

Specificational subjects

– a formal characterization and some consequences

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Abstract

This paper provides a formal semantic characterization of specificational copular clauses using the theory of noun phrase interpretation developed by Partee (1987). It is argued that specificational clauses involve an unusual alignment of a predicative noun phrase with the subject position. This leads to the prediction that only noun phrases capable of denoting predicates can occur in this position. The prediction is tested against three groups of NPs. While the first two groups behave as predicated, the behavior of the last group is puzzling in terms of their formal semantics. Based on the results of the corpus study reported in Birner (1996), I argue that this puzzle can be resolved by taking into account the information structure of specificational clauses, in particular the requirement that their subject be relatively familiar in the discourse.

1 Introduction

Work of the sixties and seventies, in particular Halliday (1967:§6), Akmajian (1979), and Higgins (1979), drew a distinction between PREDICATIONAL and SPECIFICATIONAL copular clauses. This distinction is exemplified in (1) and (2).

- (1) The recipient of this year’s Nobel Peace Prize is Iranian. PREDICATIONAL
- (2) The recipient of this year’s Nobel Peace Prize is Shirin Ebadi. SPECIFICATIONAL

Intuitively, a predicational copular clause tells us something **about** the individual denoted by the subject NP, whereas a specificational copular clause tells **who** (or what) someone (or something) is (Akmajian 1979:162–165). Thus (1) tells us **about** the prize winner that she is Iranian, where as (2) tells us **who** it is that won the prize.

Later linguistic work has tried to characterize this difference in formal terms, based on general theories of clause structure and semantic interpretation (Williams 1983; Partee 1986, 2000; Heggie 1988a,b; Moro 1997; Heycock and Kroch 1999, 2002; Rothstein 2001; Geist 2003; Mikkelsen 2002b,b). The present paper is part of that effort and takes as its starting point the hypothesis proposed by Partee (2000): that the difference between the different kinds of copular clauses should be sought in the function and interpretation of the expressions flanking the copula, and only secondarily in the copula itself.

The specific hypothesis that I will be adopting here is represented in (3):¹

(3)

CLAUSE TYPE	SUBJECT	COMPLEMENT	COPULA VERB
PREDICATIONAL	individual	property	vacuous
SPECIFICATIONAL	property	individual	vacuous

According to this hypothesis, a predicational clause like (1) has an individual-denoting subject and a property-denoting complement. At the clause level the property denoted by the complement (being Iranian) is predicated of the individual denoted by the subject (Shirin Ebadi), much like the property denoted by the VP (*ran*) is predicated of the subject referent (Susan) in a non-copular clause like *Susan ran*. Note that the copula itself does not contribute to the semantic composition of (1). Rather, following Geach (1962:34ff) and Bach (1967:478–479), I assume that the copula is there for syntactic reasons, namely to express tense and finiteness. In a specificational clause, the alignment is the inverse: the property-denoting expression is the subject, and the individual-denoting expression is the complement. Again, the two an combine semantically without mediation of the copula verb. However, this alignment is marked. In particular, subject NPs do not normally denote properties (instead they denote individuals or function as quantifiers, as discussed in section 2). A reflex of this markedness is that not all predicational clauses can be inverted to form a specificational clause, while all specificational clauses (or at least almost all) can be inverted to form a well-formed predicational clause. Thus (4), which is the inverse of (2), is a well-formed predicational copular clause, while (5), which is the inverse of (1), is not a well-formed specificational clause, in fact it is ungrammatical.

(4) Shirin Ebadi is the recipient of this year’s Nobel peace prize.

(5) *Iranian is the recipient of this year’s Nobel peace prize.

One reason for the asymmetry is that whereas the complement position of a predicational copular clause can host NPs, APs, PPs and VPs, the subject position of a specificational clause, and most other clauses, can host only NPs. In the cases where inversion is possible, the two clauses are predicted to be truth-functionally equivalent since the contributing parts have the same denotations in the two constructions, and the order of composition does not change meaning, given that the copula is semantically vacuous. Thus, we predict that it is not possible to construct a scenario in which (2) is true, while (4) is false (or vice versa). This is in accordance

¹This hypothesis is discussed in detail in Mikkelsen (2002c) and extended to two other types of copular clauses (called ‘Identificational’ and ‘Identity’ clauses in Higgins (1979)) in Mikkelsen (2004) and Mikkelsen (in preparation). Geist (2003) reaches the same type-distribution based on her investigation of Russian copular clauses. For discussion of these issues based on data from a wide range of languages see the works cited in the text above as well as Rothstein (1986), Rapoport (1987), Sánchez and Camacho (1993), Rouveret (1996), Zaring (1996), Sharvit (1999), Heller (2002), Adger and Ramchand (2003), Romero (2003), and Schlenker (2003).

with speakers’ intuitions, and thus a welcome result. However, it also means that the intuitive difference between the two sentence types articulated by Akmajian (see above) must be due not to a difference in the overall meaning of these sentences, but the the difference in the alignment of the property-denoting NP with complement vs. subject position.

The goal of this paper is to use the hypothesis in (3), in particular the claim that a specificational subject (i.e. the subject of a specificational clause) denotes a property, to account for why only certain forms of NPs can occur in this position. Specifically, I argue that it allows us to understand why definite descriptions, possessives, and partitives readily occur in this position, while strongly quantificational NPs, proper names, and most pronouns do not. Indefinite descriptions provide an interesting borderline case, and I suggest that to understand why only some indefinites are possible as specificational subjects, we need to look to pragmatic factors.

The paper is organized as follows. In section 2, I introduce the theoretical tools that allow me to restate the hypothesis in (3) in formal terms. In section 3, I give some of the evidence for claiming that the subject of a specificational clauses denotes a property, and discuss what this property denotation is and how it comes about. I then turn to the main task of this paper, which is to examine certain predictions that follow from this claim concerning which NPs can, and which NPs cannot, occur in this position (section 4). I discuss three cases and the last of these leads us into the territory of information structure, in particular the relation between definiteness and topichood (section 5). Section 6 concludes the paper.

2 Partee’s theory of NP interpretation

Partee (1987) proposes a formal theory of noun phrase interpretation, according to which noun phrases (NPs) can receive three different interpretations:²

(6)

TERMS	SEMANTIC TYPE	DENOTATION
Generalized quantifier	$\langle\langle e, t \rangle, t\rangle$	set of sets of individuals
Referential	$\langle e \rangle$	individual
Predicative	$\langle e, t \rangle$	set of individuals (property)

The generalized quantifier interpretation is the most complex, but it is also the most general, in the sense that all NPs can have this interpretation (Partee (1987:121ff); see also Montague (1974), Barwise and Cooper (1981), and Thomsen (1997a)). An example is given in (7), where the italicized NP is interpreted as a generalized quantifier:

²Partee’s system is presented in an extensional formal language and I too will employ extensional types, though I will use the intensional term ‘property’ interchangeably with its extensional counterpart ‘predicate’. As discussed in Mikkelsen (in prep.) the move to an intensional formal language does not affect my analysis of copular clauses in any substantial way.

