

### VP ellipsis with symmetrical predicates

On the traditional view, ellipsis requires an identity relation with an antecedent. But the literature is full of cases of ellipsis mismatch: active/passive voice, negative/positive polarity, nominalised/clausal structure, etc. To these, I propose to add symmetrical switch mismatches in verb phrase ellipsis (VPE). In the attested example (1), and the constructed example (2), the subject and object participants switch between the antecedent and elided VP (<angled> brackets = unpronounced structure; antecedent and elided VPs underlined):

(1) EU referendum: Merkel will work with Cameron on EU – but will Tories let him  
<work with Merkel>? (Guardian online, 2015-05-09)

(2) John<sub>1</sub> wanted to dance with Mary<sub>2</sub>, but she<sub>2</sub> didn't want to <dance with him<sub>1</sub>/John<sub>1</sub>>.

Symmetrical predicates license participant switching VPE. These include *with*-predicates, e.g. *work with*, *dance with*, *live with*; and intransitive symmetrical verbs, e.g. *marry*, *meet*. The contradiction in (3) arises due to symmetry ( $xRy \Leftrightarrow yRx$ ):

(3) \*John danced with Mary, but Mary didn't dance with John.

Symmetrical switching VPE is not accounted for by standard approaches to identity: simplistic syntactic identity does not hold; Vehicle Change (Fiengo & May 1994) can only alter binding-theoretic status and gender, not the reference of a DP; and analysing (2) as a voice mismatch (Merchant 2013) yields an unintuitive continuation, which would also be ungrammatical if overt (4):

(4) \*John<sub>1</sub> wanted to dance with Mary<sub>2</sub>, but she<sub>2</sub> didn't want to <be danced with (by him<sub>1</sub>)>.

Rather, participant switching VPE is captured by a semantic condition of mutual entailment between the antecedent and elided VPs (5) (cf. Merchant's (2001) e-GIVENness), exemplified for (2) in (6):

(5) A VP  $\epsilon$  can be elided only if  $\epsilon$  has a salient antecedent VP  $\alpha$  and, in a salient context  $c$ , modulo  $\exists$ -type shifting over traces of VP-internal subjects, (i)  $\epsilon$  entails  $\alpha$ , and (ii)  $\alpha$  entails  $\epsilon$ .

(6) For any context  $c$  where there is a single dancing event, and only one  $x$  dances with Mary and only one  $y$  dances with John, by the symmetry of *dance-with*,  $\alpha$  and  $\epsilon$  entail each other.

$\alpha = [_{VP} \text{ dance with Mary}] \approx \exists x. x \text{ dance-with Mary}$

$\epsilon = [_{VP} \text{ dance with John}] \approx \exists y. y \text{ dance-with John}$

Informally,  $x$  must be John and  $y$  must be Mary for mutual entailment to go through. Thus the participant switch reading is forced, even where an alternative antecedent is present (7):

(7) John<sub>1</sub> wanted to dance with Mary<sub>2</sub>, but Bill<sub>3</sub> wouldn't let her<sub>2</sub> <dance with him<sub>1</sub>/\*<sub>3</sub>/John<sub>1</sub>/\*Bill<sub>3</sub>>.

By contrast, the higher VP in (2) cannot be the antecedent for ellipsis as in (8), where mutual entailment fails because *want* is not symmetrical:

(8) ??John<sub>1</sub> wanted to dance with Mary<sub>2</sub>, but she<sub>2</sub> didn't <want to dance with him<sub>1</sub>/John<sub>1</sub>>.

$\alpha = [_{VP} \text{ want to dance with Mary}] \approx \exists y. y \text{ want } y \text{ dance-with Mary}$

$\epsilon = [_{VP} \text{ want to dance with John}] \approx \exists x. x \text{ want } x \text{ dance-with John}$

Symmetrical switching VPE behaves like other types of VPE in requiring ambiguities to be interpreted in the same way in both the antecedent and the ellipsis site (cf. strict/sloppy identity).

First, consider the three readings for (9), which can be interpreted (a) intransitively, or symmetrically with (b) an implicit indefinite *with someone* or (c) an implicit *with Mary*. Application of such 'covert sprouting' must be consistent across the antecedent and elided VPs, where the (c) reading forces symmetrical switching ([square] brackets = implicit material):

- (9) John wanted to dance, but Mary didn't want to.  
 (a) John<sub>1</sub> wanted to dance, but Mary<sub>2</sub> didn't want to <dance (\*[with someone/him<sub>1</sub>/John<sub>1</sub>])>.  
 (b) John<sub>1</sub> wanted to dance [with someone], but Mary<sub>2</sub> didn't want to <dance \*([with anyone])>.  
 (c) John<sub>1</sub> wanted to dance [with Mary<sub>2</sub>], but Mary<sub>2</sub> didn't want to <dance \*([with him<sub>1</sub>/John<sub>1</sub>])>.

