

Specification under discussion

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1 Information structure(s)

- Information structure of sentences (ISS) vs. information structure of contexts (ISC) (Roberts 1996:91–2)

- ISS: partitioning of sentences

(1) [Hilary ate]_{GROUND} [bagels]_{FOCUS}.

- ISC: structure on inquiry pursued in discourse

IS1. Who ate what?

a. What did Hilary eat?

a_i. Did Hilary eat bagels?

Yes.

a_{ii}. Did Hilary eat tofu?

Yes.

b. What did Robin eat?

b_i. Did Robin eat bagels?

No.

b_{ii}. Did Robin eat tofu?

Yes.

- Roberts (1996): prosodic focus in English expresses presuppositions about structure of current discourse; including the Question Under Discussion (QUD)
- (1), with prosodic focus on *bagels*, presupposes a QUD like IS1a.
- Like other presuppositions, it can be accommodated.

This talk

- Specificational copular clauses: NP_{TOPIC} be NP_{FOCUS} (Halliday 1967, Akmajian 1979, Higgins 1979, Heycock and Kroch 1999, 2002, Partee 2000)
- Can QUD approach shed new light on this property of specificational clauses?
- QUD cannot explain **why** specificational clauses have fixed topic-focus structure, but can draw principled connection between two kinds of data from the literature on specificational clauses.
- There **is** information structure at the sentence-level in the sense of restrictions on information structure (or prosody?) that cannot be explained by looking at the larger context of utterance.

2 Question–Answer congruence

The constituent in the answer that corresponds to the *wh*-phrase in the question is the focus (Halliday 1967). Caps indicate focus prosody (= Jackendoff’s Accent A = Pierrehumbert’s H*)

(2) Q: Who took the chair?

A1: Sally took the chair.

A2: #Sally took the CHAIR.

(3) **Congruence** (Roberts 1996:111)

Move β is congruent to a question $?\alpha$ iff its focal alternatives $\|\beta\|$ are the Q-alternatives determined by $?\alpha$, i.e. iff $\|\beta\| = \text{Q-alt}(\alpha)$.

(4) **Focus alternative set** (Roberts 1996:112)

The focus alternative set corresponding to a constituent β , $\|\beta\|$, is the set of all interpretations obtained by replacing all the F-marked (focused) and *wh*-constituents in β with variables, and then interpreting the result relative to each member of the set of all assignment functions which vary at most in the values they assign to those variables.

(5) **Q-alternative set** (Roberts 1996:96–7)

To derive $\text{Q-alt}(\alpha)$ “abstract over any *wh*-elements in α and permit the variables of abstraction to vary freely over entities of the appropriate sort in the model.” (formal definition in (1) on p. 96)

- A1 is congruent in (2), because $\|\text{A1}\| = \text{Q-alt}(\text{Who took the chair}) = \{\text{Harvey took the chair, Sally took the chair, Robert took the chair, } \dots \}$
- A2 is incongruent in (2), because $\|\text{A2}\| = \{\text{Sally took the chair, Sally took the book, Sally took the chalk, } \dots \} \neq \text{Q-alt}(\text{Who took the chair})$

QUD framework: (Roberts 1996, Büring 2003)

- Generalizes to “answers” without explicit questions:

(6) **Presupposition of prosodic focus in an utterance** $*\beta$ (Roberts 1996:112)
 β is congruent to the question under discussion at the time of utterance.

- A1 presupposes the QUD ‘Who took the chair?’.
- A2 presupposes the QUD ‘What did Sally take?’

- Generalizes to non-declaratives (* in (6) ranges over declaratives and interrogatives)

- *Did Sally take the chair?* presupposes the QUD ‘Who took the chair?’.
- *Did Sally take the CHAIR?* presupposes the QUD ‘What did Sally take?’

- Distinguishes between coherence (content) and congruence (form):

(7) Q: Who took the chair?
A2: #Sally took the CHAIR.
A3: #Sally eats peanuts.