(7) *All politicians* are corrupt.

As a generalized quantifier, *all politicians* denote not the set containing all politicians, but the set of properties that all politicians have. Given that properties are construed as sets of individuals — namely, the set of individuals that have the property in question — *all politicians* denote a set of sets of individuals (as stated in (6)). The sentence in (7) is true if and only if the set of corrupt people is a member of this.

The referential interpretation is perhaps the one we intuitively ascribe to most NPs, namely as denoting individuals and entities in our surroundings. An example, borrowed from Strawson (1950:320), is given in (8):

(8) *The whale* struck *the ship*.

Strawson observes (p. 320) that when a speaker utters (8), we take her to be “mentioning a particular whale” and a particular ship (though Strawson only discusses the subject NP), and that (8) is true if and only if the former struck the latter. In contrast, a speaker of (7) does not mention any (or all) politicians in this sense. In terms of semantic types, it is the referential NP interpretation (type $\langle e \rangle$) that underlies the mentioning of a particular individual.

Finally, NPs can be interpreted as predicates (or properties), as illustrated by *a lawyer* in (9).

(9) Shirin Ebadi is *a lawyer* (by profession).

A speaker of (9) does not mention a particular *a lawyer* (Geach 1962:35), rather *a lawyer* denotes the set of all lawyers and (9) is true if Shirin Ebadi is a member of this set.

Importantly, not all NPs can occur in all three interpretations. For instance, *all politicians* in (7) can only be interpreted as a generalized quantifier, and the article-less *sagfører* (‘lawyer’) in the Danish version of (9) can only be interpreted predicatively:

(10) Shirin Ebadi er *sagfører*.
Shirin Ebadi is lawyer
‘Shirin Ebadi is a lawyer’

In contrast, definite descriptions like *the whale* and *the ship* can take on all three types. Which type a given definite description has in a given (utterance of a) sentence, depends on its syntactic position, the semantic interpretation of the rest of the sentences (in particular the presence of quantifiers and other scope bearing elements) and the context in which the sentence is used.

Partee (1987) argues that every kind of NP has one of the three types by default, but may shift into one of the other types (where the result of this shift is well formed) by application of one or more of the ‘type-shifting operators’ that she defines. We return to the issue of default types and type-shifting in section 4.

With this as background, we can state the hypothesis about the interpretation of the NPs in predicational and specificational copular clauses formally, as in (11):

(11)

CLAUSE TYPE	SUBJECT	COMPLEMENT	COPULA VERB
SPECIFICATIONAL	$\langle e, t \rangle$	$\langle e \rangle$	$\langle \mathcal{X}, \mathcal{X} \rangle^3$
PREDICATIONAL	$\langle e \rangle$	$\langle e, t \rangle$	$\langle \mathcal{X}, \mathcal{X} \rangle$

3 The semantic type of copular subjects

Previous work has established systematic connections between semantic types and pronominalization in many languages.⁴ Here I concentrate on English and Danish, since those are the languages that I draw data from when testing the predictions of the formal analysis in section 4. For these languages, the connections relevant for present concerns can be articulated as in (12) and (13):

(12) **English:** *she* and *he* pronominalize referential NPs (i.e. NPs of type $\langle e \rangle$), while *it* may pronominalize predicative NPs (i.e. NPs of type $\langle e, t \rangle$).⁵

(13) **Danish:** *hun* (she), *han* (he), and *den* (it-COMMON) pronominalize referential NPs, while *det* (it-NEUTER) may pronominalize predicative NPs (i.e. NPs of type $\langle e, t \rangle$).

We can thus determine the semantic type of the subject NP of predicational and specificational clauses by investigating how these subject NPs pronominalize. In section 3.1 I examine subject pronominalization in three environments: tag questions, left dislocation with resumption and question–answer pairs. Pronominalization in these environments consistently indicates that the subject of a specificational clause is property-denoting, while that of a predicational clauses is referential. Having argued that the subject of a specificational clause is property denoting, it seems appropriate to say a bit about what that means, including what kinds of properties specificational subjects denote, and how this denotation comes about. This is the business of section 3.2

³This notation expresses that the copula is polymorphic (in the sense of Partee (1986:364)): it takes an argument of any type and returns an expression of the same type, see Mikkelsen (2003:138) for details.

⁴For English see Jespersen (1927:123–124), Kuno (1972:355–363), Doron (1988:282–286), and Mikkelsen (2002c), for French see Heggie (1988a:67–71), for Italian see Zamparelli (2000:17–18), for Swedish see Engdahl (2001:132–133), and for Danish see Mikkelsen (2003).

⁵The reason I say ‘**may** pronominalize predicative NPs’ is that *it* may also pronominalize referential NPs, but only if these refer to non-humans: *What about **the house**? **It** has been sold.* Similarly, Danish *det* may pronominalize referential NPs when they are neuter and refer to non-humans. Finally, *det*, like English *it* and *that*, can also be anaphoric to clauses, i.e. to a proposition, see e.g. Asher (1993:225ff) and Cornish (1992:166ff).

3.1 Pronominalization contrasts

Tag questions It is well-established that the form of the pronoun in a tag-question is determined by the subject of the tagged clause.⁶ The use of the gendered pronoun *hun* (she) in the Danish predicational clause in (14) thus indicates that the subject NP of the tagged clause (*modtageren af Nobels fredspris i år*) is referential (type ⟨e⟩). As the translation indicates, the same is true for English.

- (14) Modtageren af Nobels fredspris i år er ikke iraner, er {**hun** / *det}?
 recipient-DEF of Nobel-POSS peace-prize in year is not Iranian, is she / it
 ‘The recipient of this year’s Nobel Peace Prize isn’t Iranian, is **she**/*it?’

In contrast, the specificational clause in (15) allows *det/it* in the tag, indicating a predicative (type ⟨e,t⟩) interpretation of the subject in this case.⁷

- (15) Modtageren af Nobels fredspris i år er ikke Shirin Ebadi, er {??hun / **det**}?
 recipient-DEF of Nobel-POSS peace-prize in year is not Shirin Ebadi, is she / it
 ‘The recipient of this year’s Nobel Peace Prize isn’t Shirin Ebadi, is ??she/**it**?’

Since the subject NPs are of identical form and lexical content, we attribute the difference in pronominalization to a difference in the semantic type of the NPs in the two clauses.

Left dislocation As noted for Danish by Diderichsen (1968:178), the same pattern shows up in constructions where the subject has been left dislocated leaving a resumptive pronoun inside the clause (what he calls ‘sætninger med løst fundament’). Consider first the predicational example in (16).

