

Specification is not inverted predication*

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1 Introduction

This paper offers new evidence concerning the correct analysis of SPECIFICATIONAL copular sentences in the sense of Higgins (1979). Some examples are given in (1):^{1,2}

- (1) a. My best friend is Bill.
- b. The teacher is John.
- c. The girl that helps us on Fridays is Mary Gray.

Higgins (1979:213–4, 265–76) argues that specificational sentences are special in that they do not involve predication, at least not in the standard sense in which the VP predicates a property of the individual denoted by the subject. A specificational sentence is not “about” the individual denoted by the subject. In fact, Higgins argues, the subject of a specificational sentence does not refer to an individual. Rather it functions like the heading of a list, where the predicate complement specifies an item on the list. In this respect, specificational sentences are different from PREDICATIONAL copular sentences, as in (2), where the predicate complement is interpreted as a property of the individual denoted by the subject DP:

- (2) a. Bill is my best friend.
- b. John is the teacher.
- c. Mary Gray is the girl that helps us on Fridays.

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¹The example in (1a) is from Partee (2000:185), (1b) is from Heggie (1988b:129), and (1c) is from Higgins (1979:265). There are other types of specificational sentences, including pseudo-clefts (*What I don't like about John is his tie* (Higgins 1979:214)) and non-clefted sentences where the post-copula constituent is not a DP (*A solution is to visit only Mary* (Rothstein 2001:252)). Here I concentrate on examples of the form in (1) where the pre-copula constituent is a (definite or possessive) description and the post-copula constituent a name. Following Higgins (1979) I refer to the post-copula constituent as the PREDICATE COMPLEMENT.

²It would be more accurate to say that each of the sentences in (1) allows a specificational reading (in the sense of ‘specificational’ discussed below), since many copular sentences allow more than one reading. For instance, Higgins (1979:265–6) argues that (1c) is ambiguous between a specificational reading and, what he calls, an ‘identificational’ reading. Where a sentence is ambiguous, I use the term specificational (sentence) to refer to the specificational reading.

Higgins takes the distinction between specificational and predicational sentences to be a fundamental one, but offers no concrete analysis explaining the difference between the two. The issue is taken up by Williams (1983:427ff), who suggests that specificational copular sentences are derived from predicational structures by inversion around the copula, and this suggestion is given a formal type-theoretic semantic interpretation by Partee (1986). The inversion hypothesis is attractive in that it maintains a single, unambiguous *be* of predication, which is special only in allowing its two arguments to appear in either order (Partee 1986:355). Furthermore, it justifies Higgins's intuition that the initial DP in the sentences in (1) is not referential, given that it is a (fronted) predicate.

In the syntactic literature, there are two main interpretations of the inversion hypothesis. Both assume, following Stowell (1978), that the copula takes a small clause complement. Heggie (1988a; 1988b) argues that specificational copular sentences ('pseudo-equatives' in her terminology) are derived from predicational structures by A-bar movement of the predicate DP to clause-initial position, with movement of the finite verb to second position. I refer to this as the PREDICATE INVERSION analysis. The second line of analysis, developed by Andrea Moro in Moro (1997) and earlier work, holds that specificational sentence ('inverse copular sentences' in his terminology) are the result of the predicate of the small clause, rather than the subject, raising to Spec-IP. I refer to this as the PREDICATE RAISING analysis.

This paper is primarily concerned with the first analysis, the predicate inversion analysis, and aims to show that this is incorrect for specificational sentences. The argument is based on data from Danish, and takes the following form:

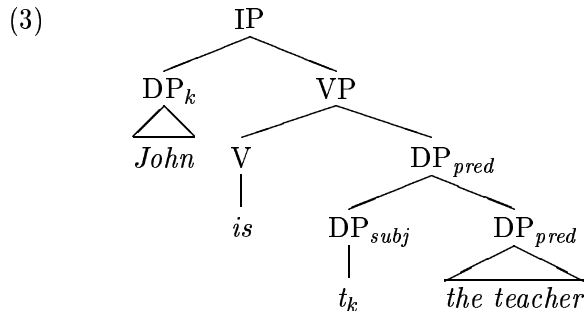
- i. Danish has predicational and specificational copular sentences.
- ii. Danish allows predicate inversion around the copula in predicational structures.
- iii. Predicate inversion produces a surface string similar to that of specificational copular sentences.
- iv. Despite surface similarities specificational copular sentences cannot be analyzed as inverted predicational structures.
- v. Thus, the distinction between predicational and specificational copular sentences cannot be reduced to predicate inversion around the copula.

In support of the claim in iv., I show (section 3) that inverted predicational copular sentences differ from specificational copular sentences with respect to negation (Jespersen 1924), anaphor binding, licensing of negative polarity items, and embedding. I argue that these differences follow from a difference in the syntactic position (and status) of the initial DP: in inverted predicational structures the initial DP is a fronted predicate complement appearing in Spec-CP, whereas in specificational structures the initial DP occupies Spec-IP and no A-bar movement takes place. The evidence presented against the predicate inversion analysis is compatible with Moro's predicate raising analysis, but also with the other, non-inversion, analyses of specificational sentences proposed by Heycock and Kroch (1999) and Rothstein (2001), and I will not argue in favor or against either of these.

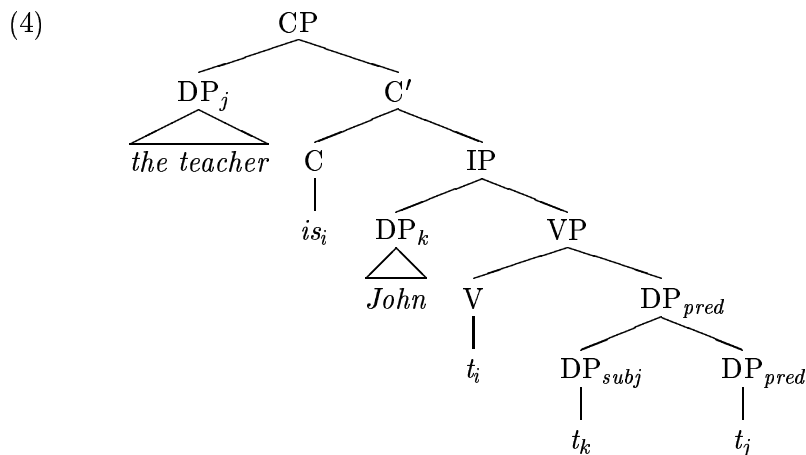
In section 4 I argue that this structural difference correlates with a difference in information structure. In an inverted predicational sentence the fronted constituent is contrastively focussed, whereas in a specificational sentence the initial DP is a topic, and the post-copula DP is focussed. These observations are compatible with the proposed syntactic structures, and with Higgins's characterization of specificational sentences as list structures. Before presenting the Danish data, I lay out the relevant details of the predicate inversion analysis in section 2.

