

## Contradiction and ellipsis: voice mismatch and symmetry

Richard Stockwell

Christ Church, University of Oxford

This paper argues that differences in the acceptability of verb phrase ellipsis (VPE) with (i) voice mismatch, previously attributed to (ii) processing effects (Grant et al. 2012), can be accounted for in terms of (iii) a standard, focus-based (Rooth 1992a) condition on ellipsis (Rooth 1992b). In short, ellipsis licensing cannot be contradictory. This perspective (iv) is compatible with voice mismatches being fundamentally grammatical (Merchant 2013 vs Arregui et al. 2006); (v) encompasses other ameliorating factors; and (vi) extends to symmetrical VPE (Stockwell 2017).

**Voice mismatches** can be acceptable in VPE. In (1) (cf. Hardt 1993), (a) is relatively acceptable despite the switch from a passive antecedent to an active elliptical clause. However, replacing *should have been* with indicative *was* is distinctly unacceptable in (b):

- (1) a. ? This information should have been released, but Gorbachev didn't.  
b. \* This information was released, but Gorbachev didn't.

From a **processing** perspective, Grant et al. (2012) attribute (1) (which they confirm experimentally) to 'Non-Actuality Implicatures' (NAIs). NAIs, conveyed by e.g. *should*, *want to*, *be eager to*, implicitly contrast the actual versus described states of affairs. While voice mismatches are fundamentally ungrammatical (Arregui et al. 2006), they can achieve higher levels of acceptability if the processor is guided by an NAI towards a suitable repair. In (1a), *should* implies that the information has not been released, suggesting an implicit Question Under Discussion (*Was the information released?*) that aides in processing the ellipsis.

However, (1) can be made to follow from the standard **focus-based condition on ellipsis** in (2) (Rooth 1992b; cf. e.g. Heim 1997; Fox 2000; Stockwell 2018; Griffiths 2019):

- (2) Ellipsis must be contained in a phrase E that has an antecedent A such that:  
i.  $\llbracket A \rrbracket \in F(E)$  — the ordinary value of A is a member of the focus semantic of E; and  
ii.  $\llbracket A \rrbracket \neq \llbracket E \rrbracket$  — the ordinary meanings of A and E contrast

With some contextual accommodation, and taking account of contrasting intensionality, (1a) passes (2) as in (3). There are two differences between A and E. First, where the agent is implicit in A, *Gorbachev* is explicitly the agent in E. This difference can be accommodated by assuming as background that Gorbachev is the person under obligation to release the information. The second difference is *should* vs *DIDN'T*. Taking accent on *DIDN'T* to realise focus on the intensional operator VERUM (Romero & Han 2004), the modality of A makes it a member of the focus value of E (Hardt & Romero 2004), encompassing intensional alternatives:

- (3) ? This information should have been released, but Gorbachev DIDN'T<sub>F</sub> ~~release the info~~.  
Background:  $\exists e.\text{info-release}'(e) = \exists e.\text{info-release}'(e) \wedge \text{agent}(e,g)$   
 $\llbracket A \rrbracket = \text{should}'(\exists e.\text{info-release}'(e)) =_{\text{by assumption}} \text{should}'(\exists e.\text{info-release}'(e) \wedge \text{agent}(e,g))$   
 $\llbracket E \rrbracket = \text{for-sure}'(\exists e.\text{info-release}'(e) \wedge \text{agent}(e,g))$   
 $F(E) = \{ \text{For sure the info was released by Gorbachev, Masha thinks the info was released by Gorbachev, Ivan hopes the info was released by Gorbachev, The info could have been released by Gorbachev, The info should have been released by Gorbachev, ... } \}$   
 $\llbracket A \rrbracket \in F(E)$  and  $\llbracket A \rrbracket \neq \llbracket E \rrbracket$

With *was* in place of *should*, however, (1b) directly contradicts the background assumption that supports focus membership in (3), as shown by the overt continuations of (1) in (4):

- (4) a. This information should have been released by Gorbachev, but he didn't release it.  
b. # This information was released by Gorbachev, but he didn't release it.

With accommodation blocked by the contradiction in (4b), the focus membership component of (2) cannot be satisfied, and (1b) is ruled ungrammatical.

An analysis in terms of (2) is thus consistent with voice mismatches in VPE being fundamentally **grammatical** (Merchant 2013). From the processing perspective on (1), voice mismatches are fundamentally ungrammatical (b) (Arregui et al. 2006), but become more acceptable when repair is triggered by an NAI (a) (Grant et al. 2012). Here, (a) is grammatical for passing (2), whereas in (b) there is an irreconcilable conflict between the background assumption necessary for ellipsis licensing and the assertion – the sentence contradicts the route to its own construction.

Furthermore, (2) encompasses **other ameliorations** of (1b). Besides intensionality, e.g. *should*, voice mismatched VPE is good with something to contrast *Gorbachev* against. Notice that *Gorbachev* is not and cannot be contrastively focused in (1). This becomes possible with an explicit passive *by*-phrase in (5), where the agent difference between A and E is mediated by focus rather than contextual accommodation. Given the lack of intensionality in A, accent on *DIDN'T* is taken to realise polar focus, and ellipsis is licensed successfully:

- (5) ? This information was released by Dmitry, so GORBACHEV<sub>F</sub> DIDN'T<sub>F</sub>.  
 $\llbracket A \rrbracket = \exists e.\text{info-release}'(e) \wedge \text{agent}(e,d)$        $\llbracket E \rrbracket = \neg \exists e.\text{info-release}'(e) \wedge \text{agent}(e,g)$   
 $F(E) = \{ f(\exists e.\text{info-release}'(e) \wedge \text{agent}(e,x)) \mid f \in \{ \lambda p.p, \lambda p.\neg p \}, x \in D_e \}$   
 $\llbracket A \rrbracket \in F(E)$  and  $\llbracket A \rrbracket \neq \llbracket E \rrbracket$

(Incidentally, ellipsis is also possible with *someone* in place of *Dmitry* in (5). Thus overt indefinites count for contrast, whereas the implicit existential passive agent does not in (1b). This accords with the recent finding that implicit existential objects do not count for contrast in sprouting from VPE, which is ungrammatical (Overfelt 2021).)

The analysis in terms of (2) extends to VPE with **symmetrical predicates** (Stockwell 2017) (6). Symmetry maintains (i) focus membership, since *dance-with'*(*j,m*) = *dance-with'*(*m,j*), while (ii) there is contrast between John and Mary's desires. Thus ellipsis is permitted by (2), despite the form mismatch of the objects switching over between A and E:

- (6) 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>T</sub>.

Yet ellipsis is out in (7), despite the general possibility of ellipsis in contradictions (8), where positive and negative contrast (2ii):

- (7) a. # John<sub>1</sub> danced with Mary<sub>2</sub>, but she<sub>2</sub> didn't dance with him<sub>1</sub>.  
b. \* John<sub>1</sub> danced with Mary<sub>2</sub>, but she<sub>2</sub> didn't ~~dance with him~~<sub>T</sub>.

- (8) a. It's raining and it isn't ~~raining~~.      b. Either John likes you or he doesn't ~~like you~~.

The problem in (7), as in (1b), is that the assertion contradicts the ellipsis licensing calculations. Participant switching VPE makes crucial use of symmetrical equality in satisfying focus membership; but at the same time, (7) asserts that this equality does not hold. Thus (7b), like (1b), is ungrammatical for contradicting the route to its own construction.

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