Two types of definite description subjects

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Introduction

(1) a. The lead actress in that movie is Ingrid Bergman. [specificational]
b. The lead actress in that movie is a good actor. [predicational]
c. Sally is Mrs. Robertson. [equative]

Q How are the subject noun phrases interpreted?

A1 In predicational and equative copular clauses the subject is referential, but in specificational clauses the subject is not referential, but 'circumscriptional' (Higgins 1979:213–219).

A2 Specificational clauses are a subtype of equative clause, and the subject of both is referential (Heycock and Kroch (1999); Rothstein (2001:chapter 9)).

My answer The subject of a specificational clause is indeed non-referential, which sets it apart from the subject of predicational and equative clauses. Specificational clauses can therefore be not be assimilated to equatives (contra Heycock and Kroch (1999) and Rothstein (2001)).

Structure of talk

1. An argument from pronominalization in Danish and English.
2. Formalization
3. Two complications
4. An alternative interpretation of the pronoun facts
5. Conclusion

1 Semantic types and pronominalization

Contrast

(2) a. The lead actress in that movie is Ingrid Bergman, isn't it? [specificational]
b. The lead actress in that movie is Swedish, isn't {she/*it}? [predicational]

Claim The use of *it* in the tag indicates a non-referential interpretation of *the lead actress*.

1.1 Assumptions

1. Noun phrase interpretation (Partee 1987)

- A definite description can be:
  - REFERENTIAL: type $\langle e \rangle$, denotes an individual
  - PREDICATIVE: type $\langle e, t \rangle$, denotes a set of individuals
  - QUANTIFICATIONAL: type $\langle \langle e, t \rangle, t \rangle$, denotes a function from sets to truth values
- The interpretation of a specific occurrence of a definite description is fixed by the semantic composition and may involve application of various type-shifting operations.

2. Predicative anaphors In Danish, the third person definite neuter pronoun *det* ('it') can be anaphoric to a predicative expression:[1]

(3) De sagde at Minna er {en god træner / flink / i Oslo} og **det**$_k$ er hun t$_k$.
They said that M. is {a good coach / nice / in Oslo} and it is she
'They said that Minna is {a good coach / nice / in Oslo} and that she is.'

but not to an expression referring to a human individual:[2]

(4) [Den nye spiller]$_i$ gjorde sig bemærket, da {hun$_i$ / *det$_i$} først ankom.
The new player made SELF noticed, when {she / it} first arrived
'[*The new player*]$_i$ *made herself noticed, when* {*she*$_i$ / **it*$_i$} *first arrived.'*

3. Pronouns in tags The form of the pronoun in a tag question is determined by properties of the subject of the tagged clause:[3]

(5) **Skuespillerinden** er forsvundet, er {**hun** / *han / *de / *jeg / *det} ikke?
actress.DEF is disappeared, is she / he / they / I / it not

(6) **At rejse alene** er hårdt, er {*hun / *han / *de / *jeg / **det**} ikke?
To travel alone is hard, is she / he / they / I / it not?

[1]The trace after *hun* in the second conjunct indicates the base-position of *det*, which has been fronted to Spec-CP. This is an instance of predicate topicalization as discussed in Mikkelsen (2002:§2).

[2]Similar facts hold in English (Kuno 1972:355-363), French (Heggie 1988:130–131), Italian (Zamparelli 2000:17–18), and Swedish (Engdahl 2001:132–133).

[3]See e.g. Quirk et al. (1985:§11.8), Bolinger (1957:17–22, 116–22; 1975:279), Bowers (1976:237), Bresnan (1994:97), Jespersen (1924:198, 302, 323), and McCawley (1988:251).

1.2 Pronominalization in copular clauses

Predicational clauses allow only *she*/*hun*, indicating a referential interpretation of their subject:

(7) The lead actress in that movie is Swedish, isn't {**she**/*it}?

(8) Den højeste spiller på holdet er svensk, er {**hun** / *det} ikke?
the tallest player on team.DEF is Swedish, is {she / it} not?
*'The tallest player on the team is Swedish, isn't {she / *it}*

Equative clauses allow only *she*/*hun*, indicating a referential interpretation of their subject:

(9) Sally is Mrs. Robertson, isn't {**she**/*it}?

(10) Marie er Dr. Andersen, er {**hun** / *det} ikke?
Mary is Dr. Andersen, is she / it not
*'Mary is Dr. Andersen, isn't {she/*it}?'*

Specificational clauses allow *it*/*det*, indicating a non-referential interpretation of their subject:[4]

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

(12) Den højeste spiller på holdet er Minna, er **det** ikke?
the tallest player on team.DEF is M, is it not?
'The tallest player on the team is Minna, isn't it?'

Q Does non-referential mean predicative or quantificational?

A Predicative.

- Truely quantificational noun phrases cannot occur as subject of a specificational clause:

  (13) *Most actresses in this room are Ingrid Bergman and Liv Ullmann.

- To the extent that truely quantificational phrases license a pronoun in a tag question, the pronoun is not *it*:

  (14) a. No woman in her right mind would do such a thing, would {*it/she}?
  b. In the old days a different guy took out the trash each day, didn't {*it/*he}?

[4]I return to the possibility of using *she*/*hun* in the tag in (11)/(12) in section 3.2.

2 Formalization

Denotations

(15) a. $[\![\text{the actress}]\!] = \lambda x \forall y[\text{actress}'(x) \leftrightarrow x = y]$ [type $\langle e,t \rangle$]

b. $[\![\text{the actress}]\!] = \iota x[\text{actress}'(x)]$ [type $\langle e \rangle$[5]]

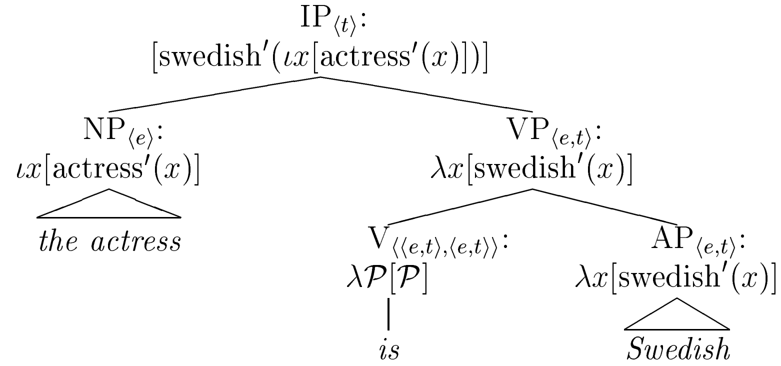
c. $[\![\text{Ingrid Bergman}]\!] = \text{b}$ [type $\langle e \rangle$]

d. $[\![\text{Swedish}]\!] = \lambda x[\text{swedish'}(x)]$ [type $\langle e,t \rangle$]

e. $[\![\text{be}]\!] = \lambda \mathcal{X}[\mathcal{X}]$, where $\mathcal{X}$ ranges over variables of all types in the language

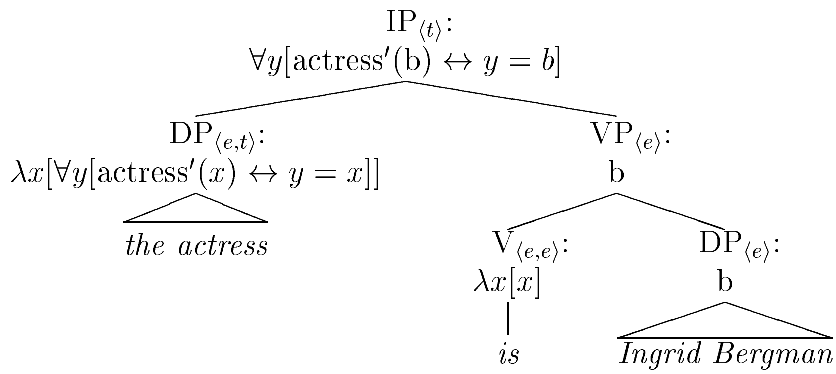
(16) a. The lead actress in that movie is Swedish [predicational]

b.



(17) a. The lead actress in that movie is Ingrid Bergman [specificational]

b.



[5] The referential interpretation can be derived from the predicative interpretation in (15a) by application of Partee's type-shifter IOTA, which maps a singleton set onto its member: $\mathcal{P} \to \iota x[\mathcal{P}(x)]$, where $\mathcal{P}$ is a predicate (Partee 1987:121).

3 Two complications

3.1 Predicative anaphors in English

Claim The use of *it* in the tag of a specificational clause indicates that the subject of the tagged clause is predicative.

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

Problem *It* cannot always be used as a predicative anaphor (Ross (1969:357), Partee (1986:360)).

