Restrictions on subordinators in Russian and Spanish elliptical clauses

In many languages, it is possible to omit the finite verb from the second of two coordinated clauses, if it is identical with that of the first clause (see (1a) for an English example). This type of verb ellipsis is called gapping. One point of variation between the languages that allow gapping occurs in embedded clauses. In English, the elliptical clause may not host a subordinator such as *that*, see (1b). This restriction also holds in other languages (e.g. German, Dutch, French), but not in all of them: In Spanish and Russian, the equivalent of English that (Sp. $que/Rus. \ \check{c}to$) is optional in such environments. See (2) for an attested example with a subordinator in Spanish. \blacklozenge These observations suggest that when it comes to embedded gapping, there are two language types: English-type languages, which prohibit a subordinator, and Spanish/Russian-type languages, where the subordinator is optional. I will address the question whether the assumption of (only) these two types is justified, specifically by asking whether Spanish and Russian are indeed of the same type. \blacklozenge A closer look at Spanish reveals nuanced patterns of que in embedded gapping. Bonke & Repp's (2022) acceptability study indicates that the presence of que is constrained by the type of embedding verb: Under factive verbs, ratings significantly decrease if que is present compared to when it is absent (but are not so low as to indicate outright ungrammaticality). Under non-factive verbs, que does not significantly affect ratings. The same effect does not obtain in non-elliptical clauses, where que has no statistically significant effect, regardless of verb type. If Spanish and Russian are indeed of the same type, it is to be expected that the same restrictions hold in Russian. \blacklozenge I will contrast Bonke & Repp's (2022) findings with the results of an equivalent acceptability study on Russian *čto*. In two experiments, participants judged the naturalness of embedded gapping structures under non-factive (Exp. 1) and factive (Exp. 2) verbs. Both experiments had a 2×2 design, with the first factor being the subordinator (present vs. absent). In keeping with Bonke & Repp's (2022) design, the second factor contrasted gapping with stripping, i.e. verb ellipsis with a polarity particle, in this case tože 'too'. The inclusion of stripping is independently motivated for Russian because there are differences between gapping and stripping in other embedded contexts (Bailyn & Bondarenko 2018). See (3) for an attested example of embedded stripping with $\check{c}to$. In (4) there is a sample item for all four resulting conditions under the non-factive embedding verb govorit 'says'. To explore whether the results were specific to ellipsis, I tested the non-elliptical equivalents of the materials of Exp. 1 in another experiment (=Exp. 3). \blacklozenge The results are in Figure 1. Ratings for the individual conditions vary slightly between experiments. However, differences between conditions are largely identical in all three experiments: Except for gapping without $\check{c}to$, all conditions are degraded but not outright ungrammatical. Ratings indicate a substantial difference between the experimental conditions and unacceptable controls (not shown). The statistical analyses (mixed models) for the three experiments revealed significant effects of both factors as well as an interaction. Single comparisons revealed that the effect of $\check{c}to$ is only significant within the gapping data subsets for each experiment. \blacklozenge The similar results for non-factives (Exp. 1) and factives (Exp. 2) suggest that verb type plays no role in the acceptability of *čto*. Instead, we find a dependency on the type of ellipsis: *Cto* causes a degradation in gapping, but not in stripping (which is degraded on the whole, independently of $\check{c}to$). A comparison of Exps. 1 and 3 furthermore suggests that, unlike in Spanish and English-type languages, the effects of the subordinator are independent of ellipsis as such: We observe the same patterns, regardless of whether the verb is absent (Exps. 1/2) or present (Exp. 3). \blacklozenge Thus, the restrictions on Russian *čto* are not the same as those on Spanish que, and the two languages cannot be subsumed under the same type. These conclusions are relevant for ellipsis theory: Gapping and stripping can be argued to involve the same clause structure as non-elliptical clauses in Russian, but not in Spanish (or English).

(1) English gapping

a. Mary orders steak and John orders seafood.

b. Sue thinks that Mary orders steak and (*that) John orders seafood.

(2) Spanish gapping

El^{sic} cree que el mundo es su empresa y **que** los Mexicanos sus lacayos He thinks that the world is his company and that the Mexicans his lackeys 'He thinks that the world is his company and the Mexicans his lackeys.' (http://www.afntijuana.info/editoriales/67101_trump_no_te_necesitamos)

(3) Russian stripping

Ja počuvstvoval, čto p'janeju sverh vsjakoj mery i **čto** vse ostal'nnye tože I felt that get.drunk over any level and that everybody else too 'I felt that I was getting drunk beyond all measure and that everyone else was, too.' (from the novel *Moscow-Petushki* by V. Yerofeyev, adapted)

(4) Sample Item Experiment 1 (Gapping vs. stripping under non-factives) Maša govorit, čto koška est žarenuju kuricu a {čto|Ø} sobaka {kotlety|tože} Masha says that cat eats fried chicken and that|Ø dog cutlets|too 'Masha says that the cat eats fried chicken and the dog cutlets/too.'



Figure 1: Experimental results (bars indicate mean ratings, errorbars indicate 95% confidence intervals)

References:

- Bailyn, John Frederick & Tatiana Bondarenko. 2018. Russian. In Jeroen van Craenenbroeck and Tanja Temmerman (eds), *The Oxford Handbook of Ellipsis*. OUP.
- Bonke, Max & Sophie Repp. 2022. Complementizer deletion in embedded gapping in Spanish. The Linguistic Review 39/3.