Complementizer Deletion in Embedded Gapping in Spanish

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When both conjuncts of a gapping construction are embedded under a predicate, there is a cross-linguistic difference as to whether a complementizer may appear in the gapping clause. In German and English, the complementizer must be omitted (1). We will present experimental data showing that this is not the case in Spanish, where a complementizer is generally optional. In light of recent findings that there is a penalty on 'true' factive embedding predicates in a different construction in which embedding and gapping interact (Bîlbîie/de la Fuente 2019), we conducted three experiments to test the acceptability of que 'that' in gