

# Subject choice in copular clauses

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**Abstract** This paper offers a unified analysis of predicational and specificational copular clauses in Danish and English. Building on Moro (1997), I propose that specificational clauses involve the same core predication structure as predicational clauses—one which combines a referential and a predicative expression to form a minimal predicational unit—but differ from them in how the predicational core is realized syntactically. Predicational copular clauses represent the canonical realization, where the referential expression is aligned with the most prominent syntactic position, the subject position. Specificational clauses involve an unusual alignment of the predicative expression with subject position. Following a suggestion in Partee (2000), I further argue that this unusual alignment is grounded in information structure, specifically the desire to align the topic with the subject position, which allows us to understand why specificational clauses exhibit a fixed topic–focus structure. I develop an Minimalist analysis of predicational and specificational clauses that implements these ideas. The central syntactic mechanism that governs the derivation of the two kinds of clauses is the featural interaction between the two DPs and T, the host of the subject position. I further show that the analysis correctly accounts for the distribution of predicational and specificational word orders in certain embedded contexts.

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## 1 Introduction

It has long been noted that specificational copular clauses, exemplified in (1), exhibit a fixed topic–focus structure—the subject is topic and the complement is focus—and that they differ from predicational copular clauses, like the one in (2), in this respect (Higgins 1979:234–236; Declerck 1988:11–19; Williams 1997; Partee 2000:199–200; Heycock and Kroch 2002:108–109; Mikkelsen 2002a:414–417; Mikkelsen 2005:133–161).

- (1) The most influential architect of the twentieth century is Victor Gruen. [specificational]  
(2) Victor Gruen is the most influential architect of the twentieth century. [predicational]

This paper relates this observation, in particular the topic requirement on the subject DP in (1), to other properties of specificational clause, specifically their semantic composition and syntactic derivation. The core of the proposal is the result of combining two independent ideas: first that specificational and predicational clauses are derived from the same underlying structure, but differ in which of the two DPs is realized in subject position (Moro 1997) and second, that the choice as to which of the two DPs is realized in subject position (and hence whether the derivation results in a predicational or specificational clause) is determined by an interplay of syntactic, semantic, and information-structural factors, specifically that a non-referential DP (the definite description in (1) and (2)) only gets to be

realized in subject position (as in (1)) when it bears the informational structural function of being topic (Partee 2000). In the insistence on integrating information structure and semantic considerations into the syntactic analysis of copular clauses, I follow Heycock and Kroch (2002), though my proposal differs from theirs in detail and in substance.

I propose that the word order found in predicational clauses (name precedes definite description) is basic and that the order reversal displayed in specificational clauses is due to the presence of an uninterpretable topic feature on T matched by an interpretable topic feature on the definite description. This featural configuration attracts the definite description to subject position (Spec-TP), resulting in the specificational order in (1). If sustainable, this proposal offers a partial account of the fixed topic–focus structure of specificational clauses: the subject of a specificational clause is always the topic, because that’s a prerequisite for deriving a specificational structure in the first place. It also furthers our understanding of the relation between (1) and (2) and of the place of specificational clauses in the taxonomy of copular clauses proposed in Higgins (1979:chapter 5).

Since Higgins (1979), much of the literature on specificational clauses has concerned itself with specificational pseudo-clefts and the connectivity effects documented by Higgins (Williams 1983; Partee 1986, 2000; Jacobson 1994; Sharvit 1999; Heycock and Kroch 1999; Ross 2001; Schlenker 2003; den Dikken et al. 2000; Heller 2002). Here I will be concerned exclusively with non-clefted copular clauses of the sort in (1) and (2), though I agree that the ultimate goal is a unified analysis of these and the pseudo-cleft constructions.

The paper focusses on copular clauses in English and Danish and the proposed analysis is cast within the Minimalist Program, specifically the Agree-based system laid out in Chomsky (2000, 2001). The paper contributes to the ongoing debate about the nature of the locality conditions that constrain the basic syntactic operations assumed within that framework, especially as regards the Agree operation. I argue that strict locality (defined in terms of *c*-command) can be overridden in order to maximize feature checking, contra Pesetsky and Torrego (2001), and provide a definition of the Agree operation that captures this.

The analysis I propose for specificational clauses follows much other work in rejecting optionality accounts of word order alternations and in positing instead a decisive role for information structural factors in the syntactic derivations. Two Minimalist antecedents are particularly important in this regard: Ndayiragije’s (1999) analysis of focus-driven OVS order in Kirundi and Doggett’s (2004) analysis of locative inversion in English (see also Adger 2003:329-333, 340; Bailyn 2004; and references cited there). These are discussed briefly at the end of section 5.1, though a fuller comparison and potential integration must await another occasion.

## 2 Predication and specification

To ground the discussion that follows, this section provides an informal characterization of specificational and predicational clauses along with some more examples of the two kinds of clause.

Predicational clauses are similar to a non-copular clause like (3) in that the verb phrase predicates something (a property) of the referent of the subject.

- (3) Chris can run a marathon in 3 hours and 15 minutes.

Thus, (3) says of Chris that he has a certain property, namely the ability to run a certain distance within a certain time. Similarly, (4a) says of a certain inanimate object (the one being demonstrated) that it has a high degree of mass, (4b) predicates of a contextually salient woman that she has the property of being Mayor of Cambridge.<sup>1</sup>

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<sup>1</sup>Examples from Higgins (1979) are annotated with an H followed by the original page and example numbers.

- (4) PREDICATIONAL
- a. That is heavy. (H 236, (65))
  - b. That woman is Mayor of Cambridge. (H 239, (62))
  - c. The cat is on the mat.
  - d. My sister is the only nurse in the family.
  - e. Helen is a teacher. (Partee 2000:185, (6a))
  - f. Bill is my best friend. (Partee 2000:185, (6c))
  - g. The price of milk is too high.

Specificational clauses differ from predicational ones in that they appear to not involve predication. Paraphrasing Akmajian (1979:162–165), we can say that a specificational clause does not tell us something *about* the referent of the subject, instead it says *who* or *what* the referent is. Thus (5a) says what it is the speaker doesn’t like about John; it doesn’t predicate anything of this object (the tie). Similarly, (5d) tells us who it is that helps out on Fridays, not something about her, and (5h) gives the price of milk, not some assessment of its appropriateness (compare with (4g)).

- (5) SPECIFICATIONAL
- a. What I don’t like about John is his tie. (H 214, (8))
  - b. The number of planets is nine. (H 215, (9))
  - c. His height is two meters. (H 218, (18))
  - d. The only girl that helps us on Fridays is Mary Gray. (H 266, (153))
  - e. The name of this book is Lorna Doone. (H 287, (va))
  - f. The only thing he eats is junk food. (Partee 2000:185, (7a))
  - g. My best friend is Bill. (Partee 2000:185, (7c))
  - h. The price of milk is \$1.79. (Romero 2004:162, (60a))

Another way of characterizing specificational clauses, is that the subject behaves as a variable (or as if it contains a variable), and the predicate complement serves to provide a value for that variable (Akmajian 1979:19ff; Higgins 1979:153ff, 234ff). Thus in (5b) the definite description in subject position introduces a variable (‘the  $x$  such that  $x$  is the number of planets’) and the predicate complement gives the value for that variable (‘9’). Likewise, the subject of (5c) introduces a variable over body heights (‘the  $x$  such that  $y$  is  $x$  tall’, where  $y$  is the referent of the pronoun), and the predicate complement fixes the value of this variable (‘2 meters’).

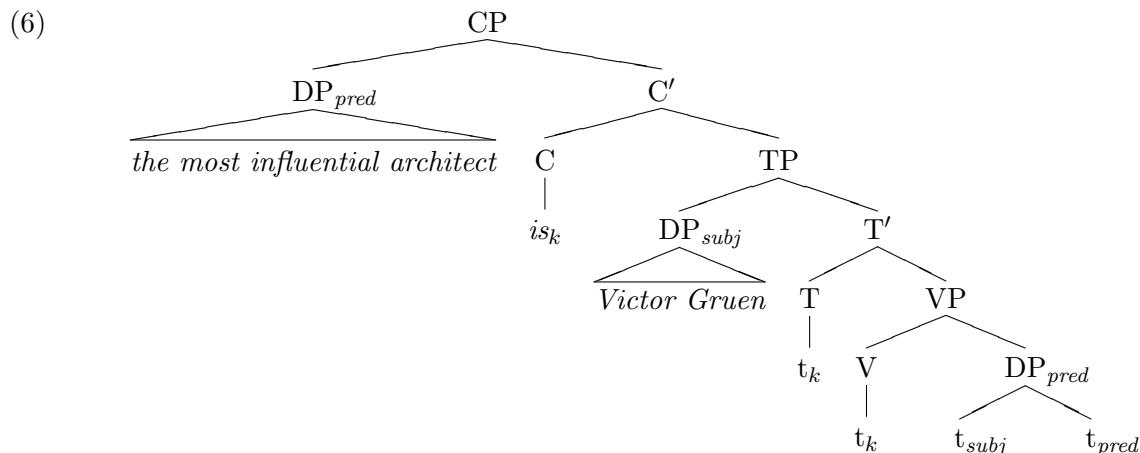
Whereas there is at least a rough consensus about the basic properties of predicational clauses outlined above, there is less agreement about the nature of specificational clauses. The next section is concerned with laying out my assumptions about specificational clauses in advance of presenting the analysis of both kinds of clauses in section 4.

### 3 Empirical assumptions about specificational clauses

To present the analysis, certain empirical assumptions about specificational clauses need to be laid out and motivated. For reasons of space, the presentation will be brief, but I include references to more detailed discussions of these assumptions.

### 3.1 The initial DP is in subject position

The majority view, which I adopt here, is that specificational clauses like (1) are subject-initial structures (Higgins 1979; Moro 1997; Heycock and Kroch 1999; Partee 2000; Rothstein 2001; Mikkelsen 2002a; 2005). This view has been challenged most vigorously by Heggie (1988a,b), who argues that specificational clauses are the result of predicate topicalization and that their surface structure is essentially as in (6):



According to this analysis, the copula takes a small clause complement which contains one referential and one predicative element, configured as in Stowell (1983:297–299). The referential DP raises to subject position, the predicative DP to Spec-CP, and the copula moves from V to T to C, giving rise to the word order in (1).

As argued by Heycock (1994:186–189) and Rothstein (2001:250–259), there is clear evidence that this is not the right analysis of specificational clauses in English. The most straightforward evidence comes from the morphological form of pronouns, the word order in clauses with multiple auxiliaries, and the formation of polar questions. If specificational clauses are instances of predicate topicalization and the post-copular DP is the structural subject, we expect a pronoun in this position to appear in the nominative, just as the pronominal subject does in the object *wh*-question in (8). This expectation is contradicted by (7); see fn. 15 for a caveat on the ungrammaticality of (7).

(7) \*The most influential architect is *he*.

(8) Which influential architect did *he* meet?

Second, we expect additional auxiliaries to follow the second DP, as they do in a object *wh*-question. Again, this is not the case:

(9) \*The most influential architect might Victor Gruen *have* been.

(10) Which influential architect might Victor Gruen *have* met?

Third, we expect polar question formation to be impossible, as it is when a topicalized DP argument occupies Spec-CP; compare (11) and (12).

(11) \*Does this particular architect he really like?

- (12) a. This particular architect, he really likes.  
 b. Does he really like this particular architect?

However, polar questions formed on specificational clauses are syntactically impeccable (though they do require a special discourse context for reasons that will figure centrally in the discussion below; see section 3.3):

- (13) Is the most influential architect of the 20th century (really) Victor Gruen?

The contrasts in (7)–(13) find no explanation under the predicate topicalization analysis of specificational clauses, but fall into place immediately if specificational clauses are regular subject-initial clauses; compare (7), (9), and (13) with (14)–(16) below:

- (14) \*The most influential architect admires *he*.  
 (15) \*The most influential architect might Victor Gruen *have* admired.  
 (16) Does the most influential architect admire Victor Gruen?

Another reason to doubt Heggie’s analysis of English specificational clauses is that topicalization normally does not trigger verb second order in English (cf. (12a)), but predicate topicalization crucially must to derive the word order in (1). This property of Heggie’s analysis is more appealing when considering specificational clauses in a language like Danish where topicalization does trigger verb second and where the analysis of specificational clauses illustrated in (6) thus fits with the general syntax of topicalization in the language. However, there is ample evidence that in Danish predicate topicalization structures exist alongside subject-initial specificational clauses. In the simplest cases, like (17), the two produce the same word order, but as noted by Jespersen (1924:153, fn. 2) and discussed at length in Mikkelsen (2005:18–22), the two structures can be teased apart by considering the placement of the sentence negation *ikke*, as in (18).

- (17) Den mest indflydelsesrige arkitekt er Victor Gruen.  
 the most influence-rich architect is Victor Gruen
- (18) a. Den mest indflydelsesrige arkitekt er *ikke* Victor Gruen. [specificational clause]  
 the most influence-rich architect is not Victor Gruen  
 b. Den mest indflydelsesrige arkitekt er Victor Gruen *ikke*. [predicate topicalization]  
 the most influence-rich architect is Victor Gruen not

Given that sentence negation marks the left edge of the verb phrase in the language (Vikner 1995:40), the word order in (18a) is indicative of a subject-initial structure where the definite description has raised to subject position, the copula to the characteristic verb second position, but the post-copular DP remains inside the VP. In contrast, the word-final negation in (18b) can be understood as the result of predicate topicalization in Heggie’s sense (cf. (6)).