2 Predicate inversion

Heggie (1988a:23–62) assumes, citing Stowell (1978), that the copula is a raising verb taking a small clause complement. The subject of the small clause is left-adjoined to the maximal projection of the small clause predicate (as in Stowell (1983)). The subject of the small clause raises across the copula to the subject position (Spec-IP) yielding the surface order of a predicational sentence (Heggie 1988a:47).³



Specificational copular sentences are derived from the same configuration, but in addition to the subject raising to Spec-IP the predicate DP moves to Spec-CP, because it is the focus (Heggie 1988a:66). Movement of the predicate DP to Spec-CP triggers subject–auxiliary inversion, analyzed as movement of the finite verb to C (Heggie 1988a:78):



It should be noted that Heggie assumes that there is also an equative reading of a sentence like *The teacher is John*. On this reading *the teacher* is not a predicate, but a uniquely referring expression, and the sentence “equate[s] the reference of two different NPs” (Heggie 1988a:94). The equative reading is associated with a different, non-inverted structure (Heggie 1988a:138). It might be that *The teacher is John* has such a reading. The crucial point here, argued at length in Higgins (1979:214–9), is that there is also a specificational reading of *The teacher is John*, which is neither equative nor predicational. I return to this in section 5.

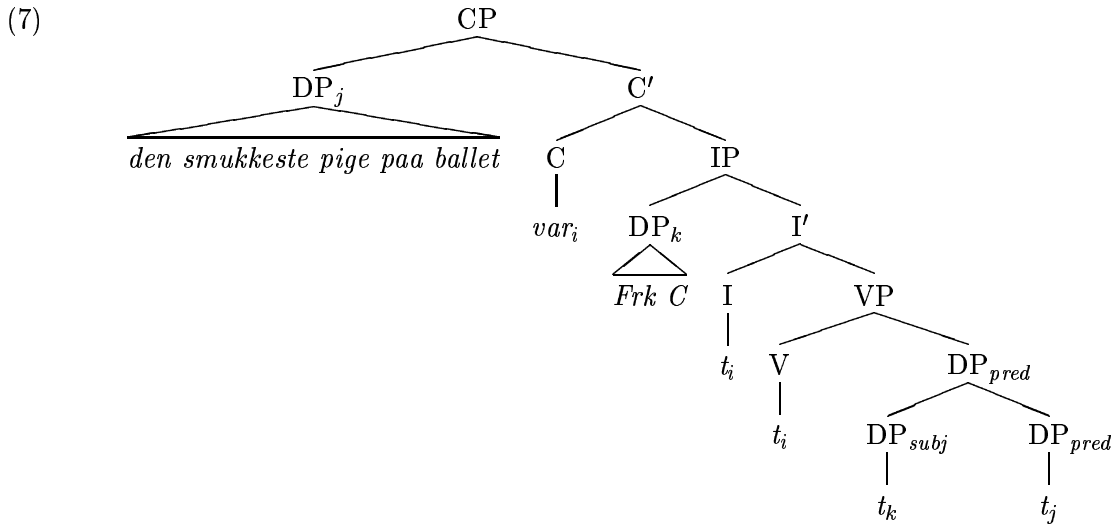
³I have updated Heggie’s terminology, changing NP to DP, and COMP to Spec-CP (see (4)).

3 Specification is not inverted predication

Danish has specificational and predicational copular sentences very similar to the English ones discussed above. The sentences in (5) are specificational, the sentences in (6) predicational (the (b) examples are from Jespersen (1924:153)).

- (5) a. Min bedste ven er Sparky.
 my best friend is Sparky
 ‘My best friend is Sparky.’
- b. Den smukkeste pige paa ballet var Frk. C.
 the prettiest girl at ball.DEF was Miss C.
 ‘The prettiest girl at the ball was Miss C.’
- (6) a. Sparky er min bedste ven.
 Sparky is my best friend
 ‘Sparky is my best friend.’
- b. Frk. C. var den smukkeste pige paa ballet.
 Miss C. was the prettiest girl at ball.DEF
 ‘Miss C. was the prettiest girl at the ball.’

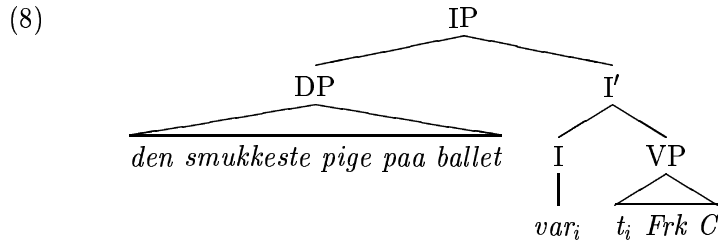
Applying Heggie’s predicate inversion analysis to (5b) yields the structure in (7), where the predicate complement (*den smukkeste pige paa ballet* ‘the prettiest girl at the ball’) has moved to Spec-CP. This movement serves to focus the predicate complement and is thus an instance of ‘topicalization of focus’, as opposed to ‘topicalization of topic’, in the terminology of Gundel (1988:143–6). I return to the discourse function of predicate inversion in section 4.⁴ The subject of the small clause (*Frk. C.*) has raised to Spec-IP, and the finite verb has moved to C yielding the verb second order characteristic of Danish and most other Germanic languages (Vikner 1995:39–46):



The central claim of this paper is that whereas (7) represents a legitimate derivation of the string in (5b) – it accurately represents the inverted predicational reading of (5b) – it is not the correct structure for

⁴The pragmatic effect of topicalizing the predicate complement is hard to convey in idiomatic English, and therefore generally not expressed in the free translations of the Danish examples of inverted predicational sentences.

the specificational reading of (5b). The specificational reading is associated with a non-inverted structure where the definite description is in Spec-IP and the name inside VP:



The tree in (8) manifests a claim about the surface structure of a specificational sentence. There are various proposals about the underlying structure of specificational sentences, which I just mention here. Moro (1997:31–44) argues that the underlying structure is identical to that of a predicational sentence (see (3)), but that it is the predicate of the small clause, and not the subject, that raises to Spec-IP to produce a specificational structure. Heycock and Kroch (1999) also assume that the DP in Spec-IP originates in a small clause complement to the copula. Contra Moro (1997), they argue that the small clause found in specificational sentences (which belong to the class of ‘equative’ sentences in their terminology) is of a different nature than the small clause found in predicational sentences. Finally, Rothstein (2001:§9) argues against a small clause analysis of specificational copular sentences, and suggests that the clause-initial DP is a subject, base-generated in Spec-IP, with the second DP a complement to the copula, base-generated as a sister of V. Each of these analyses is compatible with the surface structure in (8), and I will not discuss them further. What I want to establish here is that specificational sentences, unlike inverted predicational sentences, do not involve topicalization. In a specificational structure the initial DP (the description) is in Spec-IP and the second DP (the proper name) is inside VP. The tree in (8) represents this.⁵

Having laid out the relevant differences between the inverted predicational structure and the specificational structure, I now give four pieces of evidence that the string in (5b) is ambiguous between exactly these two structures. The first comes from the position of negation.

3.1 Negation

In Danish subject-initial matrix clauses, negation occurs immediately to the right of the finite verb, as in (9). Clause-final negation is impossible, as (10) shows.

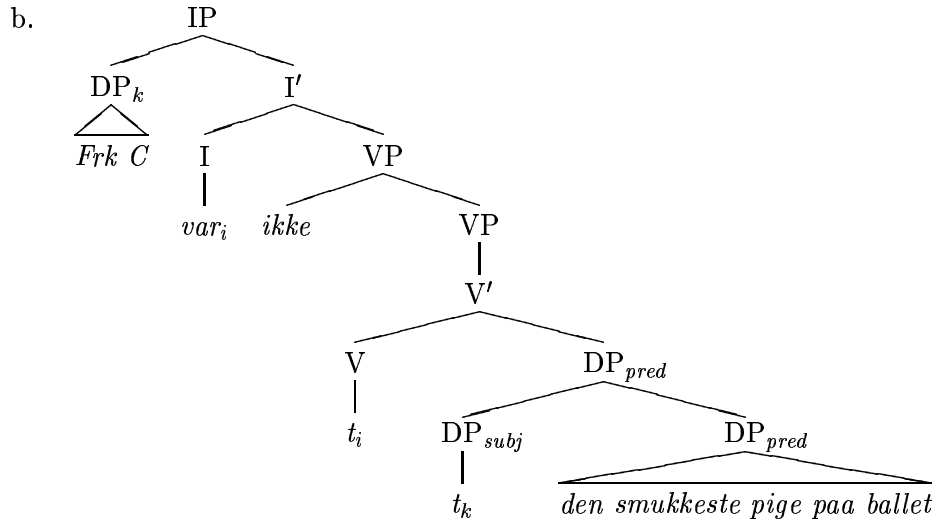
- (9) Jeg har **ikke** set den film.
 I have not seen that movie
 ‘I haven’t seen that movie’

- (10) *Jeg har set den film **ikke**.
 I have seen that movie not

⁵The standard analysis of verb second in Danish posits string-vacuous movement of the subject and finite verb to the C-domain in subject-initial matrix clauses (see Vikner (1995:39ff) and references cited there). Zwart (1997:224–30) argues, against the standard analysis, that there is no movement to the C-domain in subject-initial clauses in Mainland Scandinavian. This issue is orthogonal to the argument I want to make here, but it affects the representations assumed for non-inverted copular sentences, since these are subject-initial. To make the contrast between inverted and non-inverted structures more obvious I ignore string-vacuous movement in non-inverted structures, and represent these as IPs (in the spirit of Zwart (1997)). I stress that this is simply for expository convenience, and does not affect the validity of the arguments presented against the predicate inversion analysis.

Following Vikner (1995:40) I assume that the negation (*ikke*) is left-adjoined to VP. In matrix clauses, the finite verb moves out of VP – yielding the characteristic verb second order – and appears immediately to the left of negation, as in (9). The clause-final negation in (10) is impossible because negation must precede the direct object (*den film* ('that movie')), which is situated inside VP. Combining this analysis of negation with Heggie's small clause analysis of predicational sentences, the structure for a negated uninverted predicational sentence is (11b).

- (11) a. Frk. C. var ikke den smukkeste pige paa ballet.
 Miss C. was not the prettiest girl at ball.DEF
 'Miss C. wasn't the prettiest girl at the ball.'



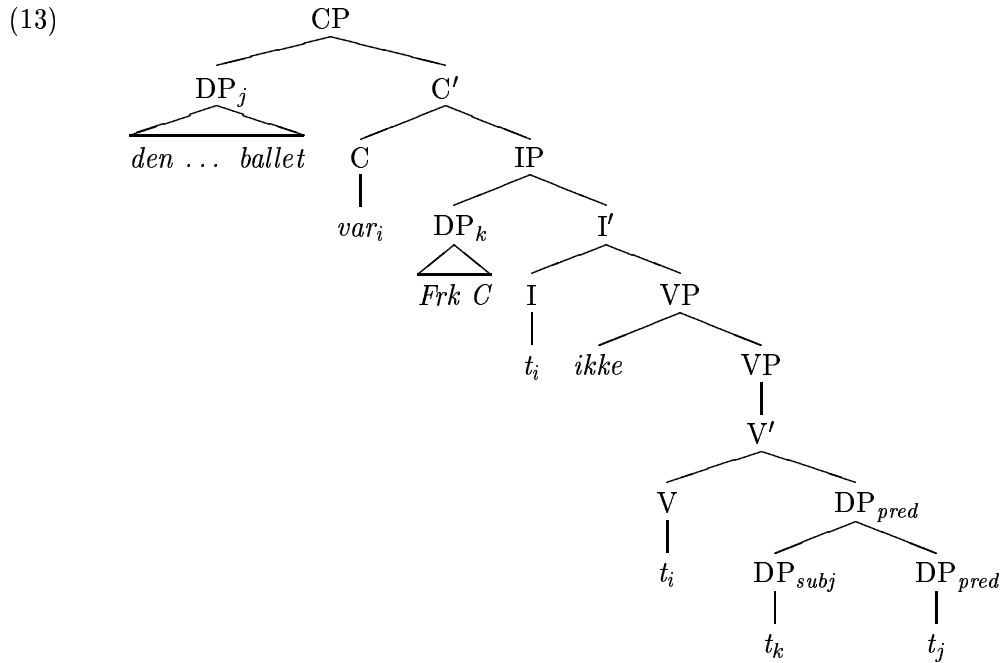
In a discussion of the notion of 'grammatical subject', Jespersen (1924:153, fn. 2) observes that there are two ways of negating (12) (= (5b)):

- (12) Den smukkeste pige paa ballet var Frk. C.
 the prettiest girl at ball.DEF was Miss C.
- a. Den smukkeste pige paa ballet var **ikke** Frk. C.
 the prettiest girl at ball.DEF was not Miss C.
 'The prettiest girl at the ball wasn't Miss C.'
- b. Den smukkeste pige paa ballet var Frk. C. **ikke**.
 the prettiest girl at ball.DEF was Miss C. not
 'Miss C. wasn't the prettiest girl at the ball.'

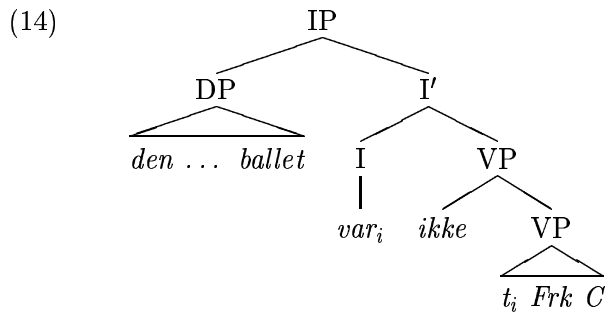
In (12a) negation appears in its canonical position, immediately to the right of the finite verb. The surprising fact is that clause-final negation is also possible (compare (12b) with the ungrammatical (10)). In brief, (12b) negates the attribution of the property of being the prettiest girl to Miss C., whereas (12a) denies that the identity of the prettiest girl is Miss C.⁶ With the two structures for (12) posited above, we

⁶This interpretative difference might be related to a difference in the strength of the existence presupposition associated with the definite description. It is easier to cancel this presupposition (that a prettiest girl at the ball exists) in (12b) than in (12a). Thus continuing with an explicit denial like *in fact there were no pretty girls at the ball*, is more felicitous in the case of (12b) than in the case of (12a). To make formal sense of this observation, more work is needed.

can make sense of Jespersen’s observation. (12b) is the negation of the inverted predicational reading of (5b), where all constituents have moved out of VP – the focussed predicate raising to Spec-CP, the subject raising to Spec-IP – leaving the negation *ikke* in clause-final position:



(12a) is the negation of the specificational reading of (5b), where the description is in subject position and the name stays inside VP. Its structure is (14).



The position of syntactic negation thus provides additional evidence that Danish has both inverted predicational structures like (7)/(13) and specificational structures like (8)/(14). Absent the availability of both structures, we have no explanation for the grammaticality of both (12a) and (12b). Indeed, (12b) would be completely anomalous if *Frk C* were a VP-internal complement, and the description *den smukkeste pige paa ballet* in Spec-IP, because Danish sentential negation can never follow a VP-internal DP, as seen in (10).

In what follows I use the position of negation to distinguish the two readings: clause-final negation indicates an inverted predicational structure, non-final negation a specificational structure. The next piece of evidence in favor of the two structures comes from the distribution of reflexives.

3.2 Reflexives

Danish has a third person reflexive possessive pronoun *sin* which must be bound by a clausemate subject (Vikner 1985):

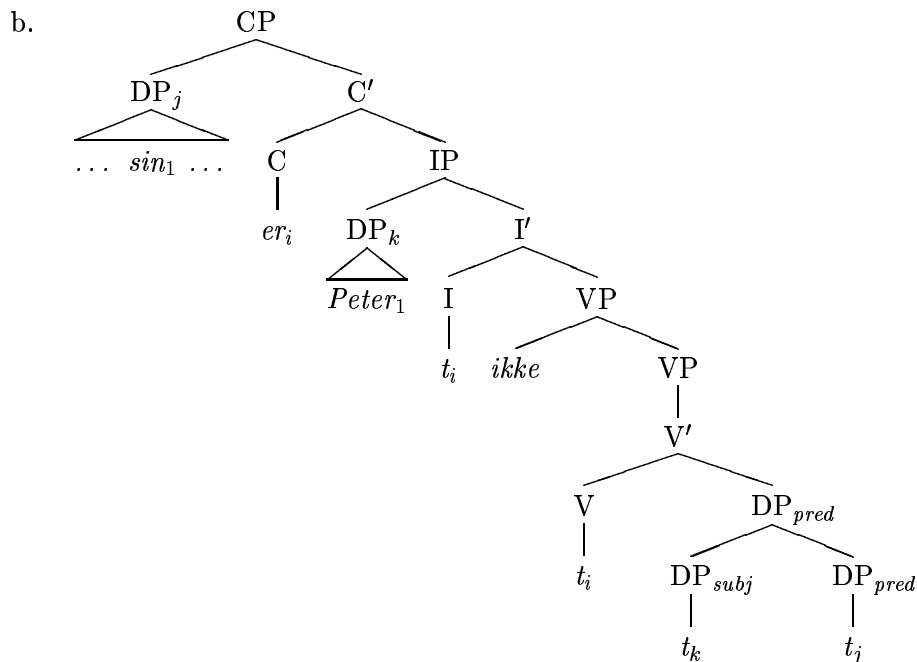
- (15) a. Peter₁ har savnet sin₁ hund.
 Peter has missed REFL dog
 ‘Peter has been missing his (Peter’s) dog.’
 b. *Sin₁ hund har savnet Peter₁.
 REFL dog has missed Peter
 ‘*His₁ dog has missed Peter₁.’
 c. *Peter₁ tror sin₁ hund sover.
 Peter thinks REFL dog sleeps