- (16) Modtageren af Nobels fredspris i år, {**hun** / *det} er iraner.
 recipient-DEF of Nobel-POSS peace-prize in year, she / it is Iranian
 ‘The recipient of this year’s Nobel Peace Prize, **she**/*it is Iranian.’

We see that (16) allows only the gendered pronouns *hun/she* to resume the left-dislocated subject NP, indicating that this NP is referential. In contrast, in the specificational example in (17), we find *det/it* as the resumptive pronoun, indicating a non-referential, predicative interpretation of the subject NP.⁸

- (17) Modtageren af Nobels fredspris i år, {??hun / **it**} er Shirin Ebadi.
 recipient-DEF of Nobel-POSS peace-prize in year, she / it is Shirin Ebadi
 ‘The recipient of this year’s Nobel Peace Prize, ??she/**it** is Shirin Ebadi.’

⁶See e.g. Bolinger (1957:17–22, 116–122; 1975:279), Bowers (1976:237), Bresnan (1994:97), Jespersen (1924:198, 302, 323), Kay (2002:§4), McCawley (1998:251), Mikkelsen (2003:130–131), and Quirk et al. (1985:§11.8).

⁷In Mikkelsen (2002c:150) I argue that *she* is possible in the tag of a clause like (15) to the extent that it can be interpreted as an Identity statement, analogous to *The Morning Star is The Evening Star*. On the difference between identity statements and specificational clauses see Geach (1962:48), Higgins (1979:213–219) and Russell (1917:228).

⁸In addition to *it*, English also allows *that* as the resumptive in (17). In Mikkelsen (2004) I argue that *that* can be used as a property anaphor, so the use of *that* in (17), but not in (16), is consistent with the claim that the subject of specificational clauses is property-denoting. Property-denoting *that* is also possible as the subject of specificational answers (see below), whereas we never find *that* in tag questions. In Mikkelsen (2002c), I argue that the absence of *that* in tags is due to prosodic restrictions. Note that Danish *det* can be translated as either *it* or *that*, depending, among other things, on whether it is stressed.

Question–answer pairs The third environment where we see a pronominalization contrast is question–answer pairs. Consider first the English data in (18) and (19).

- (18) Q: What nationality is the recipient of this year’s Nobel Peace Prize?
A: **She**/*It is Iranian.
- (19) Q: Who is the winner of this year’s Nobel Peace Prize?
A: ??She/**It** is Shirin Ebadi.

The exchange in (18) involves predicational clauses: the questioner wants to know something **about** the individual who received Nobel’s Peace Prize, namely her nationality. The exchange in (19) involves specificational clauses: the questioner wants to know **who** won received the Prize (cf. Akmajian’s intuitive characterization of the difference between predicational and specificational clauses, repeated in the introduction of the present paper). The predicational answer in (18) allows only the referential pronoun *she* in subject position, which is exactly as expected under the type-distribution in (11). In contrast the specificational answer in (19) allows property-anaphoric *it* (and *that*, see footnote 8) in subject position.

The Danish equivalents of (18) and (19) display the same contrast, but here I want to take advantage of the fact that Danish has grammatical gender, which allows us to extend the contrast into the domain of inanimates. Consider first the predicational exchange in (20)

- (20) Q: Hvor stor er den største by i Skotland?
How large is the largest city in Scotland
A: {Den/*Det} er større en København.
it-COM/it-NEU is larger than Copenhagen

Here the questioner wants to know something about the largest city in Scotland, namely how large it is. We see that the pronoun in the subject position of the answer must be the common gender pronoun *den*, which displays gender agreement with the antecedent NP **den største by i Skotland** (the head noun *by* is common gender). This indicates a referential interpretation of the antecedent NP. Consider next the specificational pair in (21).

- (21) Q: Hvilken by er den største i Skotland?
which city is the largest in Scotland
A: {*Den/Det} er Glasgow.
it-COM/it-NEU is Glasgow

Here the questioner wants to know *what* the largest city in Scotland is, and the answer allows the non-agreeing property anaphor *det* in subject position.

To summarize the results so far: we have seen that pronominalization in tag questions, left-dislocation constructions and question–answer pairs consistently indicates that the subject of a predicational clauses is referential, while the subject of a specificational clause is property denoting. The next section discusses what exactly this property denotation is and how it comes about.

3.2 Property denotations

Before I go on to examine what kinds of NPs can occur as specificational subjects, it seems appropriate to say a little more about what it means to say that an NP in this position is interpreted as a property. In the specificational clauses discussed above the subject NPs are all definite descriptions. As discussed in section 2, such NPs can also denote individuals (see example (8)). In that section we established that properties are (in extensional terms) sets of individuals. In the case of singular definite descriptions, the difference between a type $\langle e \rangle$ denotation and a type $\langle e, t \rangle$ denotation thus comes down to the difference between an individual (in the domain of interpretation) and the set containing that individual. When there is only a single referent for the NP in its referential use, the set is singleton. However, this is not necessarily the case for specificational subjects. When the subject is indefinite (see section 4.3), the set denoted by the subject NP is not singleton.

Within Partee's theory of NP interpretation, there are two ways in which the property-denotation could come about a specificational subject. It could either be the default type for the NP in question, or it could be the result of type-shifting. In the case of definite descriptions, these options play out as follows. Following Graff (2001), we assume that definite descriptions by default denote predicates. They get their predicative denotation from their lexical material (the head noun and its modifiers) and the definite article does not change its type, but adds presuppositions of existence and uniqueness. This is the approach taken in Mikkelsen (in prep.). Alternatively, we could follow Partee, who assumes that the default type for definite descriptions, particularly in subject position, is $\langle e \rangle$. Then the type $\langle e, t \rangle$ denotation would be derived from the type $\langle e \rangle$ denotation by application of the type-shifter IDENT, which maps any element onto its singleton set (Partee 1987:122).

4 Which NPs can be specificational subjects?

In the preceding sections I have argued that the subject of a specificational clause is not referential, but predicative. Taking this as our starting point we can investigate which forms of NPs can occur in in this position. In particular, I propose the following hypothesis:

- (22) For an NP to be the subject of a specificational clause it is a necessary, but not sufficient, condition that the NP can denote a property (that is, occur in type $\langle e, t \rangle$).

I will test this hypothesis by examining three groups of NPs. The first group contains NPs that uncontroversially occur in type $\langle e, t \rangle$ (definite descriptions, possessive NPs and partitive NPs) and show that these also occur as subjects of specificational clauses. The second group contains NPs that have been argued not to occur in type $\langle e, t \rangle$ (proper names, strongly quantificational NPs and some pronouns) and show that these also do not occur as subjects of specificational clauses. The third group is indefinite NPs, which can have a predicative interpretation, but have been argued not to occur as subjects of specificational clauses. I show that this is only true for some indefinites and suggest that pragmatic factors (in particular the requirement that the subject of a specificational clause be topic) are responsible for the split in the class of indefinites.