This word order diagnostic in turn allows for further tests (involving the distribution of reflexive pronouns and negative polarity items, and restrictions on topicalization in embedded contexts) all of which point to the conclusion that Danish, like English, has subject-initial specificational copular clauses, though the two languages differ in whether or not predicate topicalization is also attested (see Mikkelsen 2005:6–45 for data and discussion).

### 3.2 The initial DP is not referential

The second key assumption is that the subjects of predicational and specificational clauses differ in their semantic properties: whereas the subject of a predicational clause like (19) may receive a referential interpretation (type  $\langle e \rangle$ ), the corresponding subject of a specificational clause like (20) (= (1)) is interpreted non-referentially, specifically as predicative (type  $\langle e, t \rangle$ ) in Partee's (1987) typology of noun phrase interpretation.<sup>2,3</sup>

(19) The lead actress in that movie is Swedish.

(20) The lead actress in that movie is Ingrid Bergman.

Evidence for this difference comes from the pronominalization facts in (21) and (22). (I discuss the possibility of *she* in the tag in (22) on page 8.)

(21) The lead actress in that movie is Swedish, isn't *she*?

(22) The lead actress in that movie is Ingrid Bergman, isn't *it*?

The claim is that the use of *she* in the predicational clause in (21) indicates a referential interpretation of the subject of the tagged clause, whereas the use of *it* in the specificational (22) indicates a predicative interpretation of the subject DP.<sup>4</sup> The reasoning behind this claim can be schematized as follows (see Mikkelsen 2005:48–93 for discussion and motivation):

1. Pronominalization is sensitive to the semantic type of the antecedent (Doron 1988:282–286; Engdahl 2001:132–133; Heggie 1988a:67–71; Jespersen 1927:123–124; Kuno 1972; Zamparelli 2000:17–18).
2. In the domain of humans, use of a gendered pronoun like *she* indicates a referential interpretation of the antecedent, whereas the use of the inanimate pronouns *it* and *that* indicates a predicative interpretation.
3. The antecedent of the pronoun in a tag question is the subject of the tagged sentence (Bolinger 1957:17–22, 116–122, 1975:279; Bowers 1976:237; Bresnan 1994:97; Huddleston and Pullum 2002:893, [7i]; Jespersen 1924:198, 302, 323; Kay 2002:§4; McCawley 1998:251; Næsslin 1984:3; Quirk et al. 1985:§11.8).

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<sup>2</sup>The third possibility within Partee's system is a quantificational interpretation (type  $\langle \langle e, t \rangle, t \rangle$ ). Whereas the well-formedness of (i) indicates that this is a possible interpretation for the subject of a predicational clause (hence the hedging *may* in the discussion of (19) in the text), the ill-formedness of (ii) suggests that this is not a possible interpretation of a specificational subject:

- i. {Most / Both / Exactly two} actresses in that movie are Swedish.
- ii. # {Most / Both / Exactly two} actresses in that movie are Liv Ullmann and Ingrid Bergman.

I will thus set aside quantificational interpretations in what follows, but see Mikkelsen (2005:112–3) for further discussion.

<sup>3</sup>I use extensional types here, partly for consistency with Partee (1987) and partly for simplicity. Intensionality can be incorporated in a minimal way by redefining  $\langle t \rangle$  as the type of propositions, such that the domain of type  $\langle t \rangle$  is the power set of the set of possible worlds (see van Benthem 1991:156–167 for details). This has the desirable effect that clauses denote propositions, rather than truth values (the more standard domain of type  $\langle t \rangle$ ), and that predicative expressions denote properties rather than functions from individuals to truth values. I will assume this redefinition of type  $\langle t \rangle$  in what follows, and use the terms property-denoting and predicative interchangeably.

<sup>4</sup>Two prominent alternatives are that the subject denotes a proposition (Schlenker 2003) and that the subject denotes an individual concept (Romero 2003, 2004). These alternatives are incompatible with the analysis I propose in section 4, and I will not consider them further here, but see Mikkelsen (2002b) and Mikkelsen (2005:61–2) for discussion.

4. Hence, the use of *she* in (21) indicates a referential interpretation of the subject of the matrix clause, and the use of *it* in (22) indicates a predicative interpretation of the subject of the matrix clause.

The pronominalization contrast extends to constructions involving left-dislocation with resumption (23) and question–answer pairs (24): the use of *she* in the predicational a. sentences contrasts with the use of *it* and *that* in the specificational b. examples. (*That* does not occur in tag questions at all, possibly for prosodic reasons.)

- (23) a. The lead actress in that movie, *she* is Swedish.  
 b. The lead actress in that movie, {*it* / *that*} is Ingrid Bergman.
- (24) a. Q: Where is the lead actress in that movie from?  
 A: *She* is Swedish.  
 b. Q: Who is the lead actress in that movie?  
 A: {*It* / *That*} is Ingrid Bergman.

As shown in Mikkelsen (2003), the same set of contrasts is found in Danish. Furthermore, there is evidence (from ellipsis and from the range of elements that can occupy the post-copular position) that the semantic type of the post-copular expression differs in the two clause types as well: the post-copular DP of a predicational clause is predicative, whereas the post-copular DP of a specificational clause is referential (Mikkelsen 2005:94–107). This leaves us with the following type-theoretic characterization of the two kinds of clauses:

CLAUSE TYPE	SUBJECT	COMPLEMENT
Predicational	$\langle e \rangle$	$\langle e, t \rangle$
Specificational	$\langle e, t \rangle$	$\langle e \rangle$

If correct, this semantic characterization sets specificational clauses apart from not only predicational clauses, but also equative clauses like (26), which have been argued to involve two referential elements flanking the copula.

- (26) a. He is Victor Gruen.  
 b. Cicero is Tully.

This is in opposition to the influential proposal made by Heycock and Kroch (1999) to assimilate specificational clauses to equatives. The same conclusion (that specificational clauses are semantically distinct from both equative and predicational clauses) is reached for Russian copular clauses in Geist (2003), based on a different set of empirical observations.

**A note on ambiguity** As Higgins (1979) demonstrates in great detail, many copular clauses are ambiguous between the readings labelled predicational, specificational, and equative above. A particularly clear case of this is the example in (27), originally discussed in Kripke (1972:271–273).

- (27) The winner might have been the loser.

As Higgins observes (p. 271–273), this sentence is multiply ambiguous. Taking the sentence to be uttered in response to the 1972 US presidential election, where McGovern lost to Nixon, the sentence can have at least the following readings:<sup>5</sup>

- (28)     a.   Nixon might have lost the election.                               [predicational]
- b.   McGovern might have won the election.                         [specificational]
- c.   Nixon might have been McGovern.                               [equative]

The (28a) reading is clearly predicational: the subject DP is interpreted referentially (to denote Nixon), whereas the complement DP is interpreted predicatively (to denote the property of losing the election). The (28b) reading is specificational: the subject DP is interpreted predicatively (to denote the property of winning the election), whereas the predicate complement is interpreted referentially (to denote McGovern). Finally, the (28c) reading is equative: both DPs are interpreted referentially (to denote Nixon and McGovern, respectively). This ambiguity arises from the fact that definite descriptions can have both referential and non-referential interpretations. If we replace one of the definite descriptions in (27) with a name the ambiguity is reduced. Replacing the complement (*the loser*) with a name gets rid of the predicational reading (assuming that names can't denote properties), and replacing the subject (*the winner*) with a name gets rid of the specificational meaning. However, the possibility of an equative reading persists in both, as it does in (22), (23b), and (24b) above. This, I suggest, is the source of the additional possibility of referential *she* in these examples (at least for some speakers in some contexts):

- (29)     a.   The lead actress in that movie is Ingrid Bergman, isn't *she*?                       [equative]
- b.   The lead actress in that movie, *she* is Ingrid Bergman.                       [equative]
- c.   Q: Who is the lead actress in that movie?  
          A: *She* is Ingrid Bergman.                               [equative]

The examples in (29) are not evidence against the claim that specificational subjects are property-denoting, but a reflex of the pervasive ambiguity of copular clauses, which in turn is fed by the type-flexibility of certain kinds of noun phrases.

### 3.3 The initial DP is topic

The third and final assumption concerns the information structure of specificational clauses. From early on the notions of topic and focus (as well as those of given vs. new information, and of theme vs. rheme) have figured prominently in work on copular clauses (Halliday 1967; Higgins 1979; Akmajian 1979; Declerck 1988; and, more recently, Heycock and Kroch 1999, 2002 and Partee 2000). While there is no agreement on what exactly these terms mean (and what the relationship between the three pairs of terms are), almost everyone seems to agree that specificational clauses differ from predicational ones in that specificational clauses have a fixed information structure, one where the post-copular phrase is focus (or new information or rheme), and the subject is topic (or given information or theme). This characterization is typically based on question–answer pairs like those in (30) and (31), and the notion of question–answer congruence, which to my knowledge was first discussed in Halliday (1967).

- (30)     Q:   Who is the winner?

<sup>5</sup>Higgins also discusses a set of extra readings of (27) involving Donnellan's (1966) distinction between referential and attributive readings of definite descriptions, and he concludes that the ambiguities in (28a) do not involve Donnellan's distinction. I will therefore ignore these here.



- |         |                       |                   |
|---------|-----------------------|-------------------|
| A1:     | The winner is JOHN.   | [specificational] |
| A2:     | JOHN is the winner.   | [predicational]   |
| (31) Q: | {Who / What} is John? |                   |
| A3:     | #The WINNER is John.  | [specificational] |
| A4:     | John is the WINNER.   | [predicational]   |

In a congruent question–answer pair the constituent in the answer that corresponds to the *wh*-phrase in the question is the focus. Thus in the answers to the question in (30), *John* is the focus, because it corresponds to the *wh*-phrase of the question, and in the answers in (31) *the winner* is the focus because it corresponds to the *wh*-phrase of the question. What we observe is that the predicational clause can felicitously be used to answer either question (A2 and A4 are both fine), which indicates that it can carry focus on either the subject (A2) or the complement (A4). In contrast, the specificational clause is only felicitous as an answer to the question in (30), where the complement is the focus (A1). Having focus on the subject is infelicitous, as A3 shows.<sup>6</sup> Under the assumption that one and the same expression cannot simultaneously be focus (new information) and topic (old information), the asymmetry in the question–answer pairs provides indirect evidence that the subject of a specificational clause is obligatorily topic, since that would explain why it resists (information) focus in A3.

Consideration of Discourse-familiarity (in the sense of Prince 1992) also provides potential evidence for the topic status of specificational subjects. Building on Birner’s (1994, 1996) study of inversion structures, Mikkelsen (2005:135–161) argues that specificational clauses obey (a strengthened version of) Birner’s discourse-condition on inversion: the subject must be at least as Discourse-old as the complement, and the subject cannot be entirely Discourse-new. In so far as being topic involves being Discourse-old, this lends further support to the idea that there is a topic requirement on specificational subjects (see Reinhart 1982:18–23; Vallduví 1992:chapter 2; and Lambrecht 1994:117–205 for discussion of the relation between Discourse-familiarity and topicality).

One caveat deserves mention here: I argued in the previous section that specificational subjects are not referential. Given this, one might object to calling it a topic (I am grateful to Anastasia Giannakidou for drawing my attention to this point). However, in so far as there is a connection between being Discourse-old and being topic, we must allow non-referential expressions to be topic, since it is clear that entities in the discourse model other than individuals can be Discourse-old (Birner 1996:140ff; Chafe 1976:28; Webber 1981, 1988). In the end this might be a terminological issue, and my use of the topic feature in the analysis presented below therefore might be a misnomer. Nonetheless, the logic behind the analysis is unaffected by the specific name and interpretive content of the [topic] feature, though the empirical consequences and claims would of course differ.

### 3.4 Bringing the observations together

The discussion above leaves us with the following set of empirical assumptions:

- Predicational and specificational clauses are both subject-initial clauses.
- Predicational and specificational clauses both involve one predicative and one referential DP, but they differ in how the predicative and referential DPs are aligned with syntactic position at surface structure:

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<sup>6</sup>As Heycock and Kroch (2002:108, fn. 2) note, A3 is grammatical, but only usable in a different context, one in which the sentence is not interpreted specifically. Citing a corpus study by Delin (1989), they further note that a peak accent on the subject DP is only possible if the post-copular DP also bears a peak accent. I will not discuss such dual accent cases here.

- In predicational clauses the referential DP is in subject position, and the predicative DP is inside the verb phrase.
  - In specificational clauses the predicative DP is in subject position and the referential DP is inside the verb phrase.
- When they contain the same DPs, as in (1) and (2) above, predicational and specificational clauses are truth-conditionally equivalent; they are ‘allosentences’ in Lambrecht’s (1994) sense.
  - However, predicational and specificational clauses differ in information structure:
    - Specificational clauses have a fixed topic–focus structure: the subject is always topic and the predicate complement is always focus.
    - Predicational clauses have a free topic–focus structure: either DP can be topic and either DP can be focus.
  - The notions of topic and focus that distinguish predicational and specificational clauses in this way involve, as part of their content, Discourse-familiarity.
  - Hence, a specificational clause can be seen as an inversion of its predicational counterpart, whose discourse function is to have Discourse-old information appear before Discourse-new information.

The goal of the rest of the paper is to bring these observations to bear on each other, to develop an analysis that integrates them, and to spell out some of the implications for our general theoretical understanding of clause structure and the special requirements associated with the subject position. The central intuition behind my analysis is that the fact that the subject of a specificational clause is always topic is intimately related to the fact that the subject DP is less referential than the post-copular DP. The reasoning that connects this intuition to the analysis presented below proceeds in three steps:

- (32)
1. Other things being equal, the most referential DP occupies the subject position. This is the case in predicational copular clauses.
  2. However, the preference for the topic to be in subject position may override this default alignment. The result is a specificational clause.
  3. The reason why the subject of a specificational clause is always topic is that this is a precondition for getting a specificational clause at all.

The first clause states that when a predicative DP and a referential DP compete for the subject position, the referential DP is inherently privileged. This is supported by Keenan (1976), who includes on his list of prototypical subject properties several that involves referentiality, such as ‘Presupposed Reference’ (property 3.6, p. 318) and ‘Highly Referential’ (property 3.9, p. 319). In the case of copular clauses we can understand this preference as a reflection of the syntax–semantics mapping: the referential DP is the subject of predication (or the logical subject), and the default syntax–semantics mapping is one where the subject of predication is realized in the syntactic subject position (Spec-TP).<sup>7</sup> (This is reminiscent

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<sup>7</sup>In recent work in Optimality Theoretic syntax, pioneered by Aissen (1999), such default alignments between syntactic position (or grammatical function) and non-structural properties (including thematic role, animacy, topicality, person, and definiteness) are captured in terms of constraint hierarchies derived by a technique known as Harmonic Alignment (Prince and Smolensky 1993:136ff). Within that conception, the default alignment of the referential element with subject position proposed here could be seen as the result of a Harmonic Alignment between a referentiality scale (defined on semantic types) and the grammatical function scale (according to which subjects and more prominent than non-subjects). In my derivational analysis, the relation between referentiality and syntactic position is built into the configuration of the predicational core, shared between predicational and specificational copular clauses, which I call PredP. It is an interesting question how the two approaches relate to each other, but one that I will not attempt to answer here.

of Jespersen’s (1924:145) claim that within a nexus (made up of a subject and a predicate) the subject is primary and the predicate secondary, though it is not clear how Jespersen’s notion of primacy relates to referentiality in the type-theoretic sense in which I am using the term here.)

The second step holds that when a topical DP competes with a non-topical DP for subject position, the topical DP is privileged. This claim is grounded in the very large literature on the relation between subjects and topics, in particular in the work showing that there is a preference for the subject to be topic and vice versa (Prince 1981:242,252; Horn 1986; Prince 1992:317–318; Aissen 1999:687–688; Beaver (2004:18); and references cited there).

The concluding step is that it is the interaction between these two preferences that causes the subject of a specificational clause to necessarily be topic.

As noted in the introduction, this reasoning can be seen as a development of suggestions in Partee (2000), in particular the following remarks:

The occurrence of the less referential NP as NP<sub>1</sub> [= the initial NP] in specificational clauses, whether it is subject (as in English) or not (as in Russian), seems to be conditioned in part by its topicality. [...] we might say that what is going on in English is that the generalization that the more referential NP is normally the subject is overridden by the desire to make the topic the subject. (Partee 2000:200)

Partee further suggests, echoing Sgall (1995:362ff), that less vs. more referential can be understood as attributive vs. referential in the sense of Donnellan (1966). However, Higgins (1979:271ff) argues, to my mind convincingly, that Donnellan’s notion of attributive does not provide an adequate characterization of the interpretation of the subject of a specificational clause (cf. fn. 5). Hence, I maintain that for present purposes less referential should be understood as property-denoting (type  $\langle e, t \rangle$ ) and more referential as individual-denoting (type  $\langle e \rangle$ ).

Below, I develop an analysis of predicational and specificational clause that captures the reasoning in 1–3 above, in particular the proposed connection between referentiality, topicality and subjecthood, in terms of featural interactions of the sorts that drive the syntactic computation within the Minimalist framework.

## 4 Analysis

My analysis builds on Moro’s (1997) idea that in certain copular structures either DP can raise to subject position, but integrates information structure as a crucial factor in determining the syntactic conditions under which each of the two DP raises to subject position. In fleshing out the structural relation between the copula and the two DPs I rely on earlier work on the structural representation of predication by Bowers (1993), Svenonius (1994), and, more recently, Adger and Ramchand (2003).

I will be drawing most of my theoretical assumptions from the version of the Minimalist Program developed in Chomsky (2000, 2001), and I start, in section 4.1, by laying out basic assumptions about features and featural interactions. Then, in section 4.2, I introduce the ‘predicational core’, which is my structural rendering of the small clause, and which is common to both predicational and specificational clauses. In sections 4.3 and 4.4, I give sample derivations for predicational and specificational clauses, before turning to a more systematic examination of the syntactic conditions under which the derivation will yield one or the other kind of clause (section 4.5). In section 4.6, I provide further evidence for the analysis from the domain of non-finite and subjunctive clauses, and in section 5, I discuss a range of questions, theoretical and empirical, that arise from the proposed analysis. Section 6 concludes the paper.

## 4.1 Starting assumptions

Features are the nuts and bolts of Minimalist syntax, as it is their properties and interactions that drive the syntactic derivation and computation. What effect a given feature has on the derivation depends, among other things, on where in the derivation it is introduced (as part of which feature bundle), and on whether it is interpretable or not. Uninterpretable features need to be checked before the syntactic structure is sent off to one of the interfaces. Once checked, an uninterpretable feature deletes.

Feature checking takes place via one of the two operations Merge and Agree. We distinguish ‘First Merge’—the initial incorporation of a syntactic object (say a DP) into a larger structure—from ‘Second Merge’, ‘Third Merge’ and so on. These last refer to the re-use of already-introduced material under the Merge operation. That is, First Merge does the same work as base-generation in earlier versions of the theory; subsequent applications of Merge do the work of movement. (I tend to refer to re-Merge as move in what follows.)

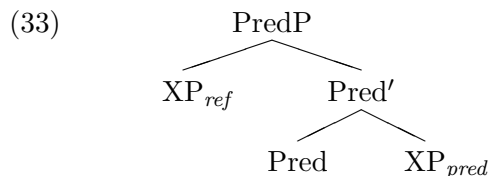
Selectional features have priority over others, in the sense that First Merge of a syntactic object to a head is motivated by selectional requirements of the head. EPP is also a selectional feature; it requires that the head to which it belongs has a specifier in addition to those required by other selectional features. Thus the EPP can be satisfied either by movement (Second Merge) or by First Merge of an expletive.

Feature checking under Agree comes about when a higher head bears an uninterpretable feature that is not satisfied by Merge. The higher head, called ‘the probe’, seeks an element inside the syntactic structure that bears the feature in question (and that is active in a sense that will be made clear below). That element is called ‘the goal’. The probe enters into an Agree relation with the goal, valuing and checking matching features. Speaking informally, the probe Agrees with the closest goal that can eliminate all relevant features on the probe (see section 5.1 for a more precise statement and motivation of this principle).

**Notational conventions** Uninterpretable features are prefixed with *u*. So for a particular occurrence of a feature *F* in a particular feature bundle, the notation  $[F]$  means that *F* is interpretable and  $[uF]$  means that *F* is uninterpretable. That a feature has been checked is shown by striking it through:  $[\cancel{uF}]$ . Movement is indicated by enclosing the lower copy (or copies) of the moved element in angled brackets:  $\langle XP \rangle$ .

## 4.2 The predicational core

Following Bowers (1993), Svenonius (1994:28–31), Adger and Ramchand (2003), and much other work, I assume that the predication relation is syntactically mediated by the projection of a functional head, Pred.<sup>8</sup> Pred takes two arguments—a predicative one and a referential one:

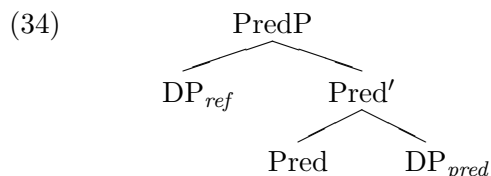


This is a case of semantic selection (s-selection), since the predicative argument can be of any category as long as it is semantically predicative (including AP, PP, NP, DP, and VP). The referential argument is typically a DP, but it can also be a CP or an AP insofar as these can be type-shifted to denote (abstract)

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<sup>8</sup>Pred is the term used by Svenonius (1994) and by Adger and Ramchand (2003). Bowers (1993) calls it Pr.

individuals. In the PredPs that we will be considering here, the referential argument is always a DP, and in the ones that give rise to specificational clauses both arguments are DPs, as in (34).



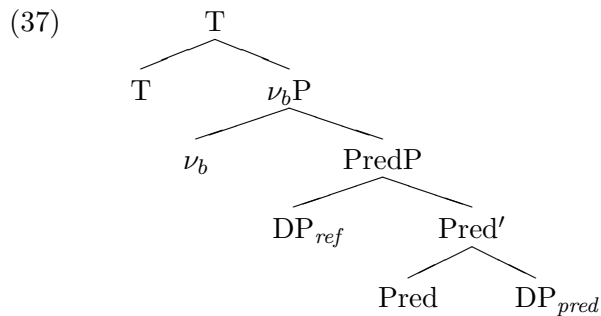
While their syntactic category may vary, the order in which the two arguments are Merged is fixed: the predicative argument is Merged as the complement of Pred, and the referential argument is Merged as the specifier of Pred. I assume that the fixed order, as well as the s-selection for one predicative and one referential element, is governed by the semantic type of the Pred head, which is  $\langle\langle e,t \rangle, \langle e,t \rangle\rangle$ .

Supporting evidence for the assumption that Pred Merges with its arguments in this fixed order comes from certain embedded predicational structures. As observed by Rothstein (1995:41ff), in a small clause under *consider* the referential element must precede the predicative element, as in (35). The opposite order is impossible, as (36) shows. If we identify the complement of *consider* as PredP, we can understand this restriction as a reflection of the fixed order in which the predicative and referential arguments are Merged.

(35) I consider [PredP Susan my best friend].

(36) \*I consider [PredP my best friend Susan].

In a copular clause, PredP is surmounted by functional architecture which consists, minimally, of a ‘little v’ head, which I will call  $\nu_b$  and T, the locus of tense:

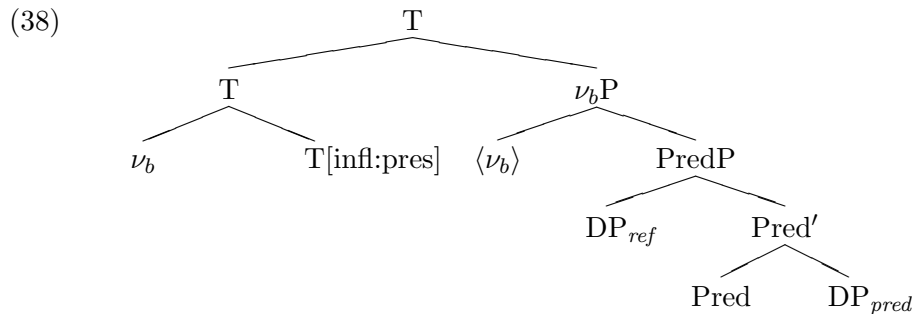


$\nu_b$  is a subtype of unaccusative  $\nu$ : it does not assign a  $\Theta$ -role (nothing is Merged in its specifier position) and it does not assign accusative case. The difference between the normal unaccusative  $\nu$  and  $\nu_b$  is in the category of their complement:  $\nu$  takes a VP complement;  $\nu_b$  takes a PredP complement. Since we know from (35) that PredP has a distribution independent of the copula, I assume that the verb *be* is the morphophonological exponent of  $\nu_b$ , and that Pred itself has no morphophonological exponent (at least not in English and Danish).

The separation of  $\nu_b$  and Pred allows us to understand a well known cross-linguistic difference in the domain of copular clauses. In languages like English and Danish, all copular clauses contain some verbal element, whereas many other languages (including Hebrew, Irish, Scots Gaelic, Polish, Russian, Arabic, and Zapotec) allow “copular” clauses without any verbal element. Given the structure in (37), we can understand this as a difference in the status of  $\nu_b$ . In languages like English and Danish,  $\nu_b$  is obligatory in the sense that T cannot select PredP directly. In the second group of languages, T can select PredP directly, as suggested for Scots Gaelic by Adger and Ramchand (2003:331ff) (see also

Rothstein 2001:205–338 for detailed discussion of the difference between Hebrew and English in this respect).<sup>9</sup>

As is well-known, the copula behaves as an auxiliary verb with respect to verb raising: a finite copula precedes negation and undergoes subject–auxiliary inversion. Thus, if T is finite,  $\nu_b$  moves to T, as shown in (38).<sup>10</sup>



The T- $\nu_b$  complex is spelled out as one of the present tense copula forms *am*, *are*, or *is*. Which one depends on how the  $\phi$ -features are valued on T (by the DP in Spec-TP).

As is the case in non-copular clauses, there can be more structure between T and the little v head, signalled by negation and aspectual marking (progressive and/or perfective). Thus (39) involves a NegP and a PerfP between T and  $\nu_b$ , and (40) a ProgP (see Adger 2003:171–185 for discussion of these intermediate projections):

(39) Susan might not have been a baker.

(40) Susan is being careful.

I will not be concerned with these more articulated clause structures in what follows, since they do not affect the part of the derivation that distinguishes predicational from specificational copular clauses, which is my main concern here.

Building on the analysis in Moro (1997), I assume that predicational and specificational copular clauses share the structure in (37), and that they differ in which DP raises to subject position. If the referential DP raises to subject position, the result is a predicational clause; if the predicative DP raises to subject position, the result is a specificational clause. It is worth noting that Moro (1997) did not discuss under which circumstances each DP raises, but focussed on showing that raising of the predicative DP to subject position was theoretically possible, and that it was an attractive analysis of specificational clauses in empirical terms. This should be seen in light of the fact that Moro was working within the Principle and Parameters framework, where movement is optional and free (given the general principle of Move  $\alpha$ ), though regulated indirectly by well-formedness filters, such as the EPP and the Case Filter. Within that conception of movement, there was no theoretical problem with assuming that from one and the same initial structure either DP could move to subject position, as

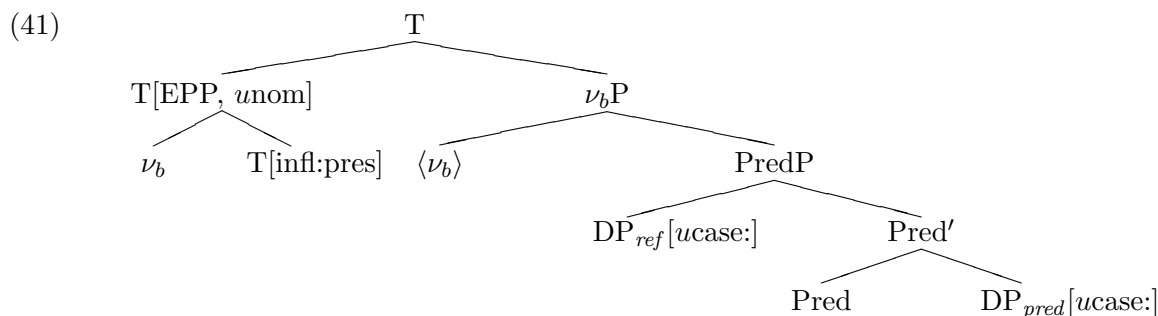
<sup>9</sup>Given the analysis I propose for specificational clauses below, word order in raising constructions (*The winner seems to be Susan*, not *\*The winner seems to Susan be*) and specificational clauses containing a modal (*The winner might be Susan*, not *\*The winner might Susan be*) provides further evidence that *be* is not the spell out of Pred in English. I am grateful to Jason Merchant for pointing out the relevance of these facts.

<sup>10</sup>The nature of this movement, and of head movement more generally, is the subject of much current debate within the Minimalist Program. These issues, however, are not directly relevant for my concerns; the movement of  $\nu_b$  to T plays no special role in my analysis of predicational and specificational clauses, other than accounting for the surface position of the copula with respect to negation, and it does not interact with movement of phrasal elements to Spec-TP, which is at the core of my proposal. I thus remain agnostic as to how exactly this movement should be understood theoretically.

long as the resulting structure passed the well-formedness criteria.<sup>11</sup> The situation is very different within the Minimalist framework, where movement is not free, but driven by the need to check and eliminate uninterpretable features, such that the structure can eventually be interpreted at the interface with language-external systems, in particular the Conceptual–Intentional system and the Articulatory–Perceptual system (cf. the discussion of ‘Interpretability’ in Chomsky 2000:113, 118–119). The following sections are thus concerned with characterizing, syntactically, the conditions under which  $DP_{ref}$  raises to subject position—resulting in a predicational clause—and the conditions under which  $DP_{pred}$  raises to subject position, resulting in a specificational clause. Based on the discussion of topic–focus structure in the previous section, I will suggest that the key factor in this calculation is the distribution of a topic feature, which is interpretable on DPs, but uninterpretable on T. This goes beyond Moro’s analysis, not only technically (by getting rid of the assumption that either DP is free to move in all structures), but also conceptually and empirically by integrating information-theoretic properties of the two kinds of copular clauses as a central piece of their syntactic derivations.

### 4.3 Deriving predicational clauses

Let us start by considering a derivation where neither DP bears the topic feature, in order to appreciate how the other features interact. T is finite so it bears an interpretable inflectional feature [infl:pres], an uninterpretable nominative case feature, [*unom*], and the standard EPP feature.<sup>12</sup>  $DP_{ref}$  and  $DP_{pred}$  both bear an uninterpretable case feature [*ucase:*]. After raising  $\nu_b$  to T, we have the following structure:

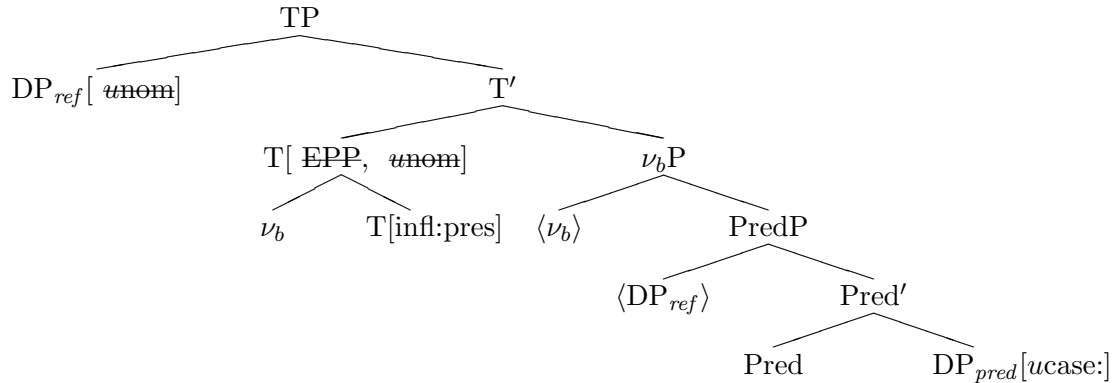


The uninterpretable case and EPP features on T need to be eliminated. In principle, either  $DP_{ref}$  or  $DP_{pred}$  could do the job (they are both Ds and they both have an unvalued case feature), but  $DP_{ref}$  is closer to T, since it asymmetrically c-commands  $DP_{pred}$ . T therefore enters into an Agree relation with  $DP_{ref}$ , valuing the case feature on  $DP_{ref}$  as nominative. The EPP feature on T forces the specifier of T to be filled, and, as a result,  $DP_{ref}$  moves to Spec-TP:

<sup>11</sup>Though it is puzzling why moving the lower, predicative, DP to subject position does not induce a violation of relativized minimality.

<sup>12</sup>My notation for the valued case feature on T [*unom*] is an abbreviation for the more explicit notation [*ucase:nom*] (see Adger 2003:211, 239). When the case feature on T is checked I will write it as [*unom*], rather than [*ucase:nom*]. Similarly, when the unvalued case feature on a DP is valued and checked, I will write that as [*unom*], rather than [*ucase:nom*].

(42)



At this point the only remaining unchecked feature is the case feature on  $DP_{pred}$ . One might question whether a predicative DP bears a case feature at all (as Safir 1985:77; Chomsky 1986:95; and Authier 1991:725, fn. 5 do), but as will become clear when we consider the derivation of specificational clauses, it is crucial to my analysis that  $DP_{pred}$  can check the nominative case feature on T, so I will assume that it bears a case feature (see Maling and Sprouse 1995 for relevant discussion).<sup>13</sup> In the present derivation, nominative case is checked by  $DP_{ref}$ . By assumption  $\nu_b$  does not have a case feature, and nor does Pred. This means that neither of these heads can value the case feature on  $DP_{pred}$ . It is not clear from morphology what case  $DP_{pred}$  has, since non-pronominals do not show case distinctions morphologically (except for the genitive *s*, which is not relevant here), and the only pronominal that can take the place of  $DP_{pred}$  is the neuter *it*, and *it* does not show case distinctions either (nor does Danish *det*). Given this paucity of evidence, I will assume that  $DP_{pred}$  is valued with default case, in roughly the sense of Schütze (2001), at spell-out.<sup>14</sup> I will say more about default case in the next section. As for the case feature on  $DP_{ref}$  being valued nominative in (42), we are on firmer empirical ground, since the referential pronouns *she* and *he* (and *I*, *we*, *they*) do distinguish nominative and accusative overtly, as do their Danish counterparts. As the examples in (43) and (44) show, the subject pronoun of a (finite) predicational clause must be in the nominative form in both English and Danish:

(43) a. {She / \*Her} is a baker.

b. {He / \*Him} is a baker.

(44) a. {Hun / \*Hende} er bager.

she / her is baker  
'*She is a baker.*'

b. {Han / \*Ham} er bager.

he / him is baker  
'*He is a baker.*'

<sup>13</sup>Alternatively, one could adopt some non-standard assumptions about how case checking works and/or assume that the case feature on  $DP_{pred}$  is optional. Neither of these seem attractive to me.

<sup>14</sup>My notion of default case is not quite Schütze's, because he assumes that a DP that is spelled out with default case is not associated with any case feature in syntax (p. 206), whereas I assume that it can be associated with an (unvalued) syntactic case feature, such as is the situation with  $DP_{pred}$  in (42). In this respect, my notion of default case is more in line with that appealed to by McCloskey (1985) in his discussion of overt subjects in infinitival contexts in Irish, where he characterizes default case as "a more general default rule which simply assigns (accusative) Case to any NP which does not get Case by some other means" (p. 195); see also Chung and McCloskey (1987:188) and the references cited there. It is also in line with more recent rethinking of the Case Filter as primarily a matter of eliminating uninterpretable case features on the probe, primarily T and  $\nu$  (cf. the asymmetric checking theory developed in Ndayiragije (1999)). Under this conception, the role of a case feature on a DP is to activate it as a goal, which allows it to enter into relations with an active probe (Agree) and possibly undergo Movement, if the probe bears an EPP feature (Chomsky 2000:127).

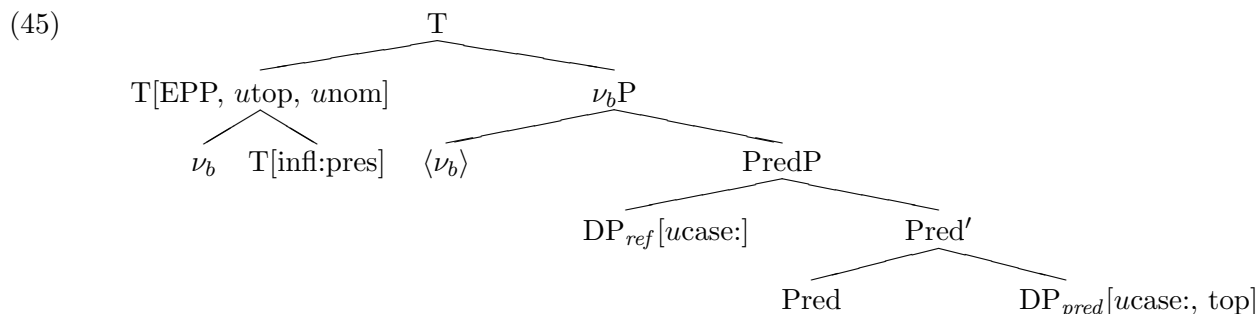


The structure in (42) is spelled out as a predicational clause: the referential DP is in subject position—preceding the finite copula—and the predicative DP is inside PredP, following the finite copula. This derivation thus illustrates the first premise of the reasoning schematized in (32); other things being equal, the referential DP is realized as the subject. Let us next consider a case where other things are not equal.

