed with a head containing *such* must be introduced by *as*, not by *that*. This is illustrated in (58).

- (58) a. it is such a doll {that/*as} I'd like to have
 b. this is such a doll {as/*that} I'd like to have

It is natural to hypothesise that *as* is only licensed as a relative operator in relative clauses whose external heads include the word *such*. Since the relative clause of *it*-cleft constructions is headed by \emptyset , which does not include *such*, no *as* is licensed in (58a).

A better-known property of the relative clause of an *it*-cleft is that, when construed with a non-locative PP VALUE, hence containing a non-locative PP-gap, it is introduced by *that*, whereas a garden-variety restrictive relative clause with a PP-gap cannot be (see (59)).

- (59) a. it was of Brian {that/*of whom} I was thinking
 b. Brian was thinking of the woman {of whom/*that} Ryan was thinking

To explain the difference in the distribution of *that* across (59a) and (59b), we can capitalise on the concord requirement that we relied on in the account of the specificity effect in *it*-clefts with *which*. Concretely, the difference between (60a) and (60b) follows from concord, this time for ‘prepositionality’ — concord (for content-licensing) between \emptyset and the prepositional VALUE identifies the former as a PP, and concord (for formal licensing) between \emptyset and Op identifies the latter, and thereby its trace, as a PP; (60b) crashes because of lack of concord. Conversely, it is the lack of concord in regular headed relatives that explains the ungrammaticality of (59b) with *that*.

- (60) a. it is [_{PP} of Mary] [_{XP=PP} \emptyset [_{CP} Op=PP [that I was thinking t_{PP}]]]
 b. *it is [_{PP} of Mary] [_{XP=DP} \emptyset [_{CP} Op=DP [that I was thinking of t_{DP}]]]

And the fact that (60a) also becomes ungrammatical when the null operator is replaced with a PP pied-piped by *whom* (as in the version of (59a) with *of whom*) again recalls the structural similarity between the relative clause of *it*-clefts and a free relative: pied-piping in free relative constructions, including specificational pseudoclefts, is severely restricted:

- (61) *of whom I was thinking was (of) Brian

So far in this section, I capitalised on ways in which the relative clause of an *it*-cleft *differs* from ordinary headed relatives. But there are also important properties that the two types of relative clause share, and which make it intuitively plausible from the outset to call the *that/wh*-clause of *it*-clefts a relative clause. Thus, for English, it is well known that in many (though, as we have seen, not all) cases, the *that/wh*-clause *it*-clefts can be introduced by either *that* or a *wh*-element, as is also the case in the typical (non-subject)

restrictive relative clause.¹⁹ And in Dutch and German, *it*-clefts with a demonstrative pronoun as the VALUE, just like as headed relatives associated with a demonstrative pronoun, force the operator in the relative clause to be *wat/was* ‘what’ rather than the *d*-pronoun that otherwise introduces relatives (see German *das was/*das mir Spaß macht* ‘that which gives me pleasure’ and *daß es DAS ist was/*das mir Spaß macht* ‘that it that is what/d-pronoun me pleasure makes, i.e., that it is that which gives me pleasure’; Huber 2002:79). And in Cypriot Greek clefts, according to Gryllia & Lekakou (2007), ‘we get the same pattern of resumption in the *pu*-clause [of an *it*-cleft] as we do in [restrictive and free] relative clauses’: resumption is impossible with accusative arguments, and obligatory with non-arguments, in all these contexts. These parallels between the relative clause of *it*-clefts and ordinary relatives follow from the proposed analysis as well, thanks in particular to the obligatory CONCORD relationship between the \emptyset head in (51)/(55a) and the VALUE.

2.3 The relative clause of continuous-topic *it*-clefts: A pseudorelative

The discussion in section 2.1 has revealed that (30a) is not an adequate vehicle for the analysis of the relative clause in *it*-clefts, and that (30b.i), developed in more detail as (51)/(55a), seems just right for the purpose of explaining the unusual properties of the relative clause in contrastive *it*-clefts — in particular, its obligatory extraposition, and the specificity effect seen with *which* as the relative operator.

19 Declerck (1988:152) points out that the relative pronoun of an *it*-cleft ‘may sometimes be deleted in subject position ..., whereas a subject relative pronoun can otherwise never be omitted (except in *there*-constructions)’ (see also Pavey 2004). The fact that the relative clause of an *it*-cleft with a highest-subject gap seems to admit of a null left periphery somewhat more liberally than does a headed relative (as illustrated in (i)) is something that does not follow immediately from the structure proposed but may be related, perhaps, to the fact that the head of the relative clause in *it*-clefts is itself null. This needs further thought — if only because the empirical fact of the matter is not perfectly straightforward. A null left periphery in the highest-subject relative clause of an *it*-cleft, as in (ia), is not universally possible among native speakers of English. It seems to be distinctly uncommon among American English speakers. Note also that (ib) does not universally block a null left periphery in the English-speaking world: there are many dialects, both in the Old World and in the New World, that accept so-called subject contact relatives.

- (i) a. it was John saw it first
 b. the police would like to talk to the person *(who/that) saw it first

- (30) a. $[_{FP} [_{Predicate} it]_k [RELATOR_i+LINKER=be [_{RP} [_{Subject} VALUE] [t_i t_k]]]] [RELATIVE CLAUSE]$
- b.i $[_{FP} [_{Predicate} it]_k [RELATOR_i+LINKER=be [_{RP} [_{Subject} VALUE] [t_i t_k]]]] [RELATIVE CLAUSE]$
- b.ii $[_{FP} [_{Predicate} it]_k [RELATOR_i+LINKER=be [_{RP} [_{Subject} VALUE [RELATIVE CLAUSE]] [t_i t_k]]]]$

What I would now like to argue that (30b.ii) is close to right for the analysis of so-called *continuous-topic it*-clefts of the type in (31b), repeated here (along with a typical *contrastive it*-cleft):

- (31) a. contrastive or stressed-focus *it*-clefts
 what got you interested in clefts? — it was Brian's book that got me interested in clefts
- b. continuous-topic *it*-clefts
 do you know Brian's book? — yes, in fact it was Brian's book that got me interested in clefts

Before I turn to the two key structural properties that differentiate continuous-topic *it*-clefts from contrastive *it*-clefts, let me make it clear that both types of *it*-clefts belong to the family of *specificational it*-clefts. In section 1, I reviewed three diagnostics that allow us to tell apart predicational and specificational copular sentences, and demonstrated that they apply to *it*-clefts, proving that *it*-clefts come in both predicational and specificational flavours. Perhaps the most powerful test is the distribution of the copula. Recall that a copula shows up obligatorily in inverse specificational copular constructions when these are embedded below a propositional attitude verb like *consider* — and recall, more specifically, that some *it*-clefts pattern exactly like inverse specificational copular constructions in this regard, while others do not. The contrast in

(28), repeated below, will bring this back to memory.

- (28) a. I consider it (to be) an INTERESTING subject that they are discussing tonight
 b. I consider it *(to be) BRIAN who is his best friend

The *it*-cleft in (28a) is a predicational construction, with *it* serving as the subject of *an interesting subject*; (28b), on the other hand, is a specificational *it*-cleft, with *it* being the raised predicate of the VALUE, *Brian*. Now, (28b) is of course a *contrastive it*-cleft, of type (31a). Contrastive *it*-clefts clearly belong to the family of specificational *it*-clefts. To determine whether *continuous-topic it*-clefts also belong to this family, all we now need to do is to verify whether the copula is optional or obligatory when a continuous-topic *it*-cleft is embedded under *consider* — and as (62) shows clearly, the copula distribution facts put the continuous-topic *it*-cleft squarely in the family of inverse specificational constructions.

- (62) A: do you know Brian's book?
 B: yes, in fact I consider it *(to be) Brian's book that got me interested in clefts

So the *it* of sentences like (31b) is an underlying predicate that inverts with its subject in the course of the syntactic derivation, forcing the presence of *to be* in (62B). To probe more deeply into the rest of the syntax of continuous-topic *it*-clefts, it will be useful to look closely at two important structural restrictions on such *it*-clefts identified in the literature. These are reproduced in (i) and (ii):

- (i) 'Informative-presupposition *it*-clefts are formally and unambiguously identifiable. First, unlike stressed-focus *it*-clefts, they have normally (vs. weakly) stressed *that*-clauses.[fn. omitted] Second, they generally have a short and anaphoric focus, which, in my data, is either a (subject) NP or an adverbial, generally of time, place, or reason ... Third, in such sentences, *that/wh-* is not deletable.'

(Prince 1978:898; my underscore)²⁰

- (63) a. I want you to agree with me, no matter who it is {that/∅} you think is right
 b. The leaders of the militant homophile movement in America generally have been young people. It was they {who/*∅} everyone knows fought back during a violent police raid on a Greenwich Village bar in 1969

(ii) that cannot be used in highest-subject *it*-clefts of the continuous-topic (or informative-presupposition) type if the VALUE is [+human] (Kayne 1981:§3.3.3)

- (64) A: do you know Mary's book?
 B: yes, in fact it was Mary's book {which/that} got me interested in clefts
- (65) A: do you know Mary?
 B: yes, in fact it was Mary {who/*that} got me interested in clefts
- (66) A: do you know Mary?
 B: yes, in fact it was Mary {who/that} everybody knows got me interested in clefts

Kayne's observation is relatable to Belletti's (2008) recent suggestion that the specifier position of the relative clause in highest-subject *it*-clefts is an *A-position* — which suggests a link with pseudorelatives (cf. (67)), as Belletti notes (but she does not develop this in any detail).

- (67) j'ai vu Marie qui mangeait une pomme (French)
 I've seen Marie who ate an apple
 'I saw Marie eat an apple'

20 Erades (1962) makes this observation as well, though he does not state it in categorical terms.

The claim that the specifier position of the relative clause of highest-subject *it*-clefts is an A-position is not obviously correct as a *general* claim about ALL highest-subject *it*-clefts. But it seems to me that it is highly plausible that it *is* correct on a more modest scale, confined in scope to continuous-topic *it*-clefts.

In particular, imagine that in the structure of a highest-subject continuous-topic *it*-cleft, the VALUE is actually base-generated in SpecCP, with the *wh*-constituent occupying the SpecIP position and being linked to the VALUE in SpecCP, as in (68) — a structure that closely resembles Guasti’s (1993) analysis of pseudo-relatives of the type in (67) (which base-generates the ‘head’ of the pseudorelative in the specifier of ‘AgrCP’, the projection in the C-domain that has an A-specifier position).

$$(68) \quad [_{SC} [_{CP} \text{VALUE}_{[+human]} [_{C'} (*that) [_{IP} \text{who} [_{I'} I \dots]]]] [_{\text{Predicate}} it]] \quad (\text{cf. (30b.ii)})$$

If the VALUE is in SpecCP in highest-subject continuous-topic *it*-clefts, as in (68), and if SpecCP in these *it*-clefts is an A-position (as Guasti 1993 proposed for the SpecCP of pseudorelatives), the ban on *that*-relatives with [+human] VALUES can be made sense of as follows. Assume first, uncontroversially, that a [+human] occupant of SpecCP *qua* A-position must agree with C. Secondly, let us follow Kayne (2008) in taking seriously the fact that *that* is a grammaticalisation of the distal demonstrative pronoun, which cannot refer to humans: we can say *he/she talks too much*, but not **that talks to much* (except insultingly or with reference to a parrot). So in (68), the [+human] specification of the VALUE clashes with a lexicalisation of C as *that*, which is incompatible with [+human]. This then captures Kayne’s observation in (65).

I should note that I have found that there are quite a number of speakers who do not object strongly at all to the use of *that* in (65B). What could we say about such speakers? The answer, from the point of view of the proposal for continuous-topic *it*-clefts, is simple: for such speakers, the complementiser *that* does NOT share with the distal demonstrative *that* its [–human] feature specification. Thus, the difference between speakers with respect to the allowability of *that* in (65B) is, at the end of the day, a question of whether *that*, in the speaker’s lexicon, is listed once (as a demonstrative, with the feature [–human], thus always prevented

from referring deictically to a human or being in a Spec–Head relationship with something specified as [+human]²¹) or more than once (as a demonstrative *and* as a complementiser).²² For speakers who list *that* just once, the Kayne judgement is in effect; for the homonyms group, it is not.

The account of Kayne’s observation in (65) that I have just presented is predicated on the premise that the relative of a highest-subject continuous-topic *it*-cleft is a *pseudorelative*, and that, more specifically, the entire pseudorelative (including the ‘head’) occupies the subject position of the small clause whose predicate is *it* (as in (68)). Precisely by virtue of the fact that it structurally represents the entire pseudorelative CP as the subject of the small clause, (68) predicts that the *entire CP* is the focus of the cleft, not just the ‘head’ of the pseudorelative — after all, it is the subject of the raised predicate of an inverse specificational copular sentence that qualifies as the focus; and the subject of *it* in (62) is the entire pseudorelative CP. This is in fact exactly the right result for continuous-topic *it*-clefts, which have the peculiar property that it is not the VALUE *per se* that is the focus of the construction but rather the predication established between the VALUE and the predicate denoted by the pseudorelative clause. This point is made forcefully in important work on pseudorelatives and a particular subtype of clefts in French by Lambrecht (2002).

Going much further than Belletti in empirical detail, Lambrecht (2002) *explicitly* establishes a parallel between pseudorelatives and a particular subtype of clefts in French — esp. constructions like (69) (so-called *avoir*-clefts).

- (69) a. j’ai une dent qui manque (French)
 I’ve have a tooth that misses
 ‘I have a tooth missing’

21 As Kayne (2008) points out, *that man* and *that mat* are both grammatical, indicating that the demonstrative when used as a determiner neither refers deictically (instead the whole noun phrase *that man/mat* refers deictically) nor entertains a Spec–Head relationship with something [+human] (i.e., the head noun’s projection, in *that man/mat*, is not in a Spec–Head relationship with the demonstrative; in (68), by contrast, a Spec–Head relation *is* inevitably established).

22 I take it for granted that for all speakers of English, *that qua* demonstrative pronoun is restricted to non-humans (i.e., I do not anticipate finding an English speaker who will happily say *that talks too much*, pointing to a person, except in an attempt to insult the person in question); so arguably, *that qua* demonstrative is always specified as [–human].

- b. y a la téléphone qui sonne
 there has the phone that rings
 ‘the phone is ringing’

Lambrecht uses the label ‘presentational relative construction’ (PRC) for all his examples, including his *avoir* clefts and perception constructions with pseudorelatives. He observes that ‘the discourse function of this construction type is to introduce a new entity into a given discourse world and at the same time to express some piece of new information involving this entity’ (p. 171) — so, crucially, they have in common with continuous-topic *it*-clefts the fact that the relative clause is not presuppositional but new. For Lambrecht, in pseudorelatives and *avoir*-clefts ‘[t]he RC denotatum ... has a FOCUS relation to the global proposition’ (p. 178). For continuous-topic clefts at least (I have nothing to say here about pseudorelatives), I would argue that this is because it is the relative clause as a whole that serves as the subject of the specificational copular sentence, as depicted in (68).

Thus (68) allows us to explain both the ban on *that* in highest-subject continuous-topic *it*-clefts with a [+human] VALUE and the information-structural profile of these constructions (as distinct from contrastive *it*-clefts).²³

The structure in (68) as it stands caters specifically for *highest-subject* continuous-topic *it*-clefts. This is basically a good result: according to Prince (1978:899), continuous-topic *it*-clefts are overwhelmingly more common (in corpora) with highest subjects than with objects or other constituents.²⁴ Prince was successful, though, in constructing (63b) on the basis of an attested example with a highest-subject focus; and Kayne (2008) gives a made-up example of a continuous-topic *it*-cleft with an object gap in the relative clause: *do you know Mary? — yes, in fact it was Mary {who/that} I learned linguistics from in the first place. So*

23 One thing that (68) does not account for as it stands is the fact that the (pseudo)relative clause of a continuous-topic *it*-cleft, just like the relative clause of other specificational pseudoclefts, must be radically clause-final. This remains to be addressed.

24 Prince (1978:899) points out that of the 50+ examples of informative-presupposition *it*-clefts with a nominal focus that she had gathered, every one of them involved a *subject* — ‘While I certainly am not claiming that focused objects never occur in this construction, I do consider this an important area for further investigation’.

continuous-topic *it*-clefts are not strictly confined to highest subjects, though they tend to be particularly common in corpora with highest subjects.

Let me tentatively take this to mean that (68) (which fits the information-structural profile of these clefts perfectly) is actually correct as the schema for continuous-topic *it*-clefts *in general*, and that non-(highest-)subject continuous-topic *it*-clefts are ‘squeezed into’ this general schema. Specifically, let me assume that non-(highest-)subject continuous-topic *it*-clefts *are* in fact (surface appearances notwithstanding) instances of highest-subject continuous-topic *it*-clefts — but that the portion of the relative clause in which the VALUE identifies the highest subject is *elliptical*, in either of the two ways in (70).²⁵

- (70) a. [SC [CP VALUE_[+human] [C' (*that) [IP ~~who is the person~~ [who/that ...]]]]] [Predicate *it*]
- b. [SC [CP VALUE_[+human] [C' (*that) [IP ~~who is the person~~ [who/that ...]]]]] [Predicate *it*]

(70a,b) present the two logically possible ellipsis choices. Of these, (70a) makes exactly the same predictions regarding the physical left periphery of the relative clause as does (68): only *who* should be allowed with a [+human] VALUE. (70b), by contrast, predicts that the physical left periphery of the relative clause should be subject to exactly the same restrictions that a restrictive relative clause associated with a [+human] predicate nominal is normally subject to — i.e., (70b) allows *that* for the same reason that *the person that...* is grammatical. So via (70b), we can accommodate the possible occurrence of *that* in non-(highest-)subject continuous-topic *it*-clefts. And interestingly, we also get a straightforward handle on the fact that a *null* left periphery is disallowed in such clefts — Prince’s observation in (*i*), illustrated by (63b). Here is how.

The ellipsis derivation in (70a) predicts that *who* must show up for the same reason that *who* must show up in (68) (the EPP). (70b), on the other hand, elides the *wh*-word of the pseudorelative, and preserves

25 If ellipsis is the way to derive non-highest-subject pseudorelatives on the basis of a core structure that admits only highest-subject gaps, the fact that Romance pseudorelatives are strictly confined *on the surface* to highest-subject cases suggests that the kinds of ellipsis depicted in (70a,b) are not available in the Romance pseudorelative. While I have no rationale to offer for why this is the case, it is clear that (if this way of looking at the world is on the right track) the question of whether or not the pseudorelatives of a particular language are confined *on the surface* to highest subjects must be a function of the constraints on ellipsis in the language.

the ‘regular’ relative clause embedded within the pseudorelative. Under ‘normal’ (i.e., non-elliptical) circumstances, the left periphery of a regular non-highest-subject relative clause is allowed to be null. But in the special circumstances that the regular non-highest-subject relative in (70b) finds itself in, its left periphery must be overtly realised, by either *who* or *that*. This is so because the fact that the matrix is elliptical prevents licensing of a null left periphery in the embedded relative clause — basically for the same reason that complementiser deletion in the clausal complement of a gapped bridge verb is impossible: *John said (that) Mary had done it, and Bill ~~said~~ *(that) Sue had.*

Prince’s (1978) observation that continuous-topic *it*-clefts disallow a null left periphery is thus accounted for. What remains to be said is that, apparently, an elliptical derivation for a highest-subject continuous-topic *it*-cleft is unavailable. For plainly, if we allowed (70b) as the underlier for highest-subject continuous-topic *it*-clefts, we would lose our account of Kayne’s observation in (65B). An elliptical derivation for continuous-topic *it*-clefts apparently is only available as a last resort — so only for non-(highest-) subject cases, for which (68) as it stands is not applicable. Since (68) itself takes care directly of highest-subject continuous-topic *it*-clefts, the more complex source in (70b) is not available. Though this makes intuitive sense, formalising it as part of a general theory of the distribution of elliptical underliers is by no means trivial. Since I am currently unable to do more than this, however, I must leave the pursuit of a principled theory of this sort for some future occasion.

3 Some conclusions on predication and specification

Having come to the end of this exploration of predication and specification in the realm of cleft sentences, what I think we can say with confidence, now that the entire range of types of specificational copular sentences has been taken into account, is that all specificational copular sentences have a predicational source. More specifically, it seems to me true that all *inverse* copular sentences (i.e., the ones derived via Predicate

Inversion) are specificational copular sentences (with ‘equatives’ arguably subsumed under this label; see Den Dikken 2006 for a suggestion regarding the analysis of equative copular sentences). But it is not the case that, conversely, all specificational copular sentences are inverse copular sentences: copular sentences with a canonical subject – predicate order can support a specificational interpretation as well. Finally, we have found that specificational *it*-clefts are a particular subtype of inverse specificational copular sentences — in particular, copular sentences featuring a pro-predicate, *it*. In contrastive specificational *it*-clefts, this pro-predicate takes as its subject the projection of the focus, which in its turn is structurally related to a radically headless relative via asyndetic specification (not predication). In continuous-topic *it*-clefts, on the other hand, pro-predicate *it* is predicated of the pseudorelative constituted by the VALUE and the relative clause, a constituent that, as a whole, is the focus of the cleft.

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References

- Ball, Catherine. 1978. It-clefts and th-clefts. Paper presented at the LSA summer meeting, Urbana-Champaign, IL.
- Belletti, Adriana. 2008. Answering strategies: New information subjects and the nature of clefts. Chapter 10 of *Structures and Strategies*, London: Routledge.
- Bennis, Hans. 1986. *Gaps and Dummies*. Dordrecht: Foris.
- Cheng, Lisa & Downing, Laura. 2008. Clefts in Durban Zulu. Paper presented at the workshop on clefts, ZAS Berlin.
- Chomsky, Noam. 1986. *Barriers*. Cambridge MA: MIT Press.
- Declerck, Renaat. 1988. *Studies on Copular Sentences, Clefts and Pseudo-clefts*. Leuven: Leuven University Press/Dordrecht: Foris.
- Dikken, Marcel. den. 2005. Specificational copular sentences and pseudoclefts. In *The Blackwell Companion to Syntax, Vol. IV*, Henk van Riemsdijk & Martin Everaert (eds). Oxford: Blackwell.
- Dikken, Marcel. den. 2006. *Relators and Linkers: The Syntax of Predication, Predicate Inversion, and Copulas*. Cambridge MA: MIT Press.
- Dikken, Marcel, Meinunger, André & Wilder, Chris. 2000. Pseudoclefts and ellipsis. *Studia Linguistica* 54: 41-89.
- Erades, Pieter. 1962. Points of modern English syntax. *English Studies* 43: 136-41.
- Frascarelli, Mara & Ramaglia, Francesca. 2008. (Pseudo)cleft constructions at the interfaces. Ms., University of Rome.
- Giannakidou, Anastasia & Merchant, Jason. 1996. On the interpretation of null indefinite objects in Modern Greek. *Studies in Greek Linguistics, Proceedings of the 10th Annual Meeting of the Department of Linguistics*. Thessaloniki: Faculty of Philosophy, Aristototle University.
- Guasti, Maria Teresa 1993. *Causative and Perception Verbs: A Comparative Study*. Turin: Rosenberg &

Sellier.

Gundel, Jeanette. 1977. Where do cleft sentences come from? *Language* 53: 543-59.

Hedberg, Nancy. 2000. The referential status of clefts. *Language* 76: 891-920.

Heycock, Caroline. 2009. Specificational sentences, scrambling, and special nouns. Paper presented at the workshop on noncanonical predication, University of Western Ontario; ms., University of Edinburgh.

Higgins, F. Roger. 1979. *The Pseudocleft Construction in English*. New York: Garland.

Huber, Stefan. 2002. *Es-Clefts und det-Clefts: Zur Syntax, Semantik und Informationsstruktur von Spaltsätzen im Deutschen und Schwedischen*. Stockholm: Almqvist & Wiksell International.

Kayne, Richard. 1981. ECP extensions. *Linguistic Inquiry* 12: 93-133.

Kayne, Richard. 2008. Why isn't *this* a complementizer? Ms., New York University.

Kester, Ellen-Petra. 1996. The Nature of Adjectival Inflection. PhD dissertation, OTS, Utrecht University.

Koster, Jan. 2000. Extraposition as parallel construal. Ms., University of Groningen.

Lambrecht, Knud. 2002. Topic, focus and secondary predication: The French presentational relative construction. In *Romance Languages and Linguistic Theory 2000*, Claire Beyssade, Reineke Bok-Bennema, Frank Drijkoningen & Paula Monachesi (eds), 171-212. Amsterdam: John Benjamins.

Moro, Andrea. 1997. *The Raising of Predicates*. Cambridge: Cambridge University Press.

Panagiotidis, Phoivos. 2003. Empty nouns. *Natural Language & Linguistic Theory* 21: 381-432.

Patten, Amanda. 2008. On the specificational/predicational distinction in *it*-clefts. Paper presented at the workshop on clefts, ZAS Berlin.

Pavey, Emma Louise. 2004. The English *It*-cleft Construction: A Role and Reference Grammar Analysis. PhD dissertation, University of Sussex.

Percus, Orin. 1997. Prying open the cleft. *Proceedings of NELS 27*. Amherst: GLSA. 337-51.

Prince, Ellen. 1978. A comparison of *wh*-clefts and *it*-clefts in discourse. *Language* 54: 883-906.

Reeve, Matthew. 2007. Relatives and pronouns in the English cleft construction. Ms., University College London.

Rijkhoek, Paulien. 1998. On Degree Phrases and Result Clauses. PhD dissertation, University of Groningen.

Sleeman, Petra. 1996. Licensing Empty Nouns in French. PhD dissertation, OTS, Utrecht University.

Sleeman, Petra. 2008. Clefts and the licensing of infinitival subject relatives. Paper presented at the workshop on clefts, ZAS Berlin.

Smits, Rik. 1989. *Eurogrammar. The relative and cleft constructions of the Germanic and Romance languages*. Dordrecht: Foris.

Vries, Mark de. 1999. Extraposition of relative clauses as specifying coordination. In *Proceedings of ConSOLE 7*.

Williams, Edwin. 1983. Semantic vs. syntactic categories. *Linguistics and Philosophy* 6: 423-46.

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