4.1 Group I: Definite descriptions, possessive NPs, and partitive NPs

These NPs can occur in all three types, including the predicative type. In fact, Graff (2001) argues that the default type for definite descriptions is $\langle e, t \rangle$, and in so far as possessives and partitive NPs are “built” out of definite descriptions (cf. Thomsen (1997a:74ff)), one might argue that the same holds for these (see also Partee (1987:123–125)). Their predicative use is illustrated in (23) where they occur as the second element of the small clause complement of *consider*. As argued by Rothstein (1995), it is a defining characteristic of small clauses that the second element is predicative (though see Heycock and Kroch (1999) for relevant discussion). In (23), the small clause is in square brackets, and the predicative element(s) in curly braces.

(23) I consider [Mary {the best person for the job/my best friend/one of my best friends}]

As the examples in (24) through (34) attest, all three kinds of NPs also occur as specificational subjects, in accordance with the correlation hypothesized in (22).

Definite descriptions We have already seen grammatical examples of specificational clauses with definite description subjects above. Below are some more examples gathered from various newspapers and magazines. Throughout the subject NP is in bold.

(24) **Det mest veltalende indlæg i debatten om kulturel forsoning** er Oliver the most well-spoken contribution in debate-DEF about cultural reconciliation is Oliver Stones dokumentarfilm *Persona Non Grata*.⁹
Stone’s documentary-film *Persona Non Grata*
‘**The most articulate contribution to the debate about cultural reconciliation** is Oliver Stone’s documentary *Persona Non Grata*.’

(25) **The most successful such enterprise** is i-flex solutions Ltd., whose Flexcube is the world’s bestselling banking software package.¹⁰

(26) “Hele Londons jet-set og medier har nu i ugevis sladret som sindsyge om at whole London’s jet-set and media have now for weeks gossiped like mad about that ‘**det højtstående medlem af kongefamilien**’ der skulle have været involveret the high-standing member of royal-family-DEF that should have been involved **i en påstået upassende episode ved hoffet, som en tidligere ansat hævder in an alleged improper episode at court-DEF that a former employee claims at have overværet, skulle være Prins Charles,**” sagde sir Michael Peat.¹¹
to have witnessed, should be prince Charles said Sir Michael Peat.
‘“For weeks all of London’s jet-set and media have been speculating that ‘**the prominent member of the royal family**’ who supposedly has been involved in a **alleged improper episode at the court that a former employee claims to have witnessed** could be Prince Charles” said Sir Michael Peat.’

⁹From Bo Green Jensen “Stilheden mellem to tanker” (The silence between two thoughts), *Weekendavisen Kultur*, September 5–11 2003, p. 1.

¹⁰Shailaja Neelakantan “India’s IT Firms: Beyond Outsourcing”, *The Wall Street Journal Europe*, November 20, 2003, p. A9.

¹¹Annegrethe Rasmussen “Royale rygter ryster Windsor” (Royale rumors shock Windsor), *Information*, November 8-9, 2003, p. 20.

Possessive NPs These also occur readily as subjects of specificational clauses as the following examples show:

(27) **Our next speaker** is Claudia Maienborn.¹²

(28) **My German consultant** is Trude Heift.¹³

(29) **His main deputy in the subject** is Brett Kavanaugh, a Federalist Society member who ...¹⁴

(30) Ifølge de seneste prognoser er **valgets favorit** partiet Det Forenede
 according-to the latest polls is election-DEF-POSS favorite party-DEF the united
 Rusland, *Jedinaja Rossija*.¹⁵
 Russia, Jedinaja Rossija
 ‘According to the latest polls, **the favorite to win the election** is the party United
 Russia, *Jedinaja Rossija*.’

(31) When I reached my station I bought a paper; and, reading the tail-end of that sentence, discovered that **Rysty’s bride** was: a beautiful cover girl from the Arkansas hills, Miss Margaret Thatcher Fitzhue Wildwood. Mag!¹⁶

Partitive NPs These too occur as subjects of specificational clauses, as illustrated in the examples below. Note that the “downstairs”, definite NP may be a definite description, as in (32) and (33), or a possessive NP, as in (34).¹⁷

(32) **En af de danske skribenter, jeg altid har beundret næsten uden reservation,**
 One of the Danish writers I always have admired almost without reservation
 er den som tennisspiller mere kendte Torben Ulrich.¹⁸
 is the as tennis-player more known Torben Ulrich
 ‘**One of the Danish writers that I have always admired almost without reservation**
is Torben Ulrich, who is in fact better known as a tennis player.’

¹²Rainer Blutner, session chair at the workshop “Pragmatics in Optimality Theory” at the 14th ESSLLI in Trento, August 14 2002.

¹³Hedberg (2000:893, fn. 5).

¹⁴Jeffrey Toobin “Advice and Dissent”, *The New Yorker*, May 26 2003, p. 47.

¹⁵Anna Libak “Designet demokrati” (Democracy by design) *Weekendavisen*, December 5–11 2003, p. 9.

¹⁶Truman Capote *Breakfast at Tiffany’s*, Vintage International edition, p. 76.

¹⁷Also note that Danish does not make an obligatory orthographic distinction corresponding to English *one* vs. *a*. The distinction can be made by doubling the vowel (*een/eet*) and/or an accent (*én/ét*), both of which get rid of the article meaning. Though neither of these devices are used in the Danish examples in (32) and (33) I nonetheless gloss these as *one*, in correspondence with the English translation where only *one* is possible.

¹⁸Dan Turrel, quoted in Lars Bukdahl “Beatnik med boldøje” (Beatnik with an eye for the ball), *Weekendavisen Bøger*, May 9–14 2003, p. 2.

- (33) **Et af de store problemer** er det rådgivende regeringsråd på 25 personer, som USA one of the big problems is the advisory council of 25 people that USA oprettede og som repræsenterer Iraks forskellige etniske og religiøse grupperinger.¹⁹ created and that represents Iraq’s different ethnic and religious groups. ‘**One of the big problems** is the 25 person advisory council which the US created and which represents the different ethnic and religious groups in Iraq.’
- (34) “**One of my heroes** is [Apple Computer Inc. founder] Steve Jobs” says Rajesh Hukku, i-flex’s founder and chief executive.²⁰

The fact that these three kinds of NPs (definite descriptions, possessive NPs and partitive NPs) occur as subjects of specificational clauses is expected under the hypothesis in (22), since they satisfy the central semantic condition for occupying this position: they can all denote properties, and that, according to the argument laid out in section 3, is exactly what subjects of specificational clauses denote.

4.2 Group II: Strongly quantificational NPs, pronouns, and names

These NPs do not (readily) occur in the predicative type, as indicated by their inability to occur as small clause predicates:

- (35) #I consider [Ingrid Bergman and Liv Ullmann {most actresses in that movie}].
- (36) #I consider [Mary {her/Mrs. Robinson}].