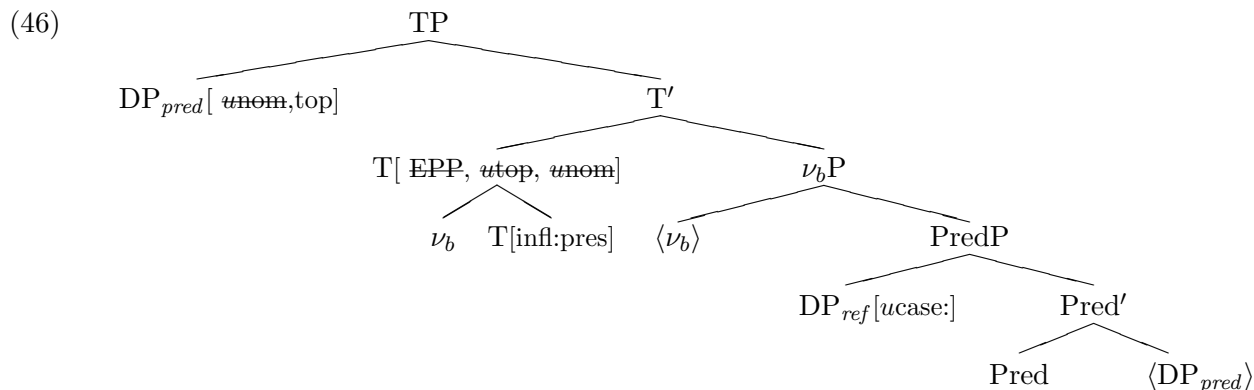
#### 4.4 Deriving specificational clauses

I assume that information structure impinges on the syntactic derivation by way of features, in particular a topic feature [top] which is interpretable on DPs (and possibly other lexical categories, but we will be concerned only with DPs here), but uninterpretable on T ([u<sub>top</sub>]). This is very similar to the suggestion in Adger (2003:329–332) that in a V2 language like German, C bears an uninterpretable topic feature, which forces a topic-marked XP to move to Spec-CP; see also Bailyn (2004:44).

We start with the structure in (45), where head movement has taken place, but as yet no XP movement has occurred. T bears the uninterpretable nominative case feature, the standard EPP feature, and an uninterpretable topic feature. Crucially, DP<sub>pred</sub> bears an interpretable topic feature, and DP<sub>ref</sub> does not.



The three uninterpretable features on T need to be eliminated. There is exactly one DP that can check all three, and that is DP<sub>pred</sub>. It is a DP so it can check the EPP feature, it has an unvalued case feature which can be valued by [u<sub>nom</sub>], and, importantly, it bears an interpretable topic feature which can check the uninterpretable topic feature on T. Since the EPP requires Spec-TP to be filled, DP<sub>pred</sub> raises to Spec-TP, as shown in (46):



The uninterpretable case feature on DP<sub>pred</sub> is valued nominative by T. Since the only pronominals that can take the place of DP<sub>pred</sub> are *it* and *that*—cf. the discussion of (24b) in section 3.2—we cannot see the nominative case overtly:

(47) {It / That} is Susan.

(48) Det er Susan.  
 it-NEU is Susan  
 ‘It is Susan.’

Things become more interesting when we consider how the case feature on  $DP_{ref}$  is valued in (46). The nominative case on T goes to value the case feature on  $DP_{pred}$  and, by assumption, there is no case feature on  $\nu_b$  (nor on Pred). Following the reasoning used in the derivation of the predicational clause above, we have to say that  $DP_{ref}$  gets default case at spell-out. The reason this is a more interesting claim is that here it is the referential DP that is getting default case, and since referential pronouns show overt case (beyond genitive vs. non-genitive) we can test the accuracy of this proposal empirically. In Danish and English, the default case is accusative (Schütze 2001:210–216, 227; Ørnsnes 2002:333–337), and we thus expect a pronominal  $DP_{ref}$  to show up in the accusative form in a specificational clause. This is indeed what we find in (49) and (50). (For pragmatic reasons the pronoun has to be prosodically prominent, so that it can receive a deictic, rather than anaphoric interpretation).<sup>15</sup>

(49) The winner isn’t {HIM / \*HE}.

(50) Vinderen er ikke {HAM / \*HAN}. [Danish]  
 winner-DEF is not him / he  
 ‘The winner isn’t HIM.’

Moreover, when we turn to Swedish, where the default case is not accusative, but nominative (Schütze 2001:229), we find that  $DP_{ref}$  is nominative in specificational clauses:<sup>16</sup>

(51) Vinnaren är inte {\*HONOM / HAN}. [Swedish]  
 winner-DEF is not him / he  
 ‘The winner isn’t HIM.’

This is a systematic difference between specificational clauses in Swedish on the one hand and in Danish and English on the other.<sup>17</sup> First, it holds for all persons. Thus, in the Swedish examples in (52), the nominative forms are all acceptable (52a), and the accusative forms are all unacceptable (52a). In Danish, the pattern is the exact opposite, as (53) shows.

(52) a. Vinnaren är inte {HAN / HON / JAG / DU / ...}. [Swedish]  
 winner-DEF is not he / she / I / you-NOM /  
 ‘The winner isn’t HIM / HER / ME / YOU / ....’

b. \*Vinnaren är inte {HONOM / HENNE / MIG / DIG / ...}.  
 winner-DEF is not him / her / me / you-ACC /

(53) a. \*Vinderen er ikke {HAN / HUN / JEG / DU / ...}. [Danish]  
 winner-DEF is not he / she / I / you-NOM /

b. Vinderen er ikke {HAM / HENDE / MIG / DIG / ...}.  
 winner-DEF is not him / her / me / you-ACC /  
 ‘The winner isn’t HIM / HER / ME / YOU / ....’

<sup>15</sup>In (very) formal registers, some English speakers allow the nominative pronoun in (49). This is part of a larger pattern of difference between formal and informal registers; see Huddleston and Pullum (2002:459–460) for relevant discussion. There is no register of Danish that allows the nominative pronoun in (50) (Allan et al. 1995:143).

<sup>16</sup>The judgments on (51) were confirmed by Ida Toivonen, Lars-Olof Delsing, Kersti Börjars, and Christer Platzack. Christer Platzack further provided me with (52), Lars-Olof Delsing with (54a), and Kersti Börjars with (61).

<sup>17</sup>The situation in Norwegian is more complex, both with respect to default case in general and case patterns on post-copular DPs (Schütze 2001:225–226, 236). This is partly due to dialectal variation, and I will not discuss it here.

Second, the same case difference is found in so-called ‘truncated clefts’, which have been argued to be specificational clauses with anaphoric subjects (Hedberg 2000:901 fn. 17, 907 fn. 22, 917; Geist 2003:19; Mikkelsen 2005:118–130. If the post-copular DP<sub>ref</sub> is also a pronoun it must be nominative in Swedish, but accusative in Danish.<sup>18</sup>

(54) [Said when calling home]

- a. Hej, det är {jag / \*mig}. [Swedish]  
 hi it is I / me  
 ‘Hi, it’s me.’
- b. Hej, det er {\*jeg / mig}. [Danish]  
 hi it is I / me  
 ‘Hi, it’s me.’

Unless one finds independent reasons to think that specificational copular clauses have a very different syntactic derivation in Swedish, a language closely related to Danish, this contrast supports my proposal that when DP<sub>ref</sub> or DP<sub>pred</sub> does not have its case feature valued by T, it is realized with default case, i.e. accusative in Danish and English, nominative in Swedish.<sup>19</sup>

Concretely, I assume that default case is effected by an interface rule, which assigns the default case of the language in question to any DP that reaches spell-out without having its case feature valued:

(55) DEFAULT CASE RULE (Danish/English)

Value any instance of an unvalued case feature with accusative.

(56) DEFAULT CASE RULE (Swedish)

Value any instance of an unvalued case feature with nominative.

Unless the application of these default case rules is restricted, they will undermine the traditional account of the ungrammaticality of sentences like (57)–(59) in terms of violations of the Case Filter.

(57) \*The sun is likely that will shine.

(58) \*It is likely the sun to shine.

(59) \*I would like very much Susan to get the job.

However, recent work, including McFadden (2004) and Landau (2005), has questioned this understanding and argued that (the lack of) abstract case plays no decisive role in these derivations; they all fail for independent reasons. My aim here is not to argue against the Case Filter, but only to suggest that the default case rules proposed above needn’t make havoc with the rest of syntax.

Though it does not bear directly on the analysis of specificational clauses, it is worth noting that the case contrast extends to equatives. Where Danish has nominative subject and accusative complement, as in (60), Swedish has nominative subject and nominative complement, as (61) shows. Out of context such equatives are rather odd, but if we imagine a case of mistaken identity, say on a TV show or film, then (60) and (61) could be uttered by a helpful co-watcher, along with some pointing, to clear up the issue (thanks to Kersti Börjars for suggesting this scenario).

<sup>18</sup>For reasons that I do not understand, the post-copular pronouns needn’t bear contrastive stress in this context.

<sup>19</sup>This is in contrast with the conclusions reached by Maling and Sprouse (1995) and Schütze (2001:235–238).

- (60) HUN er ikke {HENDE / \*HUN}. [Danish]  
 she is not her / she  
 ‘*SHE isn’t HER.*’
- (61) HON är inte {\*HENNE / HON}. [Swedish]  
 she is not her / she  
 ‘*SHE isn’t HER.*’

This seems to indicate that the DP that does not raise to Spec-TP in equative clauses is also realized with default case, suggesting that in copular clauses generally (predicational, specificational, and equative) there is no accusative case assigner, which in turn correlates with the absence of an agentive  $\nu$ . Moreover, the example in (61) shows that there is nothing inherently wrong with having two nominative DPs in a copular clause in Swedish. This is important because, according to my analysis, this is exactly the situation in a Swedish specificational clause: the subject,  $DP_{pred}$ , is valued nominative by T, and the predicate complement,  $DP_{ref}$ , is nominative by default, since there is no accusative case assigner around. We do not see both nominatives overtly in specificational clauses, because the Swedish predicative pronoun *det* (“it-NEU”) does not show case distinctions. In the absence of morphological evidence, one might be sceptical about the claim that both DPs are nominative in Swedish (in particular, that the predicative subject DP is nominative) and suggest instead that the differences in overt case in Danish and Swedish specificational clauses are indicative of radically different derivations. The fact that two overtly nominative DPs are possible—and in fact obligatory—in the copular clause in (61) indicates that my claim that Swedish specificational clauses involve two nominative DPs is not problematic, which removes one potential objection to my default case approach.

So far I have given one convergent derivation for a predicational clause and one convergent derivation for a specificational clause. The latter illustrated the role of the topic feature in allowing the predicative DP to move to subject position, whereas I abstracted away from the topic feature in the derivation of the predicational clause. It is time to investigate more systematically under which conditions (i.e. given which numerations) we get one or the other clause and to consider the role of the topic feature in more detail. This is the business of the next section.

#### 4.5 The markedness of specificational clauses

As we saw above, the distribution of the topic feature (on the two DPs and on T) plays a key role in the derivation of a specificational clause and, hence, in determining whether a given derivation will result in a predicational or a specificational clause. There are many more possible numerations than the two I considered above. Schematically, we can represent the relevant ones as in table (62), distinguishing whether  $DP_{ref}$  and/or  $DP_{pred}$  bears an interpretable topic feature, and whether T bears an uninterpretable topic feature. For all of the numerations, I assume that each DP also bears an uninterpretable case feature, that T bears the nominative case feature, as well as the standard EPP feature, and that head movement (of  $\nu_b$  to T) takes place as in the derivations given above.

(62)	NUMERATION	$DP_{ref}$	$DP_{pred}$	T	CLAUSE
	1. = (41)–(42)	—	—	—	Predicational
	2.	—	—	<i>utop</i>	*
	3.	—	top	—	Predicational
	4. = (45)–(46)	—	top	<i>utop</i>	Specificational
	5.	top	—	—	Predicational
	6.	top	—	<i>utop</i>	Predicational
	7.	top	top	—	Predicational
	8.	top	top	<i>utop</i>	Predicational

I will not give all the derivations in full, but I will go through them one by one and try to bring out why it has the outcome that the table claims it has and what the empirical consequences are.

The first numeration is the one that underlies the derivation in (41)–(42) in section 4.3. Neither of the two DPs bears an interpretable topic feature, nor does T bear the uninterpretable topic feature. As discussed above, this gives rise to a predicational clause, because the referential DP is closest to T (it asymmetrically *c*-commands  $DP_{pred}$ ) and it can satisfy all features on T. This is the sense in which  $DP_{ref}$  is structurally favored for subject position by the configuration of PredP. The result is a predicational clause which can be felicitously used in a context where neither DP is interpretable as topic.

In the second numeration, T bears the uninterpretable topic feature, but neither DP bears an interpretable topic feature. This means that [*utop*] on T goes unchecked and the derivation crashes at the interface with the Conceptual–Intentional system, since the structure to which the semantic interface rules apply cannot contain any features not interpretable at that level.

In the third numeration, the predicative DP bears an interpretable topic feature, but T does not bear *utop*. This means that the structurally favored  $DP_{ref}$  can check all relevant uninterpretable features on T (*unom* and EPP), and—to satisfy the EPP— $DP_{ref}$  moves to Spec-TP, resulting in a predicational clause. The topic feature on  $DP_{pred}$  is interpretable, so it does not have to be eliminated in the syntactic derivation. Instead, it has an effect on the interpretation, namely that the resulting predicational clause is felicitous in a context where the predicative, but not the referential DP, is interpretable as topic. This is the situation in the question–answer pair in (63), where the question sets up the referential DP as focus and the predicative DP as topic:

- (63)        Q: Who is the winner?  
               A: JOHN is the winner. [predicational]

The fourth numeration is the one that underlies the derivation in (45)–(46) above. As in the third numeration, only the predicative DP bears an interpretable topic feature, but, crucially, T bears an uninterpretable topic feature. This means that  $DP_{ref}$  cannot eliminate all features on T, since it cannot eliminate *utop*. Instead T enters into an Agree relation with  $DP_{pred}$ , and  $DP_{pred}$  moves to Spec-TP, satisfying the EPP and eliminating the topic feature on T. The result is a specificational clause where only the predicative (i.e. subject DP) is interpretable as topic. A natural context in which such a structure might be used is the question–answer pair in (64), where the predicative DP is given in the question:

- (64)        Q: Who is the winner?  
               A: The winner is JOHN. [specificational]

Note that this is the same discourse context as that provided for the predicational clause arising from the third numeration (see (63) above). Empirically, this is appropriate because both types of answers are felicitous in this context. Theoretically, it shows that the presence of an uninterpretable topic feature on T is not determined by discourse context (in fact it is not even clear to me what that would mean). Whereas there is a relatively direct relation between the presence of interpretable topic features and discourse context—the presence or absence of [*top*] on a DP has certain effects on its interpretation which in turn restricts the contexts in which the associated sentence can be used felicitously—there is no inherent connection between discourse context and the presence of an uninterpretable topic feature on T. [*utop*] is a purely syntactic feature, which has a clear and discernible effect on the derivation (its presence is the sole difference between the third and fourth numerations, which give rise to different surface structures), but its distribution is not predictable from discourse context or from anything else.

What the grammar does do is restrict the set of structures that are grammatical and, via interpretable features like [top], impose some restrictions on the interpretation of these structures, which in turn restricts the contexts in which these structures can be used felicitously. The grammar, however, never determines what a speaker is going to say or how she/he is going to say it. Paraphrasing Bolinger (1972), we can say that “Inversion is predictable (if you are a mind reader)”. In a diachronic perspective, we can view the existence of an uninterpretable topic feature on T as a grammaticalization of functional pressures (Chomsky 2000:120–121), but its function in the synchronic grammar is purely mechanical and divorced from any notion of discourse context. Thus topic–focus structure does not fully determine syntactic structure here, though it narrows down the contexts of choice, in particular the contexts in which a specificational structure is felicitous.<sup>20</sup>

In the fifth numeration,  $DP_{ref}$ , but not  $DP_{pred}$ , bears an interpretable topic feature, and there is no uninterpretable topic feature on T. As usual, T attracts the closest DP that can satisfy all of its uninterpretable features, which, in this case, is  $DP_{ref}$ . The result is a predicational clause. Since  $DP_{ref}$  bears a topic feature, the resulting predicational clause is felicitous in a context where the referential DP is given in the question, as in (65).

- (65) Q: What is John?  
 A: John is the winner. [predicational]

The sixth numeration is identical, except that T bears the uninterpretable topic feature. This has no overt effect on the outcome of the derivation, since  $DP_{ref}$  bears an interpretable topic feature, so it is able to check all the uninterpretable features on T and therefore raises to Spec-TP, resulting in a predicational clause, which is indistinguishable from the one arising from the derivation from the fifth numeration. Since the distribution of the interpretable topic feature is the same in the two derivations, the resulting clause is felicitous in the same context. This allows us to understand why the specificational answer in (66) is no good: since the question sets up the referential DP as topic, there is nothing to favor the predicative DP as subject, which is necessary for  $DP_{pred}$  to overcome the structural disadvantage conferred on it by the configuration of PredP.

- (66) Q: What is John?  
 A1: John is the winner. [predicational]  
 A2: #The WINNER is John. [specificational]

The last two numerations form a similar pair, except that here both DPs bear the interpretable topic feature. In numeration seven, T does not bear the uninterpretable topic feature, and the by now familiar result is that the closest DP, i.e.  $DP_{ref}$ , moves to subject position and we have a predicational clause. In numeration eight, T bears the uninterpretable topic feature. Since both DPs bear an interpretable topic feature, either of them is in principle capable of checking all features on T: they are both Ds (necessary for checking EPP), they both have an unvalued case feature (which can be valued by and check the nom feature on T), and they both have an interpretable topic feature which can eliminate the uninterpretable topic feature on T. However, the configuration of PredP once again favors the  $DP_{ref}$ , and the result is a predicational clause.

<sup>20</sup>Similarly, Padučeva (1979) and Sgall (1995) argue that a distinction between, on the one hand, subject vs. predicate and, on the other hand, topic vs. focus must be maintained in copular-like clauses, even in languages like Russian and Czech where subject and predicate are harder to identify.

## 4.6 The role of T

Under the proposal presented above, T plays a key role in the derivation of a specificational structure, since it is the [*utop*] feature on T that motivates and enables attraction of the predicative DP to initial position, causing a reversal of surface order of the two DPs.

Empirical support for this part of the proposal comes from the contrast between (67) and (68):

- (67) a. I consider [Susan the best cook in the county].  
 b. \*I consider [the best cook in the county Susan].
- (68) a. I consider [Susan to be the best cook in the county].  
 b. I consider [the best cook in the county to be Susan].

In the examples in (67), the complement of *consider* is a PredP and only the word order associated with the structure of PredP (name preceding description) is possible. In the examples in (68), the complement of *consider* is a non-finite TP that contains a  $\nu_b$ P, as indicated by the presence of *to* and *be*, respectively. In this case, both word orders are possible. Given the analysis proposed above, we can understand the contrast in terms of the presence vs. absence of T in the embedded structures: if T is absent, as in (67), there is also no uninterpretable topic feature to drive the movement of the predicative DP to a higher position, hence no way to derive the word order in (67b). If T is present, it can, presumably, bear the [*utop*] feature, which would allow for the derivation of (68b) under the same circumstances as in the finite TP derivations discussed above (i.e. when  $DP_{pred}$  bears an interpretable topic feature and  $DP_{ref}$  does not).

Further evidence for the enabling role of T in deriving specificational structures can be found in the domain of absolute constructions (in the sense of Stump 1985), which can be realized either as a small clause introduced by *with*, as in (69), or as a gerundive copular construction with or without an accompanying preposition, as in (70):

- (69) With [*Joyce absent*], there isn't much point in continuing this discussion.
- (70) (With) [*Joyce being absent*], there isn't much point in continuing this discussion.

Given my analysis of (67) above, it is natural to identify the bracketed constituent in (69) as PredP, whereas the gerundive morphology in (70) suggests the presence of a TP (see Roberts and Roussou 2002:127; Landau 2002:485–486; and especially Miller 2002:42–48 and Stowell 1982). If so, we expect gerundive absolutes to allow specificational word order in cases where both XPs are nominal, whereas the non-gerundive absolute construction should not allow this. This expectation is borne out by the data below:<sup>21</sup>

- (71) a. With [ $P_{PredP}$  Joyce the only available candidate], there isn't much point in continuing this discussion. [predicational]  
 b. \*With [ $P_{PredP}$  the only available candidate Joyce], there isn't much point in continuing this discussion. [specificational]
- (72) a. (With) [ $T_P$  Joyce *being* the only available candidate], there isn't much point in continuing this discussion. [predicational]  
 b. (With) [ $T_P$  the only available candidate *being* Joyce], there isn't much point in continuing this discussion. [specificational]

<sup>21</sup>Some speakers preferred (72a-b) without the initial *with*, hence the parentheses. All 15 speakers confirmed the key contrast between (72b) and (71b). One speaker did not accept (71a) or (71b), so for his dialect the prediction cannot be tested.

As (72) shows, the TP construction allows either order, whereas the PredP construction in (71) allows only the base-generated predicational order.

Finally, we may note that both orders are possible in a subjunctive CP complements to verbs like *demand*:

(73) I demand  $[_{CP}$  that Joyce be the only person who is allowed to use this pillow]. [predicational]

(74) I demand  $[_{CP}$  that the only person who is allowed to use this pillow be Joyce]. [specificational]

At first glance (74) might appear to threaten the hypothesized connection between the presence of T and the possibility of specificational order, since the copula appears in its bare form. There are, however, good reasons to believe that the embedded clauses contain a TP projection below CP, even though the T head has no independent morphological reflex (Roberts 1985:40–41, fn. 12; Potsdam 1998:137–139; Lasnik 1999:114–115). If so, we can understand (74) as the outcome of a derivation where this T head bears an uninterpretable topic feature, and the definite description, but not the name, bears an interpretable topic feature.

## 5 Discussion

Having laid out the analysis, I want to discuss some questions that arise within the Minimalist framework, as well as some that arise from empirical considerations. Much of the discussion can be seen as a starting point for further research, in particular on how my analysis of copular clauses relates to the current understanding of clause structure and featural interaction within the Minimalist Program.

### 5.1 Locality and Economy

In the derivations discussed above, I assume that when either DP is a possible goal for satisfying the uninterpretable features on T (i.e. when both DPs bear the features necessary to eliminate all relevant features on T), T always enters into an Agree relation with  $DP_{ref}$ , as in the derivations based on numerations 1, 3, 5, 7, and 8 in (62). I take this to be a locality effect;  $DP_{ref}$  is closer to T than  $DP_{pred}$ , since  $DP_{ref}$  asymmetrically c-commands  $DP_{pred}$ . On the other hand, when the closer  $DP_{ref}$  cannot satisfy all uninterpretable features on T, such as in derivation 4, I assume that T enters into an Agree relation with the lower  $DP_{pred}$ , and it checks all relevant features on T [EPP, *unom*, *utop*]. While this seems like a natural notion of locality—Agree with the closest goal that can satisfy all relevant features—there are complications arising from other work within the Minimalist Program, in particular the notions of ‘defective intervention’ and ‘equidistance’.

Defective intervention has it that an intervening goal (defined in terms of c-command) will block access to a lower goal, even if the intervening goal is defective in the sense of not bearing an unchecked feature matching that of the probe (Chomsky 2000:123). This situation is illustrated schematically in (75), where  $\alpha$  is the probe,  $\beta$  is the inactive (defective) goal,  $\gamma$  is the active (non-defective) goal, and  $>$  represents c-command.<sup>22</sup>

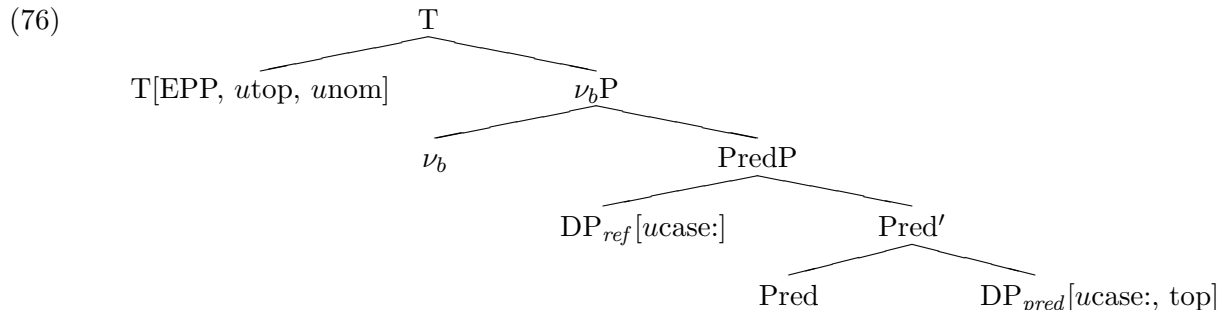
(75)  $\alpha[uF] > \beta[F] > \gamma[F]$

Chomsky suggests (p. 128) that defective intervention is the source of the *Wh*-Island Constraint: the [Q] feature of the already checked *wh*-phrase (=  $\beta$  in (75)) bars the probe ( $\alpha$ ) from entering into an Agree

<sup>22</sup>The matching features on  $\beta$  and  $\gamma$  can be interpretable (as in the *Wh*-Island scenario discussed immediately below (75)) or uninterpretable (as in the EPP checking after object shift case discussed below (76)).

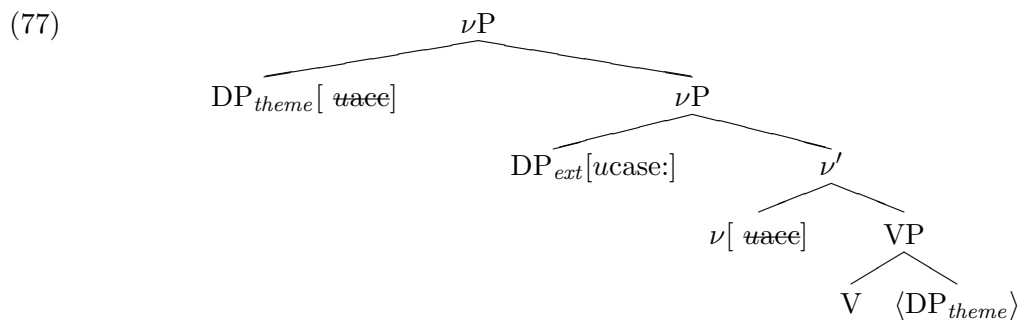


relation with the lower goal ( $\gamma$ ) which bears an unchecked [Q] feature. Since the [Q] feature on  $\beta$  is not active,  $\beta$  cannot move or check the uninterpretable features on  $\alpha$  and the derivation crashes. Chomsky further appeals to defective intervention in a range of other cases involving complex interactions between (long-distance) agreement, expletives, raising, and quirky case (pp. 129–131). The notion of defective intervention raises a problem for my analysis of specificational clauses, since  $DP_{ref}$  intervenes between T and  $DP_{pred}$ . I have been assuming that in the relevant configuration, given in (76), the intervening  $DP_{ref}$  does not bar T from entering into an Agree relation with  $DP_{pred}$ , because  $DP_{ref}$  cannot check [utop] on T (I have simplified the structure by leaving out the representation of head movement):



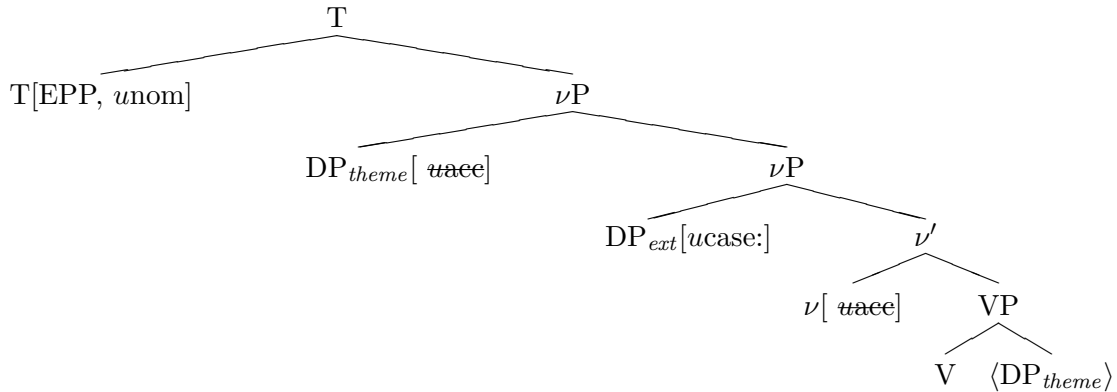
If defective intervention is real, however,  $DP_{ref}$  would bar T from entering into an Agree relation with  $DP_{pred}$ , and the derivation would crash, because *utop* on T is not eliminated. This would leave us no way of deriving specificational clauses at all, clearly an unacceptable outcome.

There are, however, other cases where it has been argued that we need to allow the probe to skip a potential, but defective, goal and access a lower, non-defective, goal. One such case is EPP checking after object shift (Chomsky 2000:130). Assume that we have created a structure like (77), where  $DP_{ext}$  is the external argument Merged as the (first) specifier of  $\nu$ , and  $DP_{theme}$  is the direct object which has moved to the second specifier of  $\nu$  and been assigned accusative case by  $\nu$ . ( $DP_{ext}[ucase:]$  cannot check accusative case on  $\nu$ , since it is not c-commanded by  $\nu$ ):



We then Merge finite T with its uninterpretable nominative and EPP features:

(78)



Given the definition of defective intervention above,  $DP_{theme}$  should block T from entering into an Agree relation with  $DP_{ext}$ , but we need this to be possible for  $DP_{ext}$  to raise to subject position.

To overcome this tension, it has been suggested that in certain configurations two goals are equidistant from a probe, and then defective intervention does not come into play. (If two goals are equidistant from a probe, neither intervenes between the probe and the other goal.) The broad notion of equidistance is that goals immediately contained within the projection of the same head are equidistant to a higher probe (Chomsky 2000:122–123).<sup>23</sup> For the object shift case in (78), this means that the two specifiers of  $\nu$  are equidistant from T, and T can enter into an Agree relation with the inner specifier, as desired. It would also solve the problem in (76), since the broad notion of equidistance would render  $DP_{ref}$  and  $DP_{pred}$  equidistant to T (the two DPs are both immediately contained in the projection of Pred), allowing T to enter into the required Agree relation with  $DP_{pred}$ . However, adopting this notion of equidistance would entail that  $DP_{pred}$  is *always* as close to T as  $DP_{ref}$ , and we would lose the result that other things being equal,  $DP_{ref}$  moves to Spec-TP, which in turn would leave us, in effect, with Moro’s (1997) analysis, where either DP is free move to subject position. This would be a setback. We thus seem to have arrived at a situation where we need equidistance to be able to derive specificational clauses at all, but if we adopt equidistance, we lose the asymmetry between predicational and specificational clauses.

The resolution, I propose, is to assume that defective intervention effects are not real (rather, they are the result of other interactions, plausibly related to the properties of phases), and that there is no equidistance (if there is no defective intervention, we do not need equidistance!). This is in line with recent work by Ndayiragije (1999) and Doggett (2004), who argue that the notion of equidistance has no place in the theory of locality, and provide alternative analyses for some of the cases that have been argued to require equidistance, including OSV order in Bantu languages and Locative Inversion in English. Under these assumptions, T can Agree with  $DP_{pred}$  in (76), but not in derivations where  $DP_{ref}$  can check all features on T (the ones corresponding to numerations 1, 3, 5, 6, 7, and 8 in (62)). This allows us to maintain the key result that specificational clauses are possible but only arise when  $DP_{ref}$  cannot check all relevant features of T. It also resolves the tension between object shift and EPP checking in (78): if there are no defective intervention effects,  $DP_{theme}$  becomes irrelevant for T, since the case feature on  $DP_{theme}$  has already been checked, rendering it inactive for further case checking. Consequently, T can Agree with  $DP_{ext}$ . This leaves us with the definition of closeness in (79), which is the one argued for by Doggett (2004).

(79)

CLOSENESS

$$\beta \text{ is closer to } \tau \text{ than } \alpha \text{ if } \tau \text{ c-commands } \beta \text{ and } \beta \text{ c-commands } \alpha. \quad [\text{Doggett 2004:7, (2b)}]$$

<sup>23</sup>There are complications arising from head movement, via the definition of minimal domain, but these are not directly relevant here, so I will ignore them.

There is another, directly related, issue that needs to be clarified. In the discussion above, as well as in the derivations given in the preceding sections, I tacitly assumed that, when co-present on T, *unom*, EPP, and *utop* were always checked by one and the same DP. This is not a trivial assumption, since it has been argued that in other situations, including expletive constructions and constructions with quirky subjects, nominative case checking is divorced from checking of the EPP feature. If this were possible in (76), we could imagine that T would Agree with  $DP_{pred}$  for EPP and *utop*—causing  $DP_{pred}$  to raise to Spec-TP—but would enter into an Agree relation with  $DP_{ref}$  for the purposes of case checking.  $DP_{pred}$ , failing to get case by other means, would receive default accusative case at spell-out. This hypothetical derivation would result in a specificational clause where the post-nominal DP is nominative as in (80):

(80) \*The winner is he.

Since this is ungrammatical, in English and in Danish, I assume that this kind of split checking is not possible, and that once the probe–goal relationship is established, the three features Agree to the maximal extent possible. Intuitively, we can think of this as a “clumping” effect: *unom*, EPP, and *utop* clump together on T and must be checked in unison. For the derivation in (76) this means that if  $DP_{pred}$  checks *utop* and EPP, it must check *unom* also, and the ungrammatical (80) is not generated. Theoretically, we can understand clumping as a requirement on the Agree operation, as articulated in (81).

(81) CLUMPING

Given a head H bearing uninterpretable features F:

- i. Search the c-command domain of H (down to the edge of the next lowest phase) for a syntactic object whose label (head) contains features which would allow the elimination of the uninterpretable features of H
- ii. Perform the Agree operation between H and the closest syntactic object whose label (head) allows elimination of all the uninterpretable features of H. Otherwise:
- iii. If no head is found whose featural content allows elimination of all uninterpretable features on H, perform the Agree operation between H and the closest syntactic object whose label (head) allows elimination of some of the uninterpretable features of H.

In the derivation for a specificational clause (see (45)), H is T, and F is [*unom*, EPP, *utop*]. The closest syntactic object whose label (head) allows elimination of all three features on T is  $DP_{pred}$ , since  $DP_{ref}$  cannot check *utop*. By clause (ii) of (81), T enters into an Agree relation with  $DP_{pred}$ , and  $DP_{pred}$  eliminates all three features and moves to Spec-TP. In derivations where  $DP_{ref}$  can check all relevant features on T (those arising from numerations 1, 3, 5, 6, 7, 8 in (62)),  $DP_{ref}$  enters into the Agree relation with T and checks all features (because it is the *closest* syntactic object whose head allows elimination of all uninterpretable features on H). The third clause comes into effect in the derivations of expletive constructions and constructions with quirky subjects, where, at least according to some analyses, there is no syntactic object whose head allows elimination of all the relevant features on T.

The definition of clumping would also subsume Chomsky’s proposal (2000:124) that checking of  $\Phi$ -features on T is a “one fell swoop” operation which affects the set of  $\Phi$ -features as a unit, precluding different  $\Phi$ -features on T from Agreeing with different DPs (e.g. the person feature Agreeing with one DP and the number feature Agreeing with another DP).

I end this section with a brief discussion of how the conception of the interaction of locality and maximization of features checking argued for above relates to proposals about locality and economy made

in Pesetsky and Torrego (2001) and the analyses of OSV order and Locative Inversion in Ndayiragije (1999) and Doggett (2004).

**The relative priority of locality and economy** In their analysis of subject/non-subject asymmetries (with respect to *that*-trace effects, *that*-omission, and T-to-C movement), Pesetsky and Torrego (2001) rely on the economy condition in (82) (their (6), p. 359):

(82) ECONOMY CONDITION

A head H triggers the minimum number of operations necessary to satisfy the properties (including EPP) of its uninterpretable features.

Following Chomsky (1995:296), they also assume a locality condition on Attract (aka Move), which they formulate as in (83) (their (10), p. 362), where closeness is defined as in (79) above.

(83) ATTRACT CLOSEST F (ACF)

If a head K attracts feature F on X no constituent that bears F is closer to K than X.

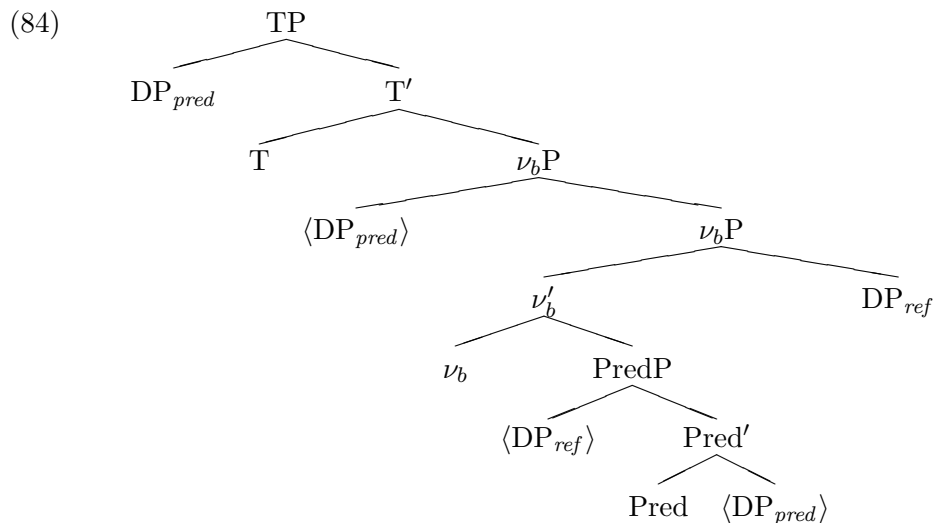
These two conditions separate the opposing forces integrated in the definition of Agree in (81): on the one hand the number of operations should be minimized, on the other hand, the probe should Agree with the closest goal. As Pesetsky and Torrego note (p. 410, fn. 36), the logic of their analysis requires the locality condition in (83) to “outrank” the economy condition in (82), in the sense that “an attractor [i.e. probe] picks the attraction pattern that involves the fewest operations (Economy) from the set of attraction patterns that satisfy ACX [a strengthened version of (83)]”. The logic of my analysis requires the opposite “ranking”: Economy, in the sense of minimizing the number of Agree relations entered into by T, must outrank Locality in order to attract  $DP_{pred}$  in the derivation of a specificational clause. The difference is clear when comparing clause ii. of (81) with the quote from Pesetsky and Torrego above.

While I am not in a position to offer any real resolution of this apparent conflict, it is interesting to note that in the data examined by Pesetsky and Torrego, the competition for attraction is between a head (T) and a maximal projection (the DP in Spec-TP), whereas in the data examined above it is between two maximal projections ( $DP_{ref}$  and  $DP_{pred}$ ). The category of the probe also differs (C vs. T), but it is harder to imagine how that could differentiate the two cases.

**Focus-driven word order reversal** Ndayiragije (1999) argues that the alternation between SVO and OVS order in Kirundi active clauses is not the result of subject and object being equidistant from T as co-specifiers of  $\nu$  (as proposed by Ura 1996). Rather SVO is the default realization (signalling broad focus or all new interpretation), whereas OVS is the result of rightward focus movement of the subject (in the sense of external argument) followed by case-driven movement of the object (the internal argument) to Spec-TP. The OVS structures are associated with narrow focus on the post-verbal subject DP, just like specificational clauses are associated with focus on the post-copular DP. The main empirical difference between the two cases is that OVS order is not restricted to copula verbs in Kirundi. The main analytical difference is that the feature responsible for the marked OVS order in Ndayiragije’s analysis is an uninterpretable focus feature (associated with a Focus head situated between T and V), whereas the feature responsible for specificational word order under my analysis is an uninterpretable topic feature on T. The focus movement has the effect of moving the closer DP out of the way, which in turn allows the other DP to move to subject position.