In an uninverted predicational copular sentence the subject DP can thus bind a reflexive in the predicate complement:

- (16) Peter₁ er ikke den største beundrer af sin₁ nabos havekunst.
 Peter is not the greatest admirer of REFL neighbor’s garden-art
 ‘Peter isn’t the greatest admirer of his (Peter’s) neighbor’s garden art.’

Somewhat surprisingly, binding is also possible when the predicate complement containing the reflexive is fronted to Spec-CP, as in the inverted predicational sentence in (17) (the clause-final position of negation shows that the predicate complement has left the VP, identifying the sentence as an inverted predicational structure).

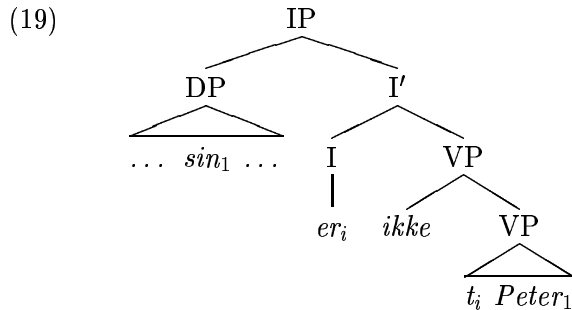
- (17) a. Den største beundrer af sin₁ nabos havekunst er Peter₁ ikke.
 the greatest admirer of REFL neighbor’s garden-art is Peter not
 ‘Peter isn’t the greatest admirer of his (Peter’s) neighbor’s garden art.’



The grammaticality of (17a) shows that A-bar movement of the predicate complement (to Spec-CP) does not bleed reflexive binding in Danish. In contrast, binding is not possible in the specificational sentence in (18).

- (18) *Den største beundrer af sin₁ nabos havekunst er ikke Peter₁.
 the greatest admirer of REFL neighbor's garden-art is not Peter

Under the structure for specificational sentences proposed above, the phrase containing the reflexive in (18) is in Spec-IP and the intended binder for the reflexive (*Peter*) is a VP-internal predicate complement:



This is not a licit binding configuration, since the intended binder is not a subject. There are two senses of ‘subject’ one might consider relevant for the binding condition: ‘DP which occupies Spec-IP’ or ‘subject of predication’. The intended binder in (18), *Peter*, qualifies as ‘subject’ under neither definition. The phrase is clearly not in Spec-IP, since it follows the negation *ikke*, and, according to Higgins, it cannot be a subject of predication since specificational clauses lack predication altogether. The ungrammaticality of (18) is thus due to the reflexive not being bound, and the contrast between (18) and (17), where the binder is in Spec-IP (and the subject of predication), is explained.

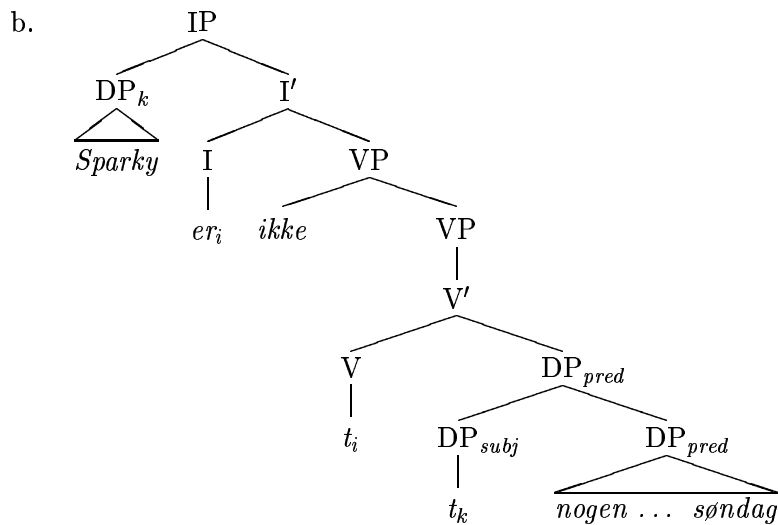
3.3 Negative Polarity Items

Danish has a negative polarity item (NPI) *nogen* which is similar to English *any* in that it can occur inside an object phrase in a negated clause, as in (20a), but not inside a subject phrase, as (20b) shows.

- (20) a. Peter har ikke **nogen** hund.
 Peter has not any dog
 ‘Peter doesn’t have a dog’
 b. ***Nogen** hund er ikke forsvundet.
 any dog is not disappeared

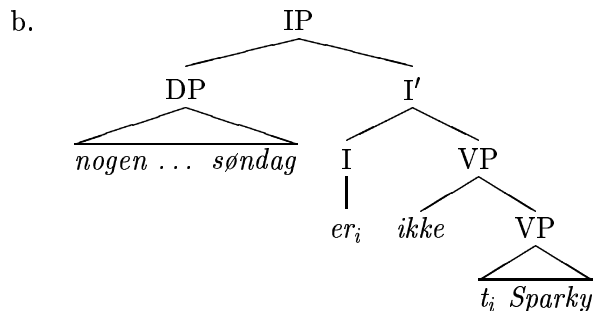
In syntactic analyses of NPI licensing in English, the lack of NPIs in subject position is often attributed to a requirement that an NPI be c-commanded by negation at surface structure (see Heycock and Kroch (1999:366), den Dikken et al. (2000:50) and references cited there). If surface c-command is the relevant condition, it is expected that *nogen* can occur in the predicate complement of a negated, uninverted predicational copular sentence, since the VP-internal predicate complement is c-commanded by the VP-adjoined negation at surface structure:

- (21) a. Sparky er ikke **nogen** stor tilhænger af bilfri søndag.
 Sparky is not any great fan of car-free Sunday
 ‘Sparky is not a great fan of carfree Sundays’



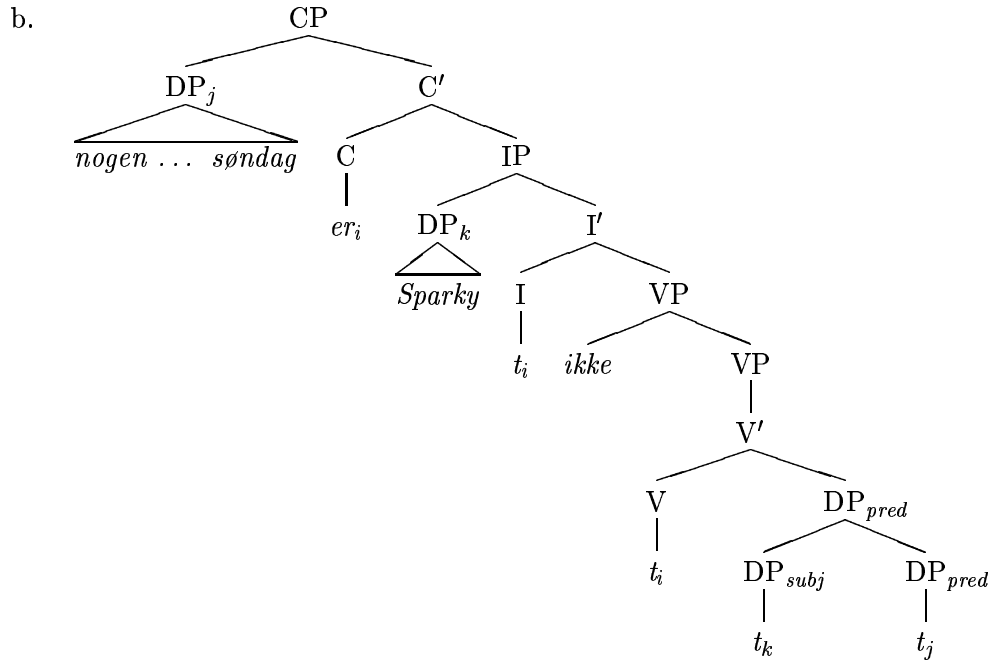
Under the analysis of specificational sentences proposed here, it is further expected that *nogen* cannot appear in the initial phrase of a specificational sentence, since this phrase is in Spec-IP at surface structure and hence not c-commanded by the VP-adjoined negation. This expectation is borne out:

- (22) a. ***Nogen** stor tilhænger af bilfri søndag er ikke Sparky.
 any great fan of car-free Sunday is not Sparky



The ungrammaticality of (22a) parallels that of (20b): in both, the NPI occurs in subject position (Spec-IP) where it is not c-commanded by negation. There are exceptions, however, to the requirement that negation c-commands the NPI at surface structure. In particular, the NPI is also licensed when topicalization brings the NPI outside the c-command domain of negation at surface structure, as in the inverted predicational structure in (23b).

- (23) a. **Nogen** stor tilhænger af bilfri søndag er Sparky ikke.
 any great fan of car-free Sunday is Sparky not
 ‘Sparky is not a great fan of carfree Sundays’



Thus, we see that, in Danish, A-bar movement does not invariably bleed NPI licensing. This is perhaps not usually the case; Heycock and Kroch (1999:366), and den Dikken et al. (2000:50) observe that it is false of many English constructions. However, as pointed out by Chris Potts (p.c. 09/12/01), such licensing is attested in English for a limited class of cases, namely those involving topicalization (e.g., *That Harvey shot anyone, they cannot prove* (for discussion, see de Swart (1998))). Although a full explanation of these facts would take us too far afield, I suggest that this exceptional NPI-licensing is linked with the fact that topicalization, unlike most A-bar movements, does not have truth functional consequences. It is purely discourse related; in (23) it expresses that the moved constituent is focussed. Thus, one might expect a semantically sensitive phenomena like NPI licensing (Ladusaw 1980; Giannakidou 1998) to be insensitive to it. This is supported by the observation that, in Danish, an object containing an NPI may be topicalized to a position above the licensing negation, as long as the discourse context is one where topicalization is appropriate:

- (24) (Peter har mange kæledyr, men) **nogen** hund har han ikke
 Peter has many pets, but any dog has he not

If specificational sentences were inverted predicational structures we would thus expect (22a) to be well-formed, contrary to fact. The ungrammaticality of (22a) further shows that if the definite description occupies a VP-internal position at some point in the derivation, as in the analyses of Moro (1997) and Heycock and Kroch (1999), this is not relevant for NPI-licensing.

The distribution of the NPI *nogen*, in particular the contrast between (22a) and (23a), provides further support for a structural distinction between specificational and inverted predicational sentences. The final piece of evidence to be considered here concerns the possibility of embedding copular sentences.

3.4 Embedding

Some verbs that take a clausal complement do not allow topicalization in the complement clause (Iatridou and Kroch (1992), Vikner (1995:70–2)). As (25) shows, *bevise* ('prove') is such a verb: (25a) which

lacks topicalization in the embedded clause, is fine, whereas (25b) which involves such topicalization, is degraded.⁷

- (25) a. Holmes beviste at Moriarty ikke havde stjålet disse penge.
 Holmes proved that Moriarty not had stolen this money
 ‘Holmes proved that Moriarty hadn’t stolen this money’
 (adapted from Vikner (1995:71, ex. (15a)))
- b. ??Holmes beviste at disse penge havde Moriarty ikke stjålet.
 Holmes proved that this money had Moriarty not stolen
 (adapted from Vikner (1995:71, ex. (16a)))

We thus expect that specificational copular sentences can embed under *bevise*, since these do not involve topicalization, whereas inverted predicational structures cannot, since these involve topicalization. These expectations are met as shown in (26).

