

Retrieval cues in French sluicing: Effects of correlate informativity and feature matching

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Background Ellipsis requires the identification and retrieval of a correlate from the context. Resolving a sluice therefore depends on cues provided by the *wh*-remnant, which in cue-based direct-access models (Martin & McElree, 2011) serves as a retrieval cue whose effectiveness depends on cue diagnosticity and susceptibility to interference. Nykiel (2013) showed that sluicing acceptability is driven by an interaction between the remnant and the correlate: speakers prefer maximal phonological, syntactic and semantic feature matching between the two across different levels of complexity, and high-informativity NP correlates remain accessible even under partial matching, whereas low-informativity pronominals require maximal matching. Informativity refers to the diagnostic strength of the correlate or retrieval cues in memory, reflected in the richness of their lexical, semantic, and morphosyntactic features. Hofmeister (2011) suggests that antecedent complexity boosts memory activation in filler-gap dependencies and reduces similarity-based interference, facilitating retrieval at the dependency site. These studies do not test the constraints that govern further operations to elliptical structures, such as P(reposition)-omission in sluices with PP correlates. Hassen and Abeillé (2025) show that in French, the nominal (hence more informative) remnant *quel* ‘which’ + N significantly favors sluicing and P-omission, compared to the less informative bare *wh*-remnant *qui* ‘who’, and their corpus data suggest that nominal correlates similarly favor P-omission, a prediction not tested experimentally.

Aim The present study investigates whether correlate informativity and remnant-correlate matching affect sluice acceptability in French, and whether these factors interact with P-omission under sluicing. If sluicing resolution depends on the number of matching cues, the preposition may serve as an additional cue whose role depends on how much feature overlap is already present.

Methods We conducted a 2x2x2 web-based acceptability judgment experiment manipulating (i) the informativity of the PP correlate (nominal P+NP vs. pronominal *quelque chose* ‘something’), (ii) whether the remnant matched the correlate (*quel* ‘which’ + N / *quoi* ‘what’), and (iii) the presence of a preposition in the remnant. The choice of *quoi* as a remnant was motivated by the fact that it has never been experimentally tested in sluices nor in P-omission under sluicing. 57 native speakers rated 24 items (see the item example in Table 1) on a 5-point Likert scale.

Results The results (see Figure 1) show that sluices in which the remnant matched the correlate were rated significantly higher than mismatching ones, especially with pronominal correlates. In contrast, NP correlates showed a weaker sensitivity to remnant type. NP correlates allowed P-omission more than pronominal correlates, particularly in the matching conditions. The three-way interaction (see Table 1) suggests that the NP match condition does not show the full additive benefit expected from Match+Prep.

Condition	Item
PR-MATCH	Anne a participé à quelque chose mais elle n'a pas dit (à) quoi. 'Anne participated in something, but she did not say (in) what.'
PR-MISMATCH	Anne a participé à quelque chose mais elle n'a pas dit (à) quelle compétition. 'Anne participated in something, but she did not say (in) which competition.'
NP-MATCH	Anne a participé à une compétition mais elle n'a pas dit (à) quelle compétition. 'Anne participated in a competition, but she did not say (in) which competition.'
NP-MISMATCH	Anne a participé à une compétition mais elle n'a pas dit (à) quoi. 'Anne participated in a competition, but she did not say (in) what.'

Table 1: Example item

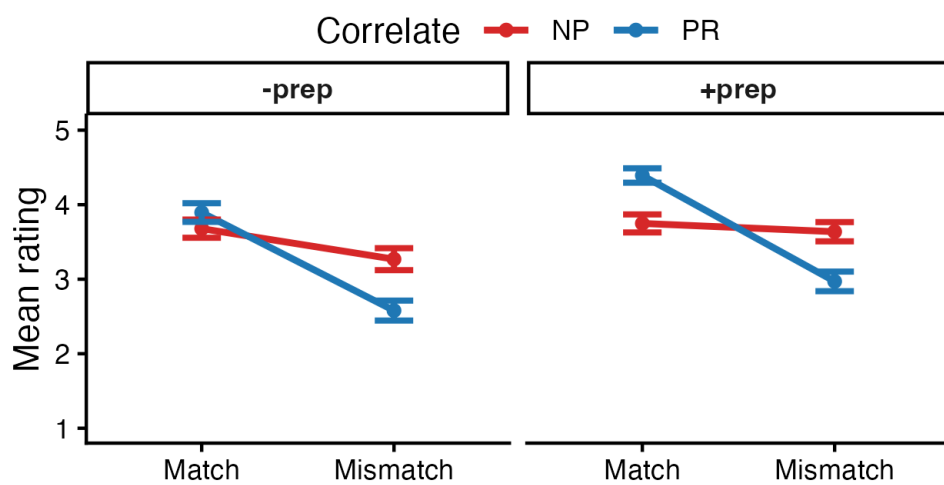


Figure 1: Mean acceptability ratings

	Est.	Std. Error	<i>z</i>	<i>p</i>
Correlate (NP)	0.04	0.09	0.41	0.685
Remnant_match (mismatch)	-1.14	0.16	-7.06	< 0.001 ***
Preposition (-Prep)	-0.55	0.13	-4.32	< 0.001 ***
Correlate:Remnant_match	0.81	0.13	6.27	< 0.001 ***
Correlate:Preposition	0.23	0.08	2.84	0.004 **
Remnant_match:Preposition	0.03	0.09	0.30	0.763
Correlate:Remnant_match:Preposition	-0.23	0.09	-2.49	0.013 *

Table 1. Cumulative link mixed-effects model predicting ratings.

References

- [1] Amal Hassen and Anne Abeillé. Preposition omission in French interrogative sluices: empirical findings and theoretical implications. *Glossa: a journal of general linguistics*, 10(1), 2025.
- [2] Philip Hofmeister. Representational complexity and memory retrieval in language comprehension. *Language and Cognitive Processes*, 26(3):376–405, 2011.
- [3] Andrea E. Martin and Brian McElree. Direct-access retrieval during sentence comprehension: evidence from sluicing. *Journal of Memory and Language*, 64(4):327–343, 2011.
- [4] Joanna Nykiel. Wh-phrases in sluicing: An interaction of the remnant and the correlate. In Philip Hofmeister and Elizabeth Norcliffe, editors, *The Core and the Periphery: Data-driven Perspectives on Syntax Inspired by Ivan A. Sag*, pages 253–274. CSLI Publications, Stanford, CA, 2013.