Am I My Own Sibling?

Itai Bassi, Keny Chatain, Sherry Yong Chen, Filipe Kobayashi

[!!! Unbeknownst to us, the same data point were discussed in more depth in Barker (1999) "Temporary Accommodation: I am the oldest of my siblings""" !!!]

During a debate on logic and grammar, the medieval grammarian al-Sirafi (Margoliouth, 1905) notes that his opponent considers (1) a valid sentence, but does not list Zaid among Zaid's brothers in (2):

(1) Zaid is the best of his brothers. (2) _ Who are Zaid's brothers? _ (*Zaid,) Amr, Bakr, Khalid

The puzzle raised by (1) (accepted by all speakers consulted) is that partitive superlatives, like "*X* is the *A*-est of the *Y*'s", presuppose that X is a Y (Stateva, 2002). But this presupposition cannot be met in (1): as the diagnostics in (2) and (3) show, Zaid is not his own brother.

- (3) a. #Every one of Zaid's brothers, including Zaid, came.
 - b. Context: Zaid's father has exactly four sons: Zaid, Amr, Bakr and Khalid.
 # Three of Zaid's brothers came.
 (proper partitive constraint, Jackendoff (1977))

Characterization of the puzzle. Other operators, like *only* or *first*, and other partitives, like *out of* or *among*, are also read as including the subject among the subject's siblings (al-Sirafi's reading). (4d) shows that a partitive structure is crucial for al-Sirafi's reading.

- (4) a. I am the only one of my siblings who smokes.
 - b. Out of all my siblings, I am the tallest.
 - c. I am the first of my siblings to get a PhD.
 - d. #I am the tallest sibling of mine.

Even when an operator can yield al-Sirafi's reading in principle, some conditions, listed in (5), must be fulfilled for the reading to arise.

- (5) In "X is OP out of/of/among Z's NP", Z can be counted among Z's NP iff
 - a. Z co-refers with X.
 - b. NP lexically expresses a symmetric relation

We provide evidence for these conditions below:

In support of (5a). When the subject does not co-refer with Z, Z cannot be in the comparison set denoted by "Z's NP". In particular, (6a) does not entail that Bakr is taller than Zaid.

(6) Bakr is the tallest of Zaid's brothers. #So, in particular, he is taller than Zaid.

In support of (5b). The noun used in the partitive construction must express a symmetric relation (R symmetric iff $\forall x, y, R(x)(y) \rightarrow R(y)(x)$), as in (7b). The relation need not be transitive like *sibling* (R transitive iff $\forall x, y, z, (R(x)(y) \land R(y)(z)) \rightarrow R(x)(z)$), as illustrated in (7).

b. Transitive non-symmetric relation: ancestor

I am the only one of my ancestors with green eyes.

→ I am my own ancestor.

c. Non-transitive non-symmetric relation: son

Zaid is the only one of his sons who smokes.

→ Zaid is his own son.

Symmetric relations formed compositionally do not give rise to al-Sirafi's reading.

(8) #Boston is the only one of the cities connected to it that has good food.

But morphologically complex nouns like *co-worker* can:

(9) I am the only of my co-workers who works at a standing desk.

One clue. Although we cannot explain al-Sirafi's reading, Kai von Fintel (p.c.) notes a related paradox. If *other* is co-indexed with I in (10), then its presupposition (Heim et al., 1991) should require that I am my own sibling. Here too, the reading only arises with symmetric relations, as the contrast with (10b) shows.

- (10) a. I live in Burma. My other siblings live in Tanzania.
 - b. I lived in Burma. # My other ancestors lived in Tanzania.

References

Heim, I., Lasnik, H., and May, R. (1991). Reciprocity and plurality. *Linguistic inquiry*, 22(1):63–101.

Jackendoff, R. (1977). X syntax: A study of phrase structure. *Linguistic Inquiry Monographs Cambridge, Mass*, (2):1–249.

Margoliouth, D. S. (1905). The Discussion between Abu Bishr Matta and Abu Sa'id al-Sirafi on the Merits of Logic and Grammar. *The Journal of the Royal Asiatic Society of Great Britain and Ireland*, pages 79–129.

Stateva, P. T. (2002). *How different are different degree constructions?* University of Connecticut.