- (26) Holmes beviste at ...
 Holmes proved that ...
- a. den smukkeste pige paa ballet **ikke** var Frk. C.
 the prettiest girl at ball.DEF not was Miss C.
- b. ??[den smukkeste pige paa ballet]_j var Frk. C. **ikke** t_j.
 the prettiest girl at ball.DEF was Miss C. not

The clause-final position of negation in (26b) shows that this is an inverted predicational structure (i.e., the predicate complement has been topicalized). The non-final position of negation in (26a) shows that this is a specificational structure, which we have seen does not involve topicalization.

From this and the data presented above, I conclude that, at least in Danish, specificational sentences cannot be analyzed as inverted predicational structures as proposed in Heggie’s work. Instead specificational sentences have a non-inverted structure, where the initial DP is in Spec-IP and the second DP inside VP, as in (8) above. In the next section I discuss the distribution of topic and focus in copular sentences and how this fits the structural differences established in this section.

4 Topic and focus

In the literature on English, it has been observed that specificational sentences exhibit a distinct and fixed topic–focus structure: invariably the initial DP is a topic and the post-copula DP a focus (see Higgins (1979:234–6), Partee (2000:199–200), and references cited there). In contrast, Heggie (1988a:66) argues that in an inverted predicational sentence the initial DP is focussed. In fact, she says, the DP moves to Spec-CP because it is focussed. If specificational sentences are analyzed as inverted predicational structures these claims are contradictory, assuming that a focussed constituent cannot also be a topic. If, as argued above, specificational structures are not inverted predicational structures, there is no contradiction. Below I give three tests that indicate that the topic–focus structures of specificational and inverted predicational copular sentences in Danish contrast in the way described above for English. I then sketch (in 4.4) how the two syntactic structures argued for above provide a natural basis for an account of the differences in topic–focus structure.

⁷There is no verb movement in embedded clauses without topicalization (Vikner 1995:67–8), hence the finite verb appears to the right of negation in (25a).

4.1 Question-Answer pairs

It is standardly assumed (since at least Halliday (1967)) that in a question–answer pair the constituent in the answer that corresponds to the *wh*-phrase in the question is the focus.⁸ I further assume that prior mention is a sufficient condition for an expression being a topic – thus the part of the answer mentioned in the question is a topic in this sense – and that a constituent cannot be both a topic and a focus.⁹ In the answers to the question in (27) *Frk. C.* is a focus and *den smukkeste pige paa ballet* is a topic. The answer in (27a) is specificational, whereas the answer in (27b) is an inverted predicational structure, as indicated by the position of the adverbial *så afgjort* (‘without question’):¹⁰

- (27) Hvem var den smukkeste pige paa ballet?
who was the prettiest girl at ball.DEF
- a. Den smukkeste pige paa ballet var så afgjort Frk. C.
the prettiest girl at ball.DEF was so decidedly Miss C.
‘The prettiest girl at the ball was without question Miss C.’
- b. #Den smukkeste pige paa ballet var Frk. C. så afgjort.
the prettiest girl at ball.DEF was Miss C. so decidedly
‘Miss C. was without question the prettiest girl at the ball.’

The felicity of the answer in (27a) shows that the predicate complement in a specificational sentences (here *Frk. C.*) can be focussed (below I argue that it must be focussed), and the subject (*den smukkeste pige paa ballet*) can be a topic. This is consistent with the observations made for English in Partee (2000:199-200). The infelicity of the answer in (27b) shows that an inverted predicational sentence has a different topic–focus structure, one which clashes with the expectations set up by the question in (27). There are several possible sources for the infelicity of (27b). It could be, as argued by Heggie, that the inverted predicate is necessarily focussed, and hence not a topic, but that it is required to be a topic in this context. It could also be that the post-verbal subject cannot be a focus, or both. Either condition is easily stated over the structure proposed above.

4.2 Contrastive contexts

Another test for focus is provided by contrastive contexts, for example the one in (28), where *men* (‘but’) indicates a contrast between Miss C. being charming, but not the prettiest girl at the ball. The contrasted element (*den smukkeste pige paa ballet*) is focussed.

- (28) Frk. C. er bedårende, men ...
Miss C. is charming, but ...
- a. #den smukkeste pige paa ballet var ikke hende.
the prettiest girl at ball.DEF was not her
‘the prettiest girl at the ball wasn’t her.’

⁸It is more controversial exactly what type of focus this is, but I cannot go into that here.

⁹As with the term ‘focus’, the term ‘topic’ has many uses. The sense of topic relevant here is closely related to the notion of ‘discourse-old’ in Prince (1992).

¹⁰The adverbial has the same surface position as syntactic negation (left-adjoined to VP, Vikner (1995:40)), and can thus be used to distinguish specificational from inverted predicational structures. I use the adverbial rather than negation, because negation would be odd in the answer to a positive *wh*-question.

- b. den smukkeste pige paa ballet var hun ikke.
 the prettiest girl at ball.DEF was she not
 ‘she wasn’t the prettiest girl at the ball.’

In this context the specificational sentence, (28a), is inappropriate, supporting the claim that the initial DP is a topic, not a focus. The inverted predicational sentences, (28b), is felicitous in this context, consistent with Heggie’s claim that the inverted predicate is focussed.

4.3 Object shift

In Mainland Scandinavian a direct object typically appears to the right of negation, as in (29). However, a direct object pronoun may appear left of negation as in (30). This change in word order is known as OBJECT SHIFT (Holmberg 1986).

- (29) De kender ikke Sparky.
 they know not Sparky
 ‘They don’t know Sparky’

- (30) De kender ham ikke.
 they know him not
 ‘They don’t know him’

When an object pronoun is focussed it cannot shift, but must appear in situ and be prosodically prominent.¹¹ This is illustrated in (31), which is a felicitous reply when asked if one can identify some people in a picture. The pronoun is contrastively focussed, and thus cannot shift (prosodic prominence is indicated by capitalization).

- (31) Jeg kender HENde, men jeg kender (*ham) ikke HAM.
 I know her, but I know (him) not him
 ‘I know HER, but I don’t know HIM’

The possibility of object shift thus provides another test for focus. To apply the test to the copular structures discussed in this paper, we need first to establish that copular sentences allow object shift in general. This is done in (32), which is a conjunction of two uninverted predicational sentences where the object pronoun (*det* ‘it’) of the second clause has shifted over the adverbial *igen* ‘again’.¹²

- (32) Frk. C. var den smukkeste pige paa ballet sidste år og hun er **det** igen i år.
 Miss C was the prettiest girl at ball.DEF last year and she is it again in year
 ‘Miss C. was the prettiest girl at the ball last year and she is that again this year.’

The grammaticality of (32) shows that (i) object shift is possible in copular sentences; and (ii) there is no requirement that the predicate be focussed in an uninverted predicational copular sentence. The second point is consistent with predicate inversion being an expression of focus on the predicate (Heggie 1988a:66), and with there being no fixed topic–focus structure in uninverted predicational sentences (Partee 2000:199–200). The object shift test is not applicable to inverted predicational sentences, since in these structures

¹¹This is observed in unpublished work by Nomi Erteschik-Shir. Elisabet Engdahl makes similar observations for Swedish, also in unpublished work.

¹²To avoid focus on the VP of the second clause, I use the adverbial *igen* ‘again’, rather than negation, to mark the left edge of VP.

the object has moved to Spec-CP, making it impossible to detect whether object shift has taken place (prior to movement to Spec-CP). However, the test can be applied to specificational sentences, as in (33), which is an appropriate response – in conjunction with a pointing gesture – when asked to comment on the appearance of some people in a photograph.

- (33) Den smukkeste pige er (*hende) så afgjort HENde
the prettiest girl is (her) so decidedly her
'The prettiest girl is without question HER'

Here the object pronoun cannot shift, but must be realized *in situ* and with prosodic prominence, indicating that the predicate complement of a specificational sentence is necessarily focussed.

4.4 Topic–focus structure and syntactic structure

The preceding sections provided evidence that inverted predicational sentences differ from specificational sentences in terms of topic–focus structure in that:

- i. the initial DP in an inverted predicational sentence is focussed, whereas
- ii. the initial DP in a specificational sentence is a topic, and
- iii. the post-copula DP in a specificational sentence is a focus.

These observations fit well with the syntactic structures argued for in the previous section, and with the characterization of specificational sentences provided by Higgins (1979). I have argued, following Heggie (1988a,b), that the initial DP in an inverted predicational sentence is a topicalized predicate occurring in Spec-CP. It has been argued independently (e.g. by Gundel (1988:143–55)) that one of the functions of topicalization is to indicate focus. In specificational sentences, the initial DP is in subject position (Spec-IP) which is compatible with it being a topic. In fact, it has been argued that there is a preference for subjects to be topics (see e.g. Prince (1992)) and references cited there). As for the post-copula DP of a specificational sentence, I have argued that it is inside VP at surface structure. It is not unusual for VP-internal material to be focus, but what is special about specificational sentence is that the predicate complement must be focussed (Higgins 1979:234–7). Higgins suggests that both of these requirements (the subject being topic, the predicate complement being focussed) are due to the special, ‘list-like’ structure of specificational sentences. He writes: “the subject clause of such a sentence [i.e. a specificational sentence, LHM] behaves as if it contained a Cataphoric item, a “variable” which has yet to be assigned a “value”. The whole purpose of the construction is to fill in that semantic gap.” (Higgins 1979:234). The syntactic structure of specificational sentences proposed here, unlike that proposed by Heggie, is compatible with his characterization.

5 Conclusion

The evidence reviewed above strongly suggests that, at least in Danish, specificational sentences cannot be analyzed as inverted predicational structures. The two differ with respect to the position of negation, anaphor binding, NPI licensing, and embedding. We can maintain Heggie’s predicate inversion analysis for inverted predicational sentences in Danish, but specificational sentences have a different, uninverted structure.

I close with an observation about pronominalization (a possibly related observation is made in Higgins (1979:283)). The pronoun of a tag question is anaphoric to the subject of the tagged clause. In a tag question to a predicational copular sentence where the subject denotes a human the pronoun must be a personal pronoun. This is true of uninverted (34a) as well as inverted (34b) structures:

- (34) a. Frk. C. var ikke den smukkeste pige paa ballet, var hun/*det?
 Miss C was not the prettiest girl at ball.DEF was she / it
 ‘Miss C. wasn’t the prettiest girl at the ball, was she/*it?’
- b. Den smukkeste pige paa ballet var Frk. C. ikke, var hun/*det?
 the prettiest girl at ball.DEF was Miss C not was she / it?
 ‘Miss C. wasn’t the prettiest girl at the ball, was she/*it?’

In a specificational sentence, however, a personal pronoun is odd for most speakers; see (35).

- (35) Den smukkeste pige paa ballet var ikke Frk. C., var ??hun/det?
 the prettiest girl at ball.DEF was not Miss C was she /it?
 ‘The prettiest girl at the ball wasn’t Miss C., was ??she/it?’

These facts are relevant for three reasons. First, the possibility of using an impersonal pronoun in (35) might be evidence for Higgins’ claim that the subject of a specificational sentence is not referential (in the sense of referring to an individual), since *det* (‘it’) is the pronoun used to refer back to non-referential expressions more generally, including verb and adjective phrases. Second, the contrast between (34b) and (35) further supports the conclusion reached in section (3) that specificational sentences are not inverted predicational structures. Finally, the possibility, albeit marginal, of using a personal pronoun in (35) might be indicative of an equative reading, where the the subject phrase (*den smukkeste pige paa ballet*) does refer to an individual, whereas the impersonal pronoun (*det*) picks out the specificational reading, as suggested by Lorie Heggie (p.c. 06/10/01). If so, the contrast between *hun* (‘she’) and *det* (‘it’) in (35) indicates that specificational sentences cannot be analyzed as semantically equative.

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