Many theories, each with some type of empirical support, make differing predictions as to processing difficulty patterns at the verb inside an RC:

- **Locality**: a verb is more difficult when it requires the simultaneous integration and/or retrieval of multiple dependents (Gibson 1998, 2000).

- **Expectations**: a verb is easier when the preceding context provides constraints (syntactic, valence, semantic…) that help sharpen the comprehender’s expectations about when the verb is likely to appear and what it is likely to be (Conkerney 2000, Levy 2005).

- **Entropy reduction hypothesis (ERH)**: if a verb causes a sharp reduction in uncertainty regarding the rest of the sentence, it gives rise to processing difficulty (Hale 2003).

- **Similarity-based interference (SBI)**: processing difficulty can ensue when multiple NP's preceding the verb are superficially good matches to a given argument slot of the verb (Lewis 1996, Van Dyke & Lewis 2003).

- **Perspective Shift**: when the relativized head noun’s external and internal grammatical functions (GM) are different, the required perspective shift is costly (MacWhinney, 1977, 1982; MacWhinney & Pleh, 1988; cf. Bever, 1970).

- **Word-order theories**: canonical vs. non-canonical word order in the RCs (MacDonald & Christiansen, 2002; cf. Bever, 1970; Mitchell et al., 1995; Tabor, Juliano & Tanenhaus, 1997).

### Experimental methods:
**Experiment 1**: self-paced reading study, 40 native Russian speaker participants (5 removed due to low question-answering accuracy), conducted in Volgograd, Russia

**Experiment 2**: self-paced reading study, 40 native Russian speaker participants, conducted in Kazan, Moscow, and St. Petersburg, Russia

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**Results**: Increasing numbers of preverbal dependents consistently increase reading time at the embedded verb complex.

### Conclusions
These data lend strong support to a locality-based component of processing difficulty at the embedded verb in Russian relative clauses:

- Positioning an additional dependent between the relative pronoun and the embedded verb increases verbal processing difficulty in both subject- and object-extracted RCs

- In subject-extracted RCs, the more dependents intervene, the greater the processing difficulty at the embedded verb

- Argument and adjunct interveners have similar effects on processing difficulty at the embedded verb

Other theories, in contrast, do not make these predictions:

- Perspective-shift and SBI theories do not predict the differences observed in Experiment 2

- The ERH predicts, if anything, that two interveners should sharpen syntactic expectations and therefore facilitate comprehension under expectation-based theories (Expts 1 & 2)

We conclude that locality is an important determinant of embedded-verb processing difficulty in Russian relative clauses.

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**Corpus study**

To ensure that expectations about the upcoming verb really should be sharpened by additional preverbal dependents, we conducted a corpus study of subject-extracted Russian relative clauses modifying animating masculine head nouns and beginning with the unambiguously nominative relative pronoun kotoryi (tr.216), using the Uppsala corpus.

### Results:

At the syntactic level, at least, the additional preverbal dependents in Experiment 2 should help sharpen comprehenders’ expectations about the upcoming verb (cf. Jaeger et al. 2005).