The reason for the lack of a predicative reading varies from case to case, so I will discuss this individually for each the three types of NP. What they have in common is that they do not occur as subjects of specificational clauses (except for a well-defined subset of pronouns, see below). Based on (22) we can understand their inability to occur in this position as a direct consequence of their inability to occur in the predicative type.

Strongly quantificational NPs These are NPs formed with determiners like *every*, *both*, *all*, and *most* (a more comprehensive list is given in Barwise and Cooper (1981:182)). By default, they denote generalized quantifiers (see the discussion of example (7) in section 2 above). Partee (1987:124–125) shows how generalized quantifier denotations can be shifted into predicative denotations by application of the type-shifter BE. Intuitively speaking, BE applies to a generalized quantifier (i.e. a set of sets of individuals), finds all the singleton sets and collects their members into a set (*ibid.* p. 127). While BE is always defined (it is a total function) the result is sometimes “degenerate”, in the sense that it yields unsatisfiable predicates (*ibid.* p. 118–119). For instance in the case of a strongly quantificational NP like *most politicians*, there are no singleton sets in its generalized quantifier denotation, and hence the result of applying BE to the generalized

¹⁹Jens Holsøe “USA’s allierede presser på for kursskifte” (US allies push for change of course), *Politiken*, November 14, 2003, p. 11.

²⁰Shailaja Neelakantan “India’s IT Firms: Beyond Outsourcing”, *The Wall Street Journal Europe*, November 20, 2003, p. A9.

quantifier denotation is the empty set.²¹ Since nothing is the member of the empty set, the resulting predicate is unsatisfiable. Thus we can understand the badness of (35) as due the lack of a non-degenerate, satisfiable predicative denotation for *most actresses*.

Given these observations and the hypothesis in (22) we expect strongly quantificational NPs not to be able to occur as subjects of specificational clauses, and that is what we find, as shown in (37) – (39).²²

(37) ***Both actresses in that movie** are Ingrid Bergman and Liv Ullmann.

(38) ***Most actresses in that movie** are Ingrid Bergman and Liv Ullmann.

(39) ***All actresses in that movie** are Ingrid Bergman and Liv Ullmann.

Note that unlike the previous cases, the subject NPs are all plural. However, the ungrammaticality of (37)–(39) cannot simply be due to the subject NP being plural, since there are well-formed examples of specificational clauses with a plural subject NP:

(40) **Favoritterne** er Zatoichi, japaneren Takeshi Kitanos svært populære debut i favorites-DEF are Zatoichi, Japanese Takeshi Kitano’s heavily popular debut in samuraigenren, og Andrej Zvjagintsevs russisk rugende Vozvrascenje samurai-genre-DEF and Andrej Zvjagintsev’s Russianly brooding Vozvrascenje (Hjemkomsten).²³
(homecoming-DEF)
'**The favorites** are Zatoichi, the Japanese director Takeshi Kitano’s wildly popular debut in the samurai genre and Andrej Zvjagintsev’s Russianly brooding Vozvrascenje (The Homecoming).'

In the grammatical example in (40) the complement of the copula is a coordinated NP, just as is the case in the ungrammatical examples in (37)–(39). However, in (40) the subject NP is a plural definite description *favoritterne* (the favorites), and not a quantifier. Definite descriptions, including plural ones, can denote properties. We can maintain this claim either on the grounds that this is their default type (as argued by Graff (2001)) or by virtue of their ability to denote plural individuals (in the sense of Link (1983)), from which a predicative reading can be derived by application of Partee’s type-shifter IDENT. Thus the contrast between (40) and (37)–(39) is in line with the hypothesis pursued here.

The difference between so-called distributive and collective readings of plural NPs might also play a role in the (un)grammaticality of these sentences, but that requires a separate investigation. (On the difference between distributive and collective interpretations, see e.g. Link (1983), Thomsen (1997a:129–165), and references cited there.)

²¹The exception to the generalization that the set of sets denoted by *most politicians* does not contain any singletons is the limiting case where there is only one politician in the domain of interpretation. In this case, however, Gricean principles would compel us to use *the politician*, rather than *most politicians*, cf. Partee’s discussion of *every man* vs. *the man* on p. 127.

²²Similarly, McNally (1992:6,87,93) argues that the reason strong quantifiers do not occur in the pivot of a *there*-existential constructions is that this position is reserved for property-denoting expressions, and these NPs lack property-denotations.

²³From Bo Green Jensen “Stilheden mellem to tanker” (The silence between two thoughts), *Weekendavisen Kultur*, September 5–11 2003, p. 1.

Pronouns Outside of their uses as bound variables, pronouns like *she*, *he*, and *they* seem inherently referential. These pronouns do not have any obvious quantificational structure, and apart from basic information about gender and number they have no descriptive content. Heim and Kratzer (1998:244) propose that the number and gender information is presupposed in the use of a pronoun, not asserted. As the examples in (41) and (42) show, this information can be exploited to create a predicative meaning, but only when these pronouns are assisted by the indefinite article:

(41) Holy smoke! The chief chef is a she!²⁴

(42) The Holy Spirit is a He, not an It.²⁵

In these examples a *she* and a *he* seem to be used to mean ‘female’ and ‘male’, respectively, exploiting the gender (and, in the case of (42), animacy) information presupposed by each of the pronouns. The property of being female/male is predicated of the subject of the clause (the chef and the Holy Ghost, respectively). However, this predicative reading disappears if we remove the indefinite article. Thus (43) is not synonymous with (41), nor is (44) synonymous with (42).²⁶

(43) Holy smoke! The chief chef is her!

(44) The Holy Spirit is him, not that.

This is valuable evidence that these pronouns, on their own, cannot denote properties. Consistent with this observation, they also do not occur as the second constituent of a small clause:

(45) *I consider [the best doctor in the county {him}].

We thus expect these pronouns not to be able to function as subjects of specificational clauses. This is indeed the case, as the examples in (46) and (47) show:

(46) ***She** is Ingrid Bergman, isn’t she?

(47) ***They** are Ingrid Bergman and Liv Ullmann, isn’t it?

I include the tag question to be sure that these are interpreted as specificational clauses (see section 3). Without the tag (or with a gendered pronoun in the tag) the matrix clauses can be interpreted as an Identity statement (see fn. 7), i.e. as stating that the referents of the two NPs are identical. These clauses differ from specificational ones in having a referential subject as well as a referential complement. That this reading is available without the tag is entirely expected, since pronouns and proper names (see below) are, at least by default, referential (type

²⁴Headline in online edition of *The Hindu*, August 15 2003.

(<http://www.hinduonnet.com/thehindu/mp/2003/08/25/stories/2003082501650300.htm>).

²⁵Posting at “What do the scriptures say? Bible Questions and Answers”

(<http://www.scripturessay.com/q451b.html>).

²⁶I use *that*, rather than *it* in (44), because it occurs in is what Postal (1998:§2.3) calls an ‘antipronominal’ context, which does not accept weak pronouns like *it*.

⟨e⟩). However, it is not the reading we are interested in here, and the fact that the addition of the specificational tag results in ungrammaticality is strong evidence that these clauses do not have a specificational reading. Given (22), we can understand the lack of a specificational reading of these clauses in terms of the lack of a predicative denotation of the pronouns that occupy their subject position.

An important exception to the claim that pronouns cannot occur as subjects of specificational clauses is that the pronouns that are used to pronominalize property-denoting NPs, Danish *det* and English *it*, **can** occur in this position:

- (48) Da jeg besøgte politistationen i dag, var der én, der ikke havde skudsikker vest
 When I visited police-station-DEF today was there one who not had bulletproof vest
 på — **det** var mr. Vittrup²⁷.
 on — that was Mr. Vittrup.
 ‘When I visited the police station today, there was one person, who wasn’t wearing a
 bulletproof vest — **that** was Mr. Vittrup.’

- (49) Jeg lagde mig på sengen *I laid down on the bed*
 og græd så bitterligt *and cried so bitterly*
 og hver en gang at døren gik *and every time the door opened*
 jeg troede **det** var dig²⁸ *I thought **it** was you*

- (50) Carla heard the car coming before it topped the little rise in the road that around
 here they call a hill. **It**’s her, she thought. Mrs. Jamieson — Sylvia — home from her
 holiday in Greece.²⁹

That these are specificational clauses is indicated by the fact that when continued by tag questions, the pronoun is *det/it*:

- (51) Det var mr. Vittrup, var **det**/*han ikke?
 that was Mr. Vittrup, was it/ he not
- (52) Det var dig, var **det**/*du ikke?
 It was you, was it/ you not
- (53) It’s her, isn’t **it**/*her?

In Mikkelsen (2004) I suggest that these clauses are “hidden” clefts, where the subject pronoun (*det/it*) is anaphoric to a contextually salient property. In an overt cleft the relevant property is spelled out by the cleft clause:³⁰

²⁷Jacob Basbøll & Hakon Mosbech “Første dag på stationen” (First day at the station), *Information*, August 9–10 2003, p. 5.

²⁸Second verse of “Det var en lørdag aften” (It was a Saturday evening), a traditional Danish song.

²⁹Opening paragraph of Alice Munroe’s “Runaway”, *The New Yorker*, 11/8 2003, p. 63.

³⁰Important sources of inspiration for this analysis are Jespersen (1927:25ff), Nölke (1984), Declerck (1988), Büring (1998), and Hedberg (2000).

- (54) Det var mr. Vittrup *der ikke havde skudsikker vest på*.
that was Mr. Vittrup, that not had bullet-proof vest on
- (55) Det var dig *der kom*.
It was you that came
- (56) It's her *that's coming*.

These data offer further support for the hypothesis in (22): pronouns that cannot denote properties are barred from occurring as subjects of specificational clauses (examples (46) & (47)), while the pronouns that are used as property-anaphors **can** occur as subjects of specificational clauses, in particular as subjects of specificational clauses of the hidden cleft variety (examples (48) – (50)).

Names The third and final kind of NP in this group is proper names. There is an extremely large and detailed literature on the semantics of names (for a recent review of the linguistic debate see the exchange between Geurts (1997, 2002) and Abbott (2002)). What is not in doubt, as far as I can tell, is that names can be referential. Here I take the stronger position, defended by Geach (1962:14, 31, 42), Kripke (1972:48ff), and Soames (2002:55–95) among others, that names, by themselves, are necessarily referential. With the help of an indefinite article a predicative reading is available for some names, as (57) shows.³¹

- (57) This guy is a real Einstein, though, because he just keeps getting away with these things.³²

Here *a real Einstein* is used to denote a property, ‘very smart’ or ‘(a) genius’, which is predicated of the subject referent. Notice that without *a real*, (57) loses this reading, in favor of a, rather implausible, equative reading (that the individual referred to by *this guy* is Einstein himself). Setting aside these cases, we observe that names cannot occur as subjects of specificational clauses. Thus (58) with a specificational tag is ungrammatical.

- (58) ***Susan** is Mrs. Robertson, isn't it?

As is the case with the pronominal subjects in (46) and (47), the tagged clause has only an equative reading, which is ruled out by *it* in the tag, resulting in overall ungrammaticality.

To summarize the results of this section: we have seen that strongly quantificational NPs, pronouns, and names do not occur as subjects of specificational clauses. Given the hypothesis in (22), we can understand this as a consequence of their inability to function as predicates, i.e. to have (non-degenerate) type $\langle e,t \rangle$ denotations. Let us finally turn to the third group, which contains indefinite NPs.

³¹Thomsen (1997b) suggest that names are by default predicative via an implicit ‘be called’ relation. Here I will assume, contra Thomsen (1997b) (and Geurts (1997)), that a predicative reading is only available when facilitated by some additional linguistic material, as in (57).

³²Posting at http://www.movie-fan-forum.com/movies/Thirteen_pretty_powerful_577776.html.

4.3 Group III: Indefinites

It seems undeniable that indefinite NPs like *a cat* can be interpreted predicatively, i.e. as denoting sets of individuals (in the case of *a cat*, the set of cats in the domain of interpretation).³³ In fact Geach (1962:35) argues forcefully that that is the **only** interpretation available for the indefinite in a sentence like (59).

(59) Jemima is a cat.

Note also that indefinites occur readily as the second element of a small clause:

(60) I consider [Susan {a good doctor}].

The ability of indefinites to denote predicates, together with the hypothesis in (22), lead us to expect that indefinites can occur as subjects of specificational clauses. However, not all indefinites are felicitous as specificational subjects. For instance, Heycock and Kroch (1999) cite (61) (their (52b)) as ungrammatical, and the Danish example in (62) is no better.

(61) # **A doctor** is John.

(62) # (**En**) **læge** må være Jonas.
a doctor must be Jonas.

Importantly, some indefinites **do** occur as subjects of specificational clauses, as the examples in (63) – (66) show:

(63) **A philosopher who seems to share the Kiparskys' intuitions on some factive predicates** is Unger (1972), who argues that ...³⁴

(64) **Another speaker at the conference** was the *Times* columnist Nicholas Kristof, who got Wilson's permission to mention the Niger trip in a column.³⁵

(65) **One Iraqi émigré who has heard from the scientists' families** is Shakir al Kha Fagi, who left Iraq as a young man and runs a successful business in the Detroit area.³⁶

(66) **En læge som måske kan hjælpe dig** er Jørgen Vestergaard.