Second, the scope of conjunction must be (a) phrasal or (b) clausal in both antecedent and elided VPs (10). In the clausal case, mutual entailment between the elided VP and only one of the antecedent conjuncts seems sufficient to license ellipsis:

- (10) John<sub>1</sub> wanted to dance with Mary<sub>2</sub> and Bill<sub>3</sub>, but she<sub>2</sub> didn't want to ...  
 (a) dance-with AND {Mary<sub>2</sub>, Bill<sub>3</sub>} ... <dance with John<sub>1</sub> and Bill<sub>3</sub>>.  
 (b) AND {dance-with Mary<sub>2</sub>, dance-with Bill<sub>3</sub>} ... <dance with him<sub>1</sub>/John<sub>1</sub>>.

More broadly, symmetrical predicates interact with reciprocal *each other* under VPE to add (11) or reduce (12) participants. Mutual entailment holds for (12) (and (11), *mutatis mutandis*) as in (13):

- (11) John<sub>1</sub> wanted to dance with Mary<sub>2</sub>, but they<sub>1+2</sub> really ought not to <dance with each other<sub>1+2</sub>>.

- (12) John<sub>1</sub> and Mary<sub>2</sub> wanted to dance with each other<sub>1+2</sub>, but she<sub>2</sub> wasn't able to <dance with him<sub>1</sub>/John<sub>1</sub>>. (cf. Hardt 1993:154,ex.13, *re* pragmatic salience)

- (13) For any context *c* where there is a single dancing event, and only one *x* dances with Mary, by the symmetry of *dance-with*,  $\alpha$  and  $\varepsilon$  entail each other.

$$\alpha = [\text{VP dance with each other}] \approx \exists x. \exists y. y \text{ dance-with } x \text{ and } x \text{ dance-with } y$$

$$\varepsilon = [\text{VP dance with Mary}] \approx \exists x. x \text{ dance-with Mary}$$

Informally, *y* must be Mary and *x* must be the same across  $\alpha$  and  $\varepsilon$  for mutual entailment to go through. Crucial is the symmetrical *with*-predicate, rather than the reciprocal *each other*. In (14), parallel to (12), the 'unpacked' conjuncts of *hit each other* are not mutually entailing, because *hit* is not symmetrical; so  $\varepsilon$  does not entail the conjunction in  $\alpha$ :

- (14) ??John<sub>1</sub> and Mary<sub>2</sub> wanted to hit each other<sub>1+2</sub>, but she<sub>2</sub> wasn't able to <hit him<sub>1</sub>/John<sub>1</sub>>.

$$\alpha = [\text{VP hit each other}] \approx \exists x. \exists y. y \text{ hit } x \text{ and } x \text{ hit } y$$

$$\varepsilon = [\text{VP hit John}] \approx \exists x. x \text{ hit John}$$

That said, as well as by syntactic means (i.e. *with*), it seems marginally possible for predicates to be made symmetrical by the context; e.g. a background assumption of vengefulness in (15) (cf. Parker (2011) on the role of focus). Symmetrisation through context could also account for Kim's (1999:265,ex.20) 'third reading' (in addition to strict and sloppy) in Korean (16) as VPE, without having to move to a null-object analysis:

- (15) John<sub>1</sub> hit HIM<sub>3</sub> because **BILL**<sub>3</sub> did <hit him<sub>1</sub>>.

- (16) **Mike**-ka [caki-uy ai]-lul ttayli-ess-ta. Kuleca Jeanne-to ttohan [NP?/VP e] ttayli-ess-ta.  
 Mike-Nom self-Gen child-Acc hit-Past-Ind then Jeanne-also too hit-Past-Ind  
 'Mike hit his child. Then Jeanne hit his (= Mike's) child / her (= Jeanne's) child / **Mike**, too.'

#### References:

- Fiengo & May (1994)**. *Indices and Identity*. Cambridge, MA: MIT Press. **Hardt (1993)**. VP ellipsis and semantic identity. *Technical Reports (CIS)*. Paper 414. **Kim (1999)**. Sloppy/strict identity, empty objects, and NP ellipsis. *Journal of East Asian Linguistics* 8(4): 255-284. **Merchant (2001)**. *The syntax of silence: Sluicing, islands, and the theory of ellipsis*. Oxford University Press: Oxford. **Merchant (2013)**. Voice and ellipsis. *Linguistic Inquiry* 44(1): 77-108. **Parker (2011)**. At the interfaces: Deriving and interpreting focus and anaphora in VP-ellipsis. In *Proceedings of NELS 39*, 585-569. University of Massachusetts, GSLA.