When syntactic parallelism is really discourse parallelism in VP ellipsis

Recent psycholinguistic work supports a syntactic parallelism condition on verb phrase ellipsis (VPE)—specifically, sentence acceptability depends on the extent of syntactic mismatch between the antecedent and the elided material (e.g. Arregui et al 2006). This syntactic effect is conditioned on discourse-level pressures like discourse coherence (Kehler 2000), presuppositions (Frazier & Clifton 2006), and information structure (Kertz 2008). We ask to what extent discourse and syntactic factors interact in ellipsis resolution; in particular, if they always mutually influence each other, it could be unnecessary to assume sentence-internal and discourse-level phenomena operate under different sets of constraints. Three experiments on voice mismatch and strict-sloppy identity in VPE suggest that this situation does not obtain uniformly for all ellipsis phenomena.

Experiment 1 used magnitude estimation to ask whether syntactic effects interact with discourse coherence, comparing the effect of Voice mismatch on VPE acceptability where antecedent and ellipsis were related by Resemblance (‘and’) or Cause-Effect (‘so’). Since Resemblance requires aligning syntactic arguments, it should be sensitive to mismatch; however, CE relates sentences at the propositional level and should be mismatch-insensitive. Ellipsis-Mismatch (1b) was compared to Matched (1a) and NoEllipsis controls. Mismatch was worse than Match only with Ellipsis (all p<.05). Additionally, the Mismatch effect was stronger with Resemblance. Thus while syntactic mismatch effects persist across coherence relations, their strength is modulated by discourse factors.

Experiment 2 compared the effect of mismatch on VPE within and across sentences (1-2). If different constraints apply sentence-externally and across discourse, cross-sentential VPE should be insensitive to mismatch. Instead, a Mismatch-Ellipsis interaction was found as in Experiment 1, with no difference between cross-sentential and coordinated VPE. The cross-sentential mismatch effect shows that discourse representations must be at least rich enough to encode passive vs. active syntax.

Do discourse and syntax always interact as in Experiments 1-2? Experiment 3 shows that strict-sloppy identity patterns differently from Voice mismatch. Coherence would rule out strict identity for Resemblance (assuming syntactic identity includes variable-binding), while both interpretations should be possible for CE. After reading sentences like (3a), participants answered questions (3b) indicating their interpretation. Intra-sententially, there were more strict interpretations for CE than Resemblance, but this asymmetry did not extend to cross-sentential VPE. This suggests the within-sentence effect is not due to Coherence, but rather a syntactic difference: while Resemblance structures are conjoined TPs, CE involves VP-adjoined result clauses. If we permit non-local variable-binding (Reuland 2001), the c-command change from Resemblance to CE enables the matrix subject to bind the variable in the second clause.

Together, our experiments suggest that constraints on VPE cannot be uniformly syntactic or discourse structural, but instead vary depending on the syntactic phenomena examined.

(1) a. Kurt blamed Frank for the disaster, {and, so} Pat did (blame Frank) too.
   b. Kurt blamed Frank for the disaster, {and, so} Pat was (blamed by Kurt) too.
(2) Kurt blamed Frank for the disaster. Pat {did, was} too.

(3) a. Julia voted for herself, {and, so} Amy did too.
b. Who did Amy vote for? (Amy—Julia)