So the question is what distinguishes the indefinites in (61) and (62), which are infelicitous, from the indefinites in (63) – (66), which are felicitous. The answer I want to propose is that the former are infelicitous because the indefinites in subject position are not interpretable as topics (in a sense to be made precise below), whereas the indefinites in the latter set of examples, qua their rich descriptive content, are able to function as topics. To explain this answer in more detail we need to examine the topic-focus structure of specificational clauses. This is the business of the next section.

³³In fact, Partee (1987:117–118) argues that indefinite descriptions, along with definite descriptions, can occur in all three types (see also de Swart (1999)).

³⁴Delacruz (1976:195, fn. 8).

³⁵Seymour M. Hersh “The Stovepipe”, *The New Yorker*, Oct 27, 2003, p. 86.

³⁶Seymour M. Hersh “The Stovepipe”, *The New Yorker*, Oct 27, 2003, p. 86.

5 The role of information structure

One of the characteristic properties of specificational clauses is that they exhibit a fixed topic–focus structure: the subject NP is always topic and the complement NP is always focus. In contrast, the topic–focus structure of predicational copular clauses is free. (For data and discussion see e.g. Higgins (1979:234–6), Partee (2000:199–200), Heycock and Kroch (2002:148–149), and Mikkelsen (2002b:§4).) Below I examine this asymmetry in the light of the corpus study reported in Birner (1996) and suggest that the notion of topic governing the subject position of specificational clauses is closely related to Prince’s (1992) notion of Discourse-old (section 5.1). I further show how Discourse-oldness interacts with indefiniteness to produce the observed split within the class of indefinite NPs as regards their ability to be subjects of specificational clauses (section 5.2).

5.1 Topic as Discourse-old

Birner (1996) reports on a corpus study of ‘inversion’ structures in written and spoken English. She defines inversion as in (67).

- (67) An INVERSION is a sentence in which the logical subject appears in a post-verbal position while some other, canonically post-verbal, constituent appears in clause-initial position. (Birner 1996:12)

In her corpus, the clause-initial constituent of an inversion is most frequently a PP, but she also discusses inversions involving VPs, Adjective Phrases, NPs, and Adverbial Phrases. While the clause-initial constituent is not typically the surface syntactic subject, Birner (1996:42–45) allows for the possibility that is indeed the case for NP inversions. This means that we can reasonably treat the specificational copular clauses examined above as an instance of NP inversion in Birner’s sense. If we further understand Birner’s notion of “logical subject” in terms of being the subject of predication (i.e. the logical subject represents the argument of the functor that is represented by the predicate of the clause), my semantic characterization of specificational clauses (referential complement NP, predicative subject NP) fits Birner’s characterization of inversion as structures where the post-copular constituent is the logical subject.

Birner argues that inversion is an information packaging device (in the sense of Vallduví (1992)) that serves to “present information that is relatively familiar in the discourse before information that is relatively unfamiliar in the discourse” (*ibid.* p. 90). Using Ellen Prince’s (1992) notion of DISCOURSE-OLD, Birner proposes that the central well-formedness condition on inversions is that the fronted constituent is at least as Discourse-old as the post-copular constituent (*ibid.* pp. 90ff). Following Prince (1992) and Webber (1981), Birner frames the notion of Discourse-old in terms of elements in the discourse model. An entity is Discourse-old if it already exists in the speaker’s model of the current discourse. By terminological extension an expression is Discourse-old if it denotes a Discourse-old entity. An entity becomes Discourse-old by being (saliently) present in the physical context, by being mentioned explicitly in the discourse, or by being inferable from previously mentioned entities (the last case is called “Inferables” in Prince (1981)). It is important to note that the kinds of entities that can be Discourse-old (or Discourse-new) extend beyond individuals to properties, states, actions, facts, etc. (*ibid.* p. 140).

Moreover, Birner found that “it was seldom the case that the ENTIRE preposed constituent represented familiar [i.e. Discourse-old; LM] information” (p. 83, emphasis in the original), but that often “a previously evoked (or, in many cases, inferrable) entity is being referred to, with additional information about it being added within the preposed constituent” (p. 84). Thus larger constituents become Discourse-old by containing Discourse-old subconstituent. We can conceive of this as a “trickle-up” effect: the Discourse-oldness of a constituent “trickles up” to a larger, containing constituent. Finally, it is important to note, that what counts, in the end, is not actual Discourse-oldness, but being treated as Discourse-old (Birner 1996:140). As with most pragmatic principles, it is ultimately about how speakers present information (and themselves and their beliefs) and not about the information itself (or the speakers and their actual beliefs). Thus it is possible to present information as Discourse-old without it (verifiably) being that. What happens then depends on whether the hearer is willing to accommodate his or her discourse model (in roughly the sense of Lewis (1979)), to process this information as Discourse-old. This in turn depends on a multitude of factors, including how costly the accommodation is and how is to be gained from it (in the the relevance-theoretic sense). Infelicity results when the hearer cannot (reasonably) perform this accommodation. Since this is a general issue and not special to copular clauses or inversion structures, I will continue to ignore it and talk about Discourse-old in objective terms.

Before discussing the split in the indefinites observed in section 4.3, let us first consider the examples of specificational clauses with group I NPs as subjects (see section 4.1) in the light of Birner’s condition on inversion structures. I will argue that her condition holds true of all of these: in each case the subject NP (a definite, possessive or partitive description) is at least as Discourse-old as the complement NP (a name). In all of the examples the subject NP is Discourse-old, either by containing previously mentioned material or by containing inferrable material. Examples of the former include (25), where the head noun *enterprise* has been mentioned previously, and (30), where the possessor *valget* (the election), is previously mentioned. Examples involving inferrables include (27), where the existence of a next speaker is inferrable from the existence of an (unfinished) workshop, which itself is Discourse-old by being salient in the context of utterance, in fact it constitutes an essential part of the context of utterance. In the examples with partitive subjects in (32) – (34), there is a trickle-up effect from the downstairs definite or possessive NP, which is itself Discourse-old by the mechanisms described above, to the whole subject NP. For instance, (33) occurred in an article discussing the difficulties facing the US-led occupation of Iraq. This makes the head noun of the downstairs NP inside the subject (*problem*) Discourse-old, which in turn renders the entire subject NP Discourse-old. As for the complement NPs in the specificational clauses with group I subjects, some were clearly Discourse-new, including *i-flex solutions Ltd.* in (25) and *Trude Heift* in (28), neither of which had been mentioned previously in the text. Others were arguably Discourse-old, including *prins Charles* (Prince Charles) in (26) and *Torben Ulrich* in (33), since these discourse referents are central to the overall topic of the articles in question (Prince Charles as a participant in the alleged incident generating the rumors and Torben Ulrich as the author of the book being reviewed). However, Birner’s condition allows for both NPs being Discourse-old (the fronted constituent must be at least as Discourse-old as the post-copular constituent), so also these cases obey her condition on inversion.³⁷

³⁷Birner (1996:90-91) discusses the possibility of refining the discourse condition on inversions by distinguishing degrees of Discourse-oldness. This is particularly relevant for cases of specificational clauses where both NPs are

5.2 Discourse-oldness and definiteness

The NP subjects discussed above (definite descriptions, possessives, and partitives) are all definite to some degree (Farkas 2002). It is not surprising that they can be used to convey Discourse-old information, since one prominent theory of definiteness is that definiteness expresses familiarity, and one way for discourse referents to become familiar is by being mentioned in the discourse (see Roberts (2003) for comprehensive discussion). Whereas it is natural for Discourse-old NPs to be definite, it is much less likely for Discourse-old NPs to be indefinite (see Birner (1996:101ff) and references cited there). The reason it is difficult for indefinite NPs to be Discourse-old is that one of the primary conditions on the use of indefinites is that they are used to introduce novel discourse referents (cf. Heim’s (1982) NOVELTY CONDITION and the empirical generalizations in Prince (1992)).³⁸ Hence, if relative Discourse-oldness is a requirement for being a specificational subject, we can understand why it is difficult for indefinites to occupy this position. Difficult, but not impossible. An indefinite can be (relatively) Discourse-old by virtue of containing material, e.g. in the form of modifiers, that refers to previously introduced discourse referents (in the broad sense of referent). Thus in the good example in (63), repeated in (68) below, the indefinite subject contains a relative clause that mentions the judgments of Kiparsky and Kiparsky.

- (68) **A philosopher who seems to share the Kiparsky’s intuitions on some factive predicates** is Unger (1972), who argues that . . .

These judgments have been discussed in the preceding text, in fact they are the central concern of this section of the paper. The relative clause therefore provides a link to the preceding discourse, which in turn confers (relative) Discourse-oldness to the indefinite NP containing it. In particular, it makes the indefinite subject Discourse-older than the complement NP, which refers to an individual (the work by Unger) which has not previously been mentioned in the text (nor has the author, Unger, been previously mentioned). Note that even though the indefinite NP **contains** Discourse-old material, it is not entirely Discourse-old: in particular, no discourse referent has been previously introduced for ‘a philosopher who seems to share the Kiparsky’s intuitions on factive predicates’. This, I suggest, is why the Novelty Condition on indefinites is not violated. Thus we find that indefinites in the subject position of specificational clauses have to walk a tight rope: on the one hand, they have to contain enough Discourse-old material to satisfy the topic requirement associated with this position; on the other hand, they have to maintain overall novelty to qualify for an indefinite article or determiner.

The indefinites in (61) and (62) do not contain any modifiers that could provide links to the preceding discourse. Hence the indefinites cannot be construed as topics, and the result is infelicity. In contrast the indefinites in the good examples in (63) – (66) all contain modifiers linking to the preceding discourse, hence they can be construed as topics, satisfying the requirement on the subject of a specificational clauses. I already discussed example (63) (= (68)) above. The other two attested examples of indefinite specificational subjects are (64) and (65), repeated here as (69) and (70).

classified as Discourse-Old under the binary distinction assumed in Prince (1992) and Birner (1996). Birner suggest that factors like recency of mention and salience could be used to define degrees of Discourse-oldness, but leaves the issue unresolved.

³⁸Here I am using ‘discourse referent’ in the broad sense described above, where it encompasses not only individuals, but also properties, facts, events, and whatever else we refer to when we engage in discourse.

- (69) **Another speaker at the conference** was the *Times* columnist Nicholas Kristof, who got Wilson’s permission to mention the Niger trip in a column.
- (70) **One Iraqi émigré who has heard from the scientists’ families** is Shakir al Kha Fagi, who left Iraq as a young man and runs a successful business in the Detroit area.

Both sentences occurred in an article by Seymour Hersh discussing the quality of the intelligence cited by the US government as motivation for the military invasion of Iraq. The sentence in (69) occurred immediately after it had been stated that Joseph Wilson had mentioned his findings on the alleged transactions between Iraq and Niger at a conference in Washington. Thus ‘the conference’ mentioned in the subject NP of (69) is Discourse-old. The referent of the complement NP (Nicholas Kristof) is Discourse-new, and even though the appositive relative clause attached to it does contain some Discourse-old material (Wilson and the Niger trip), the sentence clearly obeys Birner’s condition: the subject NP is at least as Discourse-old as the complement NP. The sentence in (70) occurred in a later paragraph discussing the situation of the men and women who worked in the Iraqi weapons industry and who at the time the article was written were being held at the Baghdad airport. In the passage immediately before (70) Hersh describes how these people, desperate for information, have been calling friends and other contacts in America for help. Thus ‘the scientists’ mentioned in the subject NP in (70) are Discourse-old. In contrast, the referent of the complement NP (Shakir al Kha Fagi) is Discourse-new, as is the appositive relative clause, except for the mentioning of Iraq.

Notice finally, that since there is no topic requirement on the subject position of a predicational copular clause, we expect to find Discourse-new indefinites in this position. And it seems that we do.³⁹ Thus (71) could occur discourse initially, which would imply Discourse-newness for the entire sentence, and (72) would be a suitable answer to a discourse-initial question like *How did the meeting go?*

- (71) A student is here to see you.
- (72) A philosopher was present and he hijacked the discussion.

6 Conclusions

In this paper I have explored some consequences of the semantic characterization of specificational clauses proposed in Mikkelsen (2002c), in particular the claim that these clauses have a property-denoting subject and a referential complement. I have examined three groups of NPs with respect to their ability to occur as specificational subjects. This examination provides supports for the hypothesis that it is a necessary, but not sufficient, condition for an NP to occur as a specificational subject, that it can denote a property. In the positive direction of the condition, we saw that NPs that can denote properties (definite descriptions, possessives and partitives) can occur as specificational subjects. In the negative direction, we saw that NPs which cannot denote properties (strongly quantificational NPs, names and most pronouns) cannot not occur

³⁹As discussed in detail in Mikkelsen (2002a), there is a general dispreference for indefinites in subject position, so good examples are not easy to come by. Nonetheless, there does seem to be a contrast between Discourse-new indefinite subjects in specificational and predicational clauses. Compare (71) and (72) with (61) and (62).

as specificational subjects. The third group examined, namely the indefinite NPs, underscored the need for the “not sufficient” part of the hypothesis. These NPs can denote properties, but not all of them can occur as specificational subjects. In the last section of the paper I suggested that that is because of a pragmatic condition on this position, in particular a requirement that the subject be Discourse-old, which conflicts with the novelty condition on indefinites, in a way that severely limits indefinite specificational subjects. The next logical step is to look at the NPs that occur in complement position of specificational clauses, and examine the validity of the claim that this position is reserved for individual-denoting expressions, but that is a project for another occasion.

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