Same and *Different*: A presuppositional account

Line Mikkelsen (UC Berkeley) and Daniel Hardt (Copenhagen Business School)

Words like *same* and *different* can give rise to internal readings, as in (1), or external readings, as in (2).

(1) Every^x boy read a^y different book.

(2) Tom^x read a^y book. Susan^u read a^v different book.

For the external reading in (2), the interpretation is straightforward: there are two indexed, book-denoting DP's, and it is asserted that book y and book v are distinct. The internal reading for (1) is this: for every pair of boys $< x1, x2 >$, $x1$ read a book $y1$ and $x2$ read a book $y2$ and $y1 \neq y2$. This presents a puzzle: the sentence is asserting an inequality between pairs of books, but there is only one book-denoting DP in the sentence. Furthermore, the books asserted to be distinct are those participating in pairs of reading events involving distinct boys.

Brasoveanu (2011) addresses these challenges with the novel suggestion that distributive quantification "involves selecting pairs of distinct individuals and simultaneously evaluating the nuclear scope relative to each individual" (p. 110). This is argued to be a general feature of distributive quantification, although its effects are unobservable, except for these particular cases. Furthermore, a stack mechanism collects pairs of quantified individuals, so that anaphoric reference is possible between them. Here we propose an alternative analysis of *different* and its sister *same*, based on the presuppositions they generate. Once these presuppositional effects are accounted for, we argue, there is no longer any need for the innovations proposed by Brasoveanu.

Building on Hardt and Mikkelsen (2015), we argue that *same* presupposes a parallel eventuality, while *different* can generate a presupposition of an individual or eventuality. In external readings (2), the presupposition is BOUND by the antecedent eventuality, while for internal readings (1) it is ACCOMMODATED.

(3) shows the external reading of *different* in (2), where the presupposition generated is for an individual, as seen in the following linear Discourse Representation Structure (see Brasoveanu (2011:107) on linear DRS notation; bold indicates presupposed material):

(3) $[x, y, u, v, e1, e2 | tom(x), book(y), read(e1, x, y), susan(u), book(v), read(e2, u, v),$
$[\mathbf{w}|\mathbf{book}(\mathbf{w})], v \neq w]$

Following van der Sandt (1992), the presupposition can be bound, since the discourse referent w has an accessible antecedent; thus we identify w with y, resulting in the DRS in (4):

(4) $[x, y, u, v, e1, e2 | tom(x), book(y), read(e1, x, y), susan(u), book(v), read(e2, u, v), v \neq y]$

To analyze the internal reading of (1), we first consider (5), which also involves distributive predication.

(5) Every^x boy read^e a^y book. $\rightsquigarrow [X, Y, E | boys(X), books(Y), read(E, X, Y)$
$[x1 | x1 \epsilon X] < every > [y1, e1 | y1 \epsilon Y, e1 \epsilon E, read(e1, x1, y1)]]$

The standard DRS for (5) only includes the tripartite quantification structure in the second line; we add discourse referents for three plural entities: the set of boys (X), books (Y) and reading events (E). This representation is truth-conditionally equivalent to the standard DRS (see Brasoveanu 2011: ex. 148, p. 132 and Moltmann (1992) for discussion of the need for plural discourse referents in such examples). The resulting analysis of the internal reading of (1) is shown in (6).

(6) Every^x boy read^e a^y different$_e$ book $\rightsquigarrow [X, Y, E | boys(X), books(Y), read(E, X, Y)$
$[x1 | x1 \epsilon X] < every > [y1, e1 | y1 \epsilon Y, e1 \epsilon E, read(e1, x1, y1),$
$[\mathbf{e2}, \mathbf{x2}, \mathbf{y2} | \mathbf{read}(\mathbf{e2}, \mathbf{x2}, \mathbf{y2})]), y1 \neq y2]]$

Here, the presupposition generated by *a different book* (shown in bold) is that there is a parallel reading event $e2$ involving parallel participants. In this case, the presupposition is accommodated, by copying it to the locally containing DRS, following van der Sandt (1992). That is, we copy the presupposed material to the restrictor of the quantifier *every*.

(7) $[X, Y, E|boys(X), books(Y), read(E, X, Y)$
$[x1, e2, x2, y2|x1 \epsilon X, y2 \epsilon Y, x2 \epsilon X, e2 \epsilon E, read(e2, x2, y2)] < every >$
$[y1, e1|y1 \epsilon Y, e1 \epsilon E, read(e1, x1, y1), y1 \neq y2]]$

This gives the desired truth conditions: for every pair of boys x1 and x2 and book y2 such that x2 read y2, there is a book y1 that x1 read, and the two books are different. We derive internal readings of *same* (8) in the same fashion (9). The only difference is that the nuclear scope asserts identity of the read books, rather than non-identity.

(8) Every boy read the same book.

(9) $[X, Y, E|boys(X), books(Y), read(E, X, Y)$
$[x1, e2, x2, y2|x1 \epsilon X, y2 \epsilon Y, x2 \epsilon X, e2 \epsilon E, read(e2, x2, y2)] < every >$
$[y1, e1|y1 \epsilon Y, e1 \epsilon E, read(e1, x1, y1), y1 = y2]]$

Our presuppositional analysis yields the same results as Brasoveanu's (2011) analysis, but relies on a standard notion of distributivity, together with general principles of presupposition binding and accommodation.

Further evidence for a presuppositional account comes from the paradigm in (10).

(10) Bill read *The Color Purple.*
a. #Harvey read {the book/a book}.
b. Harvey read {the book/a book} too.
c. Harvey read {the same book/a different book}.

It is widely held that *too* is an additive particle, generating a presupposition of a focus alternative to the proposition which *too* syntactically modifies (Krifka 1999). Observe that *same* or *different* in (10-c) repairs the infelicity of (10-a), exactly like *too* does in (10-b). The contrast between (10)a and (10)b is the result of Maximize Presupposition! (e.g. Singh 2008 & Eckhardt and Fränkel 2012), which requires language users to make their utterances presuppose as much as possible. The presupposition of *too* is met in the context of (10) and therefore *too* is obligatory. What (10)c shows is that both *same* and *different* also generate a presupposition, and this is why (10)c is felicitous in the absence of *too*.

We propose that *different* can freely generate an individual-sized or eventuality-sized presupposition, while *same* always generates an eventuality-sized presupposition. This allows us to retain the predictions of Hardt and Mikkelsen about different constraints on *same* and *different* in external readings. The internal reading requires the eventuality-sized presupposition for both *same* and *different*. In support of this, we note that Danish uses different lexical items for the internal and external readings (see Brasoveanu 2011:96–97 for discussion of similar facts in German).

(11) Alle børnene læste forskellige/*anderledes bøger.
all children.DEF read different1/different2 books.
All the children read different books.

(12) Susan læste The Color Purple. Hanne læste en anderledes/*forskellig bog.
Susan read The Color Purple Hanne read a different2/different1 book
Susan read The Color Purple. Hanne read a different book.

We have presented a novel account of internal and external readings, in terms of the presuppositions generated by *same* and *different*. In support of this, we show that *same* and *different* alternate with the presuppositional particle *too*, and that *different* is lexicalized differently in some languages depending on whether it has an internal or external reading.

References Adrian Brasoveanu. 2011. Sentence-internal *different* as quantifier-internal anaphora. *L&P*, 34(2):93–168. ★ Regine Eckhardt and Manuela Fränkel. 2012. Maximize Presupposition and discourse management. *Lingua* 122: 1801–1818. ★ Daniel Hardt and Line Mikkelsen. 2015. Same but different. *L&P* 38(4): 289–314. ★ Manfred Krifka. 1999. Additive particles under stress. SALT 8. ★ Friederike Moltmann. 1992. Reciprocals and same/different: Towards a semantic analysis. *L&P* 15(4):411–462. ★ Rob A. van der Sandt. 1992. Presupposition projection as anaphora resolution. *Journal of Semantics* 9(4): 333–377. ★ Raj Singh. 2008. VP deletion, obligatory *too*, and focus semantics. Unpublished ms. MIT.