One of the central concerns of Doggett (2004) is to show that dispensing with equidistance and adopting the non-relativized definition of locality in (79) above provides for an attractive analysis of

locative inversion in English. As noted in section 3.3, specificational clauses share properties with non-DP-inversions, including locative inversion, and Doggett’s (2004) analysis of locative inversion in fact suggests an alternative analysis of specificational clauses, one where movement of  $DP_{pred}$  to Spec-TP is preceded, and enabled, by movement of  $DP_{ref}$  to a right-hand specifier of  $\nu_bP$ , followed by movement of  $DP_{pred}$  to an second (outer) left-hand specifier of  $\nu_bP$ . Schematically, the derivation would be as in (84) (again I ignore movement of  $\nu_b$  to T for clarity of exposition).



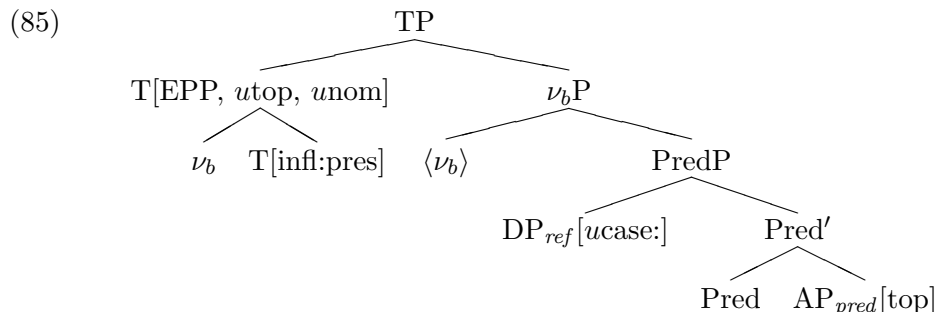
Though more complicated (in the sense of involving more operations), there are three potential advantages to this alternative analysis. First, it does not rely on the controversial proposal that Economy (“minimize number of operations”) overrides Locality (“Attract Closest”), since the movement of  $DP_{ref}$  to Spec- $\nu_bP$  removes it from the search domain of  $\nu_b$ , enabling  $\nu_b$  to attract  $DP_{pred}$  under strict locality, which in turn makes  $DP_{pred}$  the closest goal for T. Second, it is compatible with the claim made in Legate (2003) that all  $\nu$ Ps are phases (in the sense of Chomsky 2001) in a way that my proposal is not. Third, the movement of  $DP_{ref}$  could be seen as an instance of focus movement (driven by an uninterpretable focus feature of  $\nu_b$ ), hypothesizing an even closer connection between the syntactic derivation of specificational clauses and their information structure.

It is also worth noting that what is responsible for the reversal of the two DPs in the Doggett-style analysis is the rightward movement of  $DP_{ref}$ , which in turn enables leftward movement of  $DP_{pred}$  to Spec- $\nu_bP$ . Both of these movements are independent of a dominating T projection. One could therefore ask whether this analysis is able to account for the restrictions on specificational word order in embedded contexts discussed in section 4.6. It seems that it is, because in all five embedded contexts considered there (examples (67)–(74)), T and  $\nu_b$  are either both present or both absent. The (im-)possibility of specificational word order is therefore equally accounted for by an analysis where  $\nu_b$  is the enabling factor as one where T is the enabling factor. The decisive case would be an embedded  $\nu_bP$  which lacks a T projection. Under the analysis sketched in (84), we expect specificational order to be possible. Under the analysis proposed in this paper, we expect it to be impossible.

Another difference between the two analysis is the surface position of  $DP_{ref}$ : in the analysis developed in section 4, it surfaces as a left-hand specifier of PredP; in (84) as a right-hand specifier of  $\nu_bP$ . While these are clearly different structural positions, I have not been able to devise any tests to tell these apart empirically. Word order evidence is hard to come by, since it requires isolating an element that reliably intervenes between the two (e.g. by occupying right-adjoined to PredP) and so far I have not been successful in finding such an element.

## 5.2 Non-DP predicate complements

Returning to the analysis developed in section 4, we must ask why non-DP complements to Pred cannot raise to Spec-TP when topic. For instance, why can the AP not raise to Spec-TP in (85), yielding (86)?



(86) \*Tired<sub>[top]</sub> is him.

Under the terms of my analysis there are at least two reasons why this derivation will not converge. First, the AP cannot satisfy the EPP feature on T, since the category feature of the AP is A, and the EPP feature requires T to enter into an Agree relation with a D feature. Intuitively, we can say that the EPP on T is category specific in the sense that it can only be satisfied by (a) D(P). (This is the intuition underlying the construal of the EPP as an uninterpretable D feature on T, e.g. by Adger (2003:215, 253).)<sup>24</sup>

The second reason is that even if the AP could, exceptionally, satisfy the EPP feature on T, it could not check the case feature on T, since it does not bear a case feature itself. Furthermore, given that EPP, *utop*, and *unom* clump together on T, it is also not possible for AP to Agree with T for EPP and *utop*, but leave the checking of *nom* to DP<sub>ref</sub> which does bear an uninterpretable case feature. By clause (iii) of (81) the DP, being closer to T than the AP, would check the EPP feature on T. This is a good result, insofar as (87) is also impossible:

(87) \*Tired<sub>[top]</sub> is he.

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<sup>24</sup>This conception of the EPP feature on T leaves unresolved the old question of what to say about apparent cases of non-DP subjects, such as (i).

- i. Under the desk is a good place to hide.

I do not at this point have anything interesting to say about the general issue, but it is important to note that (i) is predicational, not specificational in meaning: it is being predicated of (the space) under the desk that it is a good place to hide, not vice versa (though see Nishihara 2003:396ff for a different view). The corresponding specificational clause would be (ii), which has a DP subject:

- ii. A good place to hide is under the desk.

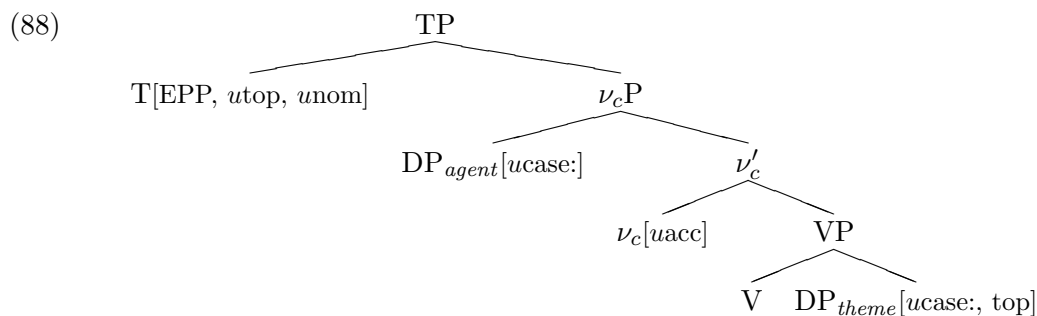
Neither of these examples challenges my claim that a non-DP complement to Pred cannot raise to Spec-TP, which is what is needed to rule out (86). The part of my analysis that (i) directly challenges is that the specifier of Pred is always a DP, which I have been assuming more or less tacitly, though see the brief discussion above (34) in section 4.2. Conversely, (ii) challenges the generalization that the predicate complement (i.e. post-copular XP) of a specificational clause is always referential, but that was only intended as a claim about specificational clauses involving two DPs, since it appears to be blatantly false about specificational predicate complements of other categories, as in the example in (iii), from Rothstein (2001:252), where the complement is a non-finite clause:

- iii. A solution is to visit only Mary.

It is relevant to note that in cases of discourse-driven movement not involving T and its category-specific EPP feature, there is no discrimination against non-DP categories. Thus in discourse-driven movement to Spec-CP, such as topicalization or inversion (in Birner’s sense) the moved element (the goal) can be an AP, a PP, a (non-finite) VP, or an NP, as well as a DP.

### 5.3 Topic-driven movement in non-copular clauses

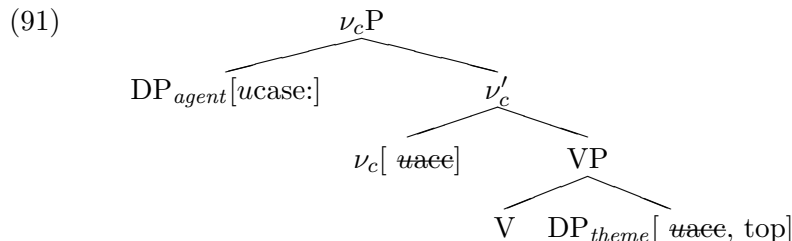
Another question to ask is why topic-marked DP-complements do not raise to Spec-TP in non-copular clauses. For instance, in the transitive structure in (88), why can the topic-marked  $DP_{theme}$  not move to Spec-TP, on analogy with  $DP_{pred}$  moving to Spec-TP in the derivation of a specificational clause (see (45)–(46) above)? If it could, it would yield the surface form in (89) with the meaning of (90), which is not a possible interpretation of (89).



(89) She<sub>[top]</sub> pushed him.

(90) He pushed her<sub>[top]</sub>.

The answer is that  $DP_{theme}$  cannot move to Spec-TP, because it is rendered inactive in virtue of having its case features valued by  $\nu_c$  before T is Merged:



This renders  $DP_{theme}$  inert for further featural interaction with T, because  $DP_{theme}$  cannot satisfy all uninterpretable features on T. Nor can  $DP_{agent}$ , but in that situation, by clause (iii) of the definition of clumping in (81), T enters into the Agree relation with the closest DP that can satisfy some of the uninterpretable features on T, and that is  $DP_{agent}$ .<sup>25,26</sup> In copular clauses, on the other hand,  $DP_{pred}$  does not check accusative case, since  $\nu_b$  does not assign accusative case (put another way, *be* is an unaccusative light verb). Since  $\nu_b$  does not assign accusative case, the DP complement to Pred,  $DP_{pred}$ ,

<sup>25</sup>As Chomsky (2000:123) puts it, “if structural Case has already been checked (deleted), the phrase P(G) [i.e. the goal whose case feature has been valued] is ‘frozen in place’, unable to move further to satisfy the EPP in a higher position”.

<sup>26</sup>It is important to note that this inactivity holds only with respect to T (since T has a case feature). If a C is Merged next, bearing an uninterpretable topic feature,  $DP_{theme}$  can enter into an Agree relation with C for the purposes of checking the topic feature on C and move to Spec-CP.

remains active and hence capable of entering into an Agree relation with T, in just those cases where  $DP_{pred}$  is able to check all three features on T and  $DP_{ref}$  is not.

This leaves the door open to [*utop*] playing a role in the derivation of passives. It has long been noted that passivization is sensitive to discourse factors, such as topicality and prominence (see Aissen 1999 and references cited there). *If* it turns out that those factors are the same as those governing inversions, in particular DP-inversion, then we would have the analytical tool already, namely [*utop*] on T. As there is no accusative case available in passives, the inactivity issue would, presumably, not arise. If viable, this move would let us capture an important similarity between specificational clauses and passive clauses: both involve a non-canonical subject. In the case of passives, a non-agent subject; in the case of specificational clauses, a non-referential subject.

## 6 Conclusion

I have proposed an analysis of predicational and specificational clauses that derives these from a uniform small clause structure, PredP. While they share this core PredP structure as well as a light verb copula, there is an important asymmetry: a specificational clause arises only under one particular feature distribution; one where the sole interpretable topic feature is on the predicative DP and T bears an uninterpretable topic feature, allowing the lower predicative DP to move to subject position. All other featural configurations lead to a predicational realization, the elsewhere case. By explicitly integrating information structural factors into the syntactic derivation, this analysis goes at least part of the way towards explaining the fixed topic–focus structure of specificational clauses and the flexible one of predicational clauses. I take this to be one of the main strengths of the analysis.

As it stands, however, this analysis of specificational clauses does not offer any account of so-called connectivity effects, illustrated in (92) and (93).

(92) The only one he likes is himself.

(93) The only thing I didn't get was any wine.

In (92) the antecedent for the reflexive, *he*, is buried inside the subject DP and hence not in a position to c-command the reflexive. Similarly in (93), the negation does not c-command the negative polarity item *any*. Moreover, under the analysis proposed here, there is no stage in the derivation at which the relevant licensing configuration obtains, in fact the subject containing the licensor originates below the reflexive/negative polarity item. A number of fairly successful analyses of connectivity effects have been offered (Jacobson 1994; Sharvit 1999; Heycock and Kroch 1999, 2002; den Dikken et al. 2000; Ross 2001; Heller 2002; Schlenker 2003), but as far as I can tell neither of them is straightforwardly compatible with the analysis of specificational clauses put forth here. Hence, one of the most important challenges for future work is to integrate the results of the present analysis with a plausible account of connectivity effects.

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