(19) They said that Sheila was beautiful, and she is {*it/that}.

A possible line of attack

- *It* cannot occur in predicate position, and other anti-pronominal contexts (Postal 1998:§2.3):

  (20) *They said Sheila would remain lonely, and she did remain it.

  (21) *A bagel makes a great snack, and a pretzel makes it too

- *That* cannot occur in tags (Higgins 1979:283):

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

  (23) That is Ingrid Bergman, isn't {it/*that}?

- In a tag question the nuclear accent falls on the auxiliary, while the pronoun is unstressed (Quirk et al. 1985:§11.8).
- *That* is generally stressed, whereas *it* is almost never stressed (discounting metalinguistic uses) (Quirk et al. 1985:§6.16).
- *It* and *that* can both be anaphoric to property-denoting expressions, but they are subject to different prosodic and syntactic restrictions.

Prediction In contexts where these restrictions are not in force (i.e. outside anti-pronominal and prosodically restricted positions), either form should be possible:

(24) Is the lead actress in that movie Ingrid Bergman?

  a. No, it's Liv Ullmann.

  b. No, that's Liv Ullmann.

3.2 Ambiguity

Observation Some speakers allow *she* in the tag of (25), in addition to *it*:

(25) The lead actress in that movie is Ingrid Bergman, isn't {she / it}?

Interpretation

- The string in (25) is ambiguous (without the tag) between a specificational reading (forced by *it* in the tag) and an equative reading (forced by *she*).
- In the equative reading, the subject and the predicate complement are both type $\langle e \rangle$.
- In the specificational reading, the subject is type $\langle e, t \rangle$ and the predicate complement is type $\langle e \rangle$.
- Unambiguous equatives allow only *she* in the tag:

  (26) Sally is Mrs. Robertson, isn't {*it/she}?

- Equatives are marked (they require a special context of utterance).
- This might be why not all speakers accept *she* in the tag in (25).

Further evidence for type ambiguity

(27) The winner of the Oscar for best actress is presently unknown.

a. She has only been in one other movie.

b. It could be Ingrid Bergman. [cf. Büring (1998)]

- Both readings of (27) appear to be predicational, but they predicate *unknown* of different sorts of entities: an individual and something higher order (not an individual).
- Other predicates like *unknown*: *unpredictable*, *well-known*, *uncertain*(?), *important*(?).
- Does this involve the same type-ambiguity of the definite description in subject position as that in (25)?
- Do we need to go intensional?

4 An alternative interpretation of the pronoun facts

A concealed question analysis (Schlenker (2001), see also Baker (1968), Grimshaw (1979), Heim (1979))

- The subject a specificational clause like (28) is a CONCEALED QUESTION.

  (28) His worry is John.

- $[\![$his worry$]\!]$ $\approx$ *"the answer to the question 'which x is such that his worry is x'"*
- Questions denote propositions, i.e. they are of type $\langle s,t \rangle$ (Groenendijk and Stokhof 1997).
- *It* can be anaphoric to a proposition (Quirk et al. 1985:§6.17).
- The use of *it* in the tag to a specificational clause is compatible with a concealed question analysis.

Some unresolved issues for a concealed question analysis

1. Is there a syntactic correlate to a concealed question reading (den Dikken et al. 2000)?
2. To what extent does the set of NPs that can occur as subject of a specificational clause (and pronominalize as *it*) correspond to the set of NPs that can be interpreted as concealed questions when occuring as complements to a verb like *know*?
3. How is the concealed question reading licensed? In particular, why can (29) not be interpreted—along the lines of (28)—as: "the answer to the question 'what nationality is the lead actress in that movie' is 'the lead actress in that movie is Swedish'"?

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

   It is crucial that this reading be ruled out, in so far as it is the concealed question reading that allows the subject to pronominalize as *it*. Otherwise, we predict (30) to be possible, contrary to fact:

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

   Under the analysis proposed here, (30) is impossible because the predicate complement (*Swedish*) is type $\langle e,t \rangle$, which forces the definite description into its $\langle e \rangle$-type denotation (cf. (16b)).

5 Conclusion

Pronominalization in tag questions reveals a difference in the interpretation of the subject of different types of copular clauses. The subject of predicational and equative clauses is referential, whereas the subject of a specificational clause is non-referential, more specifically, it is predicative. This speaks against treated specificational clauses as a (sub)type of the equative construction, as proposed by Heycock and Kroch (1999) and Rothstein (2001).

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