Experiment 1: Syntactic identity in VP ellipsis vs. pseudogapping

Experiment 1 looked at sentences with either VPE or pseudogapping, manipulating whether the antecedent and ellipsis clauses matched or mismatched in voice. Controls without ellipses were also included, yielding 8 experimental conditions. Normalized acceptability scores fit to a mixed effects regression model with Ellipsis, Mismatch, EllipsisType as predictors; Subject, Item as random effects.

VP ellipsis Match: Jane blamed Alex for the disastrous performance, and Neil did, too.
Mismatch: Jane was blamed by Alex for the disaster, and Neil did, too.

Pseudogapping Match: Jane was blamed by Alex for the disastrous performance, and Neil did, too.
Mismatch: Jane blamed Alex for the disastrous performance, and Neil did, too.

Expect degradation due to mismatch, but only with VPE.
Merchant predicts greater sensitivity to identity than VPE. Discussion function degradation predicts less sensitivity to identity.

Main effects of Ellipsis (β = –23.0.001) and Mismatch (β = –20.0.001): Ellipsis judged less acceptable than No Mismatch, Mismatch less acceptable than Match.
2-way interactions: Mismatch-Elipsis (β = –15.0.001): Mismatch less acceptable than Match only with Ellipsis.
Ellipsis-MismatchType (β = 0.006.0.03): Mismatch penalty greater for Ellipsis than Pseudogapping.

Experiment showed that pseudogapping is less sensitive to structural mismatch than VPE. Contra predictions based on Merchant’s (2008) pseudogapping account is less sensitive to mismatch.

Previous VPE results extended to Pseudogapping: Ellipsis-dependent mismatch penalty.

Conclusions:

Summary of results:

Experiment 1 showed that pseudogapping is less sensitive to structural mismatch than VPE, contra predictions based on Merchant’s (2008) single mechanism account of voice mismatches in PG and VPE.

Experiment 2 showed that the discourse relation that holds between the antecedent and ellipsis clauses determines which mechanism is used, effectively modulating sensitivity to structural mismatch (see Kehrer 2000).

Kehrer (2000, 2002): For types of ellipsis that can be anaphoric, both syntactic and non-syntactic (semantic/anaphoric) mechanisms are available for ellipsis resolution. VPE can be used anaphorically (4a), while pseudogapping cannot (4b) (see Kehler 2002 for discussion of anaphorocity).

(4a) a. Natale: I had a pumpkin spice latte this morning.
   b. Natale: I had a pumpkin spice latte this morning.
   Kate: I did a caramel macchiato.

The discourse relation that holds between the antecedent and ellipsis clauses determines which mechanism is used, effectively modulating sensitivity to structural mismatch (see Kehrer 2000).

Establishing Resemblance requires aligning syntactic arguments.
Must recover a syntactic antecedent ∈ sensitivity to mismatch.

Caution! Requires retrieving only propositional meanings.
Ellipsis resolution recovers a higher-order semantic antecedent ∈ decreased sensitivity to mismatch (see Kim & Runner 2000).

NP (non-semantic) Mechanism available—predicts Mismatch penalty would not be unaffected by discourse relation.

Normalized scores fit to mixed-effects regression models with Ellipsis Type (VPE, PG, NoEllipsis), Mismatch, and Discourse Relation as predictors; Subject and Item as random effects.

Results:

Main effects:
Both PG (~β = .01, p < .001) and VPE (~β = .16, p < .05) judged less acceptable than NoEllipsis.

Mismatch less acceptable than Match (~β = .22, p < .05).

Caution:Relation less acceptable than Resemblance (~β = .24, p < .05).

Interactions:
Mismatch-Ellipsis (~β = .01, p < .001) but not PG: Mismatch penalty greater with Ellipsis than PG.

Ellipsis-Mismatch-Resemblance marginal for VPE (~β = .28, p < .01) but not PG (~β = .08, p < .05): Ellipsis-Ellipsis interaction stronger for Resemblance than Caution-Effect, for VPE but not PG.

VPE results replicate our previous findings (Kim & Runner 2000): Caution-Effect relation alleviates, but doesn’t eliminate syntactic mismatch effects—gradual structural and voice sensitivity suggests syntactic structure must be recovered, even in cases where a strict Coherence account claims VPE is resolved via higher-order unification.

Concluding remarks:

Pseudogapping:
Main effects of Ellipsis and Mismatch, replicating Exp. 1, and Discourse Relation—Caution-Effect was judged less acceptable overall than Resemblance.
Neither the Mismatch-Ellipsis nor the Ellipsis-Mismatch-Discourse Relation interactions were significant—thus sensitivity to Mismatch is not modulated by the presence/absence of Ellipsis, nor by the discourse relation between the two clauses.
These results are reminiscent of baseline acceptability differences reported by Frazier & Chilton (2000) and Kehrer (2008) (for VPE ellipsis, however).

References:
Aronoff, 2000. Processing ellided NPs with playback antecedents; the recycling hypothesis, J. Memory Language, Kehler, 2000: Coherence and the resolution of ellipsis, JL.
Kehler, 2000: Coherence and the resolution of ellipsis, JL.
Laskin, 1993: A note on pseudogapping, MIT-PSLL.
Merchant, 2008: An anomaly in voice mismatches between VPE and pseudogapping, J. Ling, 2008: Purpose and the minimalist constraint on discourse, JL.
Kehrer, 2002: Coherence and the resolution of ellipsis, JL.