

Specificational Copular Clauses as Inverted Predications with a Semantics of Equation
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Objective: I have two main objectives: 1) Show that specificational copular (SC) sentences are inverted predicates using novel across-the-board extraction (ATBE) facts. 2) Show that SCs have a semantics of equation with the added restriction that the predicate be interpreted exhaustively.

Background: The derivation/ meaning of SCs like (1) is the focus of this paper.

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|-----|---------------------|----|-----|---------------------|
| 1) | The doctor is John. | SC | | |
| 2a) | John is the doctor. | PC | 2b) | Cicero is Tully. Eq |

There are two main analyses: those that claim that SCs are inverted PCs like (2a) (Moro 1997, Mikkelsen 2004, den Dikken 2006 etc) and those that claim that SCs are equatives like (2b) (Jacobson 1994, Heycock & Kroch 1999 (H&K), Sharvit 1999, Heller 2002 etc). I claim that SCs have a semantics of equation despite having an inverted predicate (similar to Geist 2007).

ATBE Asymmetries: I show that ATBE asymmetries are best explained if SCs and Eq are distinct types of copular clauses. (3) shows an Eq, (4) shows a PC and (5) shows a SC.

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|-----|---|----|
| 3a) | My attitude in NYC is your attitude in Philadelphia. | Eq |
| 3b) | *[Which city] _i is _j [my attitude in NYC] t _j [your attitude in t _i]? | Eq |
| 3c) | *[Which city] _i is _j [my attitude in t _i] t _j [your attitude in Philadelphia]? | Eq |
| 4a) | My attitude in NYC is a common attitude in NYC. | PC |
| 4b) | [Which city] _i is _j [my attitude in NYC] t _j [the common attitude in t _i]? | PC |
| 4c) | *[Which city] _i is _j [my attitude in t _i] t _j [the common attitude in NYC]? | PC |
| 5a) | A common attitude in NYC is my attitude in NYC. | SC |
| 5b) | *[Which city] _i is _j [the common attitude in NYC] t _j [my attitude in t _i]? | SC |
| 5c) | *[Which city] _i is _j [the common attitude in t _i] t _j [my attitude in NYC]? | SC |

H&K use the impossibility of wh-extraction seen in the (b) and (c) sentences above to claim that SCs and Eqs are the same. However, there is good reason to disagree. Consider ATBE below.

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|-----|---|----|
| 6a) | [Which city] _i is [my attitude in t _i] t _j [your attitude in t _i]? | Eq |
| 6b) | [Where] _i is [my attitude t _i] t _j [your attitude t _i]? | Eq |
| 7a) | ?[Which city] _i is [my attitude in t _i] t _j [the common attitude in t _i]? | PC |
| 7b) | *[Where] _i is [my attitude t _i] t _j [the common attitude t _i]? | PC |
| 8a) | *[Which city] _i is [the common attitude in t _i] t _j [my attitude in t _i]? | SC |
| 8b) | *[Where] _i is [the common attitude t _i] t _j [my attitude t _i]? | SC |

Eq allow ATBE (H&K: fnt 9). While PCs allow only parasitic gap (PG) formation, SCs allow neither. The (b) sentences (which contain a PP gap) tells us that Eq allow ATBE and not PG formation as PGs can only be DPs (Postal 1993, Munn 2001 a.o). Also note that (7b) is grammatical only on the reading where a possible answer is *My attitude (right now) is a common attitude in NYC* but not in the relevant reading where the wh-phrase occurs in both constituents.

Discussion of the ATBE facts: I claim that the reason why only Eqs allow ATBE is because its constituents are semantically symmetric, in that neither constituent is an argument or predicate of the other. This does not hold in SCs and PCs. Moreover, the difference between (6b) and (7b/8b) cannot be due to a structural asymmetry between the constituents in the SCs and PCs.

9) I know the man_i that [John likes t_i] and [we hope t_i will win]. Williams (1978: 34)

(9) shows ATBE in coordinate structures occurring from a direct object and an embedded subject. It is unclear how these conjuncts are more parallel than the constituents in (7b/ 8b). While we still need to explain why SCs disallow singular wh-extraction, the ATBE facts above indicate that the reason for this is not the same as in the Eq, contra H&K.

Semantics of SCs: Although SCs are proposed to be inverted PCs, I argue that SCs must have a semantics of equation. Consider the following possible PC/ SC alternation.

10a) John is the doctor PC 10b) The doctor is John. SC

Following Partee (1987), I claim that the definite phrase in a PC can be merged as type $\langle e \rangle$ or type $\langle \langle e, t \rangle, t \rangle$ (Partee 1987) (and then type-shifted to $\langle e, t \rangle$ with IDENT and BE respectively in order to compose with the predicational copula with the meaning: $\lambda P_{\langle e, t \rangle} \lambda x_e. P(x)$).

11a) $[[\text{the doctor}]]^{M, g} = \lambda x_e [\text{doctor}(x) \wedge \forall y_e [\text{doctor}(y) \rightarrow y = x]]$ $\langle \langle e, t \rangle, t \rangle$ to $\langle e, t \rangle$ with BE

11b) $[[\text{the doctor}]]^{M, g} = \lambda x_e [1y_e. \text{doctor}(y) = x]$ $\langle e \rangle$ to $\langle e, t \rangle$ with IDENT

Thus, (10a) has the following denotations.

12a) $[[\text{John is the doctor}]]^{M, g} = \text{doctor}(j) \wedge \forall y_e [\text{doctor}(y) \rightarrow y = j]$

12b) $[[\text{John is the doctor}]]^{M, g} = [j = 1y_e. \text{doctor}(y)]$

On the other hand, I claim that the corresponding definite phrase in the SC can only have the denotation in (11b). Independent evidence for this comes from Donallen (1966). While *the doctor* has no existential presupposition in (13a), it does in (13b).

13a) Is John the doctor? PC 13b) Is the doctor John? SC

This presupposition comes from the iota operator (Partee 1987) and since PCs have an interpretation not involving the iota operator, there is no obligatory presupposition. Accordingly, (10b) only has the denotation in (12b). This meets the two conditions that I claim SC formation requires. **Condition 1:** the non-type shifted meaning of the predicate and the argument must be equate-able. **Condition 2:** the predicate must be exhaustively interpreted. This is indeed the case in (10b). Other possible SCs such as *My brother is John*, *The one thing I want a man to be is honest*, and *What John is is proud* all meet both conditions as well. Relational nouns in subject position are exhaustively interpreted (eg. Barker 2008). This applies to pseudoclefts as well (eg. Sharvit 1999). In addition, the non-type shifted meanings of these predicates are of the same semantic type as the post-copular phrases, thus enabling equation. Now consider this.

14) *The one thing I want a man to be is John. SC

(14), from H&K, is not a possible SC (even though the reverse PC is possible) because while condition (2) is met, Condition (1) is not. Ungrammatical SCs like *Silly is John* and *A doctor is John* fail to meet both conditions. This also explains why the latter type of SCs are judged to be worse than (14). In the actual talk, I also discuss the derivation of copular clauses like *A doctor *(that I know) is John* which does not meet Condition 2 but yet are commonly considered to be SCs (Mikkelsen 2004). Using arguments in Fodor & Sag (1982), I show that such copular clauses are equatives. Such data are also shown to be difficult for an SC-as-equative approach.

Conclusion: I argue that the ATBE facts show that Eqs are distinct from SCs and PCs. In addition, I show that the two conditions on SC formation that I propose can account for the main

types of SCs as well as correctly rule out impossible ones. In the talk, I also show following Geist (2007), that we can eliminate a distinct equative copula *be* from the grammar entirely.