A2 is incongruent, A3 is incoherent

2.1 Copular Q–As (Part 1)

Two kinds of copular clauses

(8) PREDICATIONAL
Sharon is the chair. [name be description]

(9) SPECIFICATIONAL
The chair is Sharon. [description be name]

- Truth-conditionally equivalent \rightarrow same content \rightarrow same coherence conditions
- Different word order/syntax (\rightarrow different prosody) \rightarrow congruent to different QUDs

- (10) Q: Who is the graduate advisor? [= IS2b]
 A1: EVE is the graduate advisor. [predicational]
 A2: The graduate advisor is EVE. [specificational]

IS2. Who is who (in the department)?

- a. Who is the chair?
 a_i. Is Sharon the chair?
Yes.
 a_{ii}. Is Eve the chair?
No.
 b. Who is the graduate advisor?
 b_i. Is Sharon the graduate advisor?
No.
 b_{ii}. Is Eve the graduate advisor?
Yes.

- (11) Q: Who/What is Eve? [= IS3b]
 A3: Eve is the GRAduate advisor. [predicational]
 A4: #The GRAduate advisor is Eve. [specificational]

IS3. Who is who (in the department)?

- a. Who is Sharon?
 a_i. Is Sharon the chair?
Yes.
 a_{ii}. Is Sharon the graduate advisor?
No.
 b. Who is Eve?
 b_i. Is Eve the chair?
No.
 b_{ii}. Is Eve the graduate advisor?
Yes.

- #A4 in (11) \neq #A2 in (12): A4 is congruent (and coherent), whereas A2 is incongruent.

(12) Q: Who took the chair?
 A2: #Sally took the CHAIR.

- The problem with A4 is sentence-internal: a specificational clause does not allow focus prosody on the subject.
- Specificational clauses of the form [NP1 be NP2] cannot “answer” QUD [Who is NP2?].
- They can only “answer” QUD [Who is NP1?].

2.2 Copular Q–As (Part 2)

(13) Q: Is Eve the chair? [= IS2a_{ii}]
 A1: No, SHARon is the chair. [predicational]
 A2: No, the chair is SHARon. [specificational]

- A1 presupposes QUD ‘Who is the chair?’
 1. Focus presupposition (from (6)):
 A1 is congruent to the QUD at the time of utterance
 2. To be congruent, the focus-alternatives of A1 must equal the Q-alternatives of the QUD, that is $\|A1\| = Q\text{-alt}(QUD)$
 3. $\|A1\| = \{\text{Eve the chair, Sharon is the chair, Gary is the chair, } \dots \}$
 4. $\{\text{Eve the chair, Sharon is the chair, Gary is the chair, } \dots \} = Q\text{-alt}(\text{Who is the chair?})$
 5. Who is the chair? = IS2a

Q-A1 is well-formed because the QUD presupposed by A1 ‘Who is the chair?’ is a super-question of Q.

- $\|A2\| = \|A1\| \rightarrow A2$ presupposes IS2a \rightarrow Q-A2 is well-formed because the QUD presupposed by A2 ‘Who is the chair?’ is a super-question of Q.

- (14) Q: Is Eve the chair? [= IS2a_{ii}]
 A3: No, Eve is the GRAduate advisor. [predicational]
 A4: #No, the GRAduate advisor is Eve. [specificational]

IS3. Who is who (in the department)?

a. Who is Sharon?

- a_i. Is Sharon the chair?
Yes.
- a_{ii}. Is Sharon the graduate advisor?
No.

b. Who is Eve?

- b_i. Is Eve the chair?
No.
- b_{ii}. Is Eve the graduate advisor?
Yes.

- A3 presupposes QUD ‘Who is Eve?’:
 1. Focus presupposition (from (6)):
 A3 is congruent to the QUD at the time of utterance
 2. To be congruent, the focus-alternatives of A3 must equal the Q-alternatives of the QUD, that is $\|A3\| = Q\text{-alt}(QUD)$
 3. $\|A3\| = \{\text{Eve is the graduate advisor, Eve is the chair, Eve is undergraduate advisor, ...}\}$
 4. $\{\text{Eve is the graduate advisor, Eve is the chair, Eve is the undergraduate advisor, ...}\} = Q\text{-alt}(\text{Who is Eve?})$
 5. Who is Eve? = IS3b

Q-A3 is well-formed because the QUD presupposed by A3 ‘Who is Eve?’ is a super-question of Q

- $\|A4\| = \|A3\| \rightarrow A4$ also presupposes IS3b \rightarrow Q-A4 should be well-formed because the QUD presupposed by A4 ‘Who is Eve?’ is a super-question of Q
- So why is A4 #?
- A4 is neither incoherent nor incongruous

Observation #A4 in (14) = #A4 in (15)

(15) Q: Who/What is Eve? [= IS3b]
A4: #The GRAduate advisor is Eve. [specificational]

- both are bad because they are specificational clauses that presuppose a QUD of the form ‘Who is NP2?’ OR
- both are bad because they are specificational clauses with focus on the subject (= a matter of ISS)

3 Conclusion

- QUD framework does not explain why specificational clauses invariably have the form NP_{TOPIC} be NP_{FOCUS}
- it does connect the two sets of data — specificational answers to constituent questions and specificational answers to polar questions — in a systematic way (see also Wunderlich 1981, Kiefer 1980, Yadugiri 1986)
- There is Information Structure of Sentences
- Well, yes:

(16) It was the chair that Sally took.

(17) Sally only took the chair.

- How does the syntax “know”?
 - Part of a Construction (Kay and Fillmore 1999)
 - [focus] and [topic] active in syntactic derivation (Mikkelsen 2005)

References

- Akmajian, Adrian (1979). *Aspects of the Grammar of Focus in English*. New York: Garland.
- Büring, Daniel (2003). “On D-Trees, Beans, and B-Accents.” *Linguistics and Philosophy* 26(5):511–545.
- Halliday, M.A.K. (1967). “Notes on transitivity and theme in English (Part 2).” *Journal of Linguistics* 3(2):199–244.
- Heycock, Caroline and Anthony Kroch (1999). “Pseudocleft Connectedness: Implications for the LF Interface Level.” *Linguistic Inquiry* 30(3):365–397.

- Heycock, Caroline and Anthony Kroch (2002). “Topic, Focus, and Syntactic Representations.” In Line Mikkelsen and Christopher Potts, eds., *Proceedings of WCCFL 21*, 101–125. Somerville, MA: Cascadilla Press.
- Higgins, Roger Francis (1979). *The Pseudo-cleft Construction in English*. New York: Garland.
- Jackendoff, Ray S. (1972). *Semantic Interpretation in Generative Grammar*. Cambridge, MA: MIT Press.
- Kay, Paul and Charles J. Fillmore (1999). “Grammatical Constructions and Linguistic Generalizations: The *What’s X doing Y?* Construction.” *Language* 75(1):1–33.
- Kiefer, Ferenc (1980). “Yes-No Questions as Wh-Questions.” In John R. Searle, Ferenc Kiefer, and Manfred Bierwisch, eds., *Speech Act Theory and Pragmatics*, 97–119. Dordrecht: D. Reidel.
- Mikkelsen, Line (2005). *Copular Clauses: Specification, Predication and Equation*. Amsterdam: John Benjamins.
- Partee, Barbara (2000). “Copula inversion puzzles in English and Russian.” In Kiyomi Kusumoto and Elisabeth Villalta, eds., *Issues in Semantics*, no. 23 in University of Massachusetts Occasional Papers in Linguistics (UMOP), 183–208. Amherst, MA: University of Massachusetts.
- Roberts, Craige (1996). “Informative structure in discourse: Towards an integrated formal theory of pragmatics.” In J.H. Yoon and A. Kathol, eds., *OSU Working Papers in Linguistics 49: Papers in Semantics*. Columbus, OH: Ohio State University.
- Wunderlich, Dieter (1981). “Questions about Questions.” In Wolfgang Klein and Willem Levelt, eds., *Crossing the Boundaries in Linguistics*, 131–176. Dordrecht: D. Reidel.
- Yadugiri, M. A. (1986). “Some pragmatic implications of the use of *yes* and *no* in response to *yes-no* questions.” *Journal of Pragmatics* 10:199–210.

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