A processing account of the ellipsis alternation

This paper explores constraints on what I dub the ellipsis alternation. This alternation is seen in the two elliptical constructions shown in examples (1) and (2): the stranded phrases in bold (remnants) can be either NPs or PPs. Example (1) instantiates the construction sluicing and example (2) Bare Argument Ellipsis.

(1) A: Katie is staying in Paris with someone. B: **Who?**/**With who?**

(2) A: What meds are you on? B: **None**./**On none**.

The availability of this alternation appears to be variable. It's assumed to be disallowed in some languages (only PPs may be remnants) (Merchant 2001). If it's allowed, PPs are more acceptable and frequent as remnants than NPs in some languages (e.g., Spanish and Polish, see Rodrigues et al. 2009, Nykiel 2013), but in others (e.g., English), the reverse pattern appears to hold. I offer corpus and experimental evidence from English and Norwegian, showing that NPs are indeed more acceptable and frequent in both languages. I then propose that differences among languages with respect to this alternation can be accounted for by three performance preferences which have been well documented in research on anaphora, constituent ordering, and structural persistence (priming).

For the English part, I collected data from three corpora of spoken American English and a 100-split task, and for the Norwegian part, from an acceptability judgment study and an eye movement study. The data reveal that NPs serving as remnants are overall more frequent and acceptable than PPs in both languages. At the same time, temporary processing difficulty is associated with NPs, compared to PPs, in Norwegian: the first fixation on the remnant region is shorter for PPs. This pattern suggests that what is more frequent is the alternative that is also harder to process. Further, I demonstrate that the frequency and acceptability of PPs increase if (1) their antecedents are less accessible, (2) they are semantically independent of the lexical heads present in the antecedents, and (3) the constituents of the correlates are adjacent (compare the correlate PPs *with someone* in example (1) and *what meds...on* in (2)). All these results are significant by logistic and linear regression.

The pattern of behavior seen in (1) through (3) may be subsumed under three performance preferences. First, the semantic and morphosyntactic content is reduced in those anaphors that have accessible antecedents (Ariel 1990). Second, constituents that the parser must access together as it computes their meanings are not separated (Hawkins 2004).

Third, structures seen in previous discourse are replicated in later discourse through priming (Bock 1986, Ford and Bresnan 2010). With respect to the ellipsis alternation, I argue that the strength of the second and third preferences in various languages may vary. While the greater ease of processing PPs can explain why they may be preferred over NPs or even exist as the only option, the second and third performance preferences determine to what extent NPs may become conventionalized as the preferred option in a given language, which is consistent with the Performance-Grammar Correspondence Hypothesis (Hawkins 2004, 2009).

References

Ariel, M. 1990. *Accessing Noun Phrase antecedents*. London-New York: Routledge.

Bock, J. K. 1986. Syntactic persistence in language production. *Cognitive Psychology* 18:355–387.

Ford, M. and J. Bresnan. 2010. Studying syntactic variation using convergent evidence from psycholinguistics and usage. To appear in M. Krug and J. Schlüter (Eds.), *Research methods in language variation and change*. Cambridge University Press.

Hawkins, J. 2004. *Efficiency and complexity in grammars*. Oxford: Oxford University Press.

Hawkins, J. 2009. Language universals and the Performance-Grammar Correspondence Hypothesis. In M. H. Christiansen, C. Collins, and S. Edelman (Eds.), *Language universals*, 54–78. Oxford: Oxford University Press.

Merchant, J. 2001. *The syntax of silence: sluicing, islands, and the theory of ellipsis*. Oxford: Oxford University Press.

Nykiel, J. 2013. Clefts and preposition omission in sluicing. *Lingua* 123:74–117.

Rodrigues, C., A. Nevins, and L. Vicente. 2009. Cleaving the interactions between sluicing and preposition stranding. In L. Wetzels, and J. van der Weijer (Eds.), *Romance Languages and Linguistic Theory 2006*, 175–198. Amsterdam: John Benjamins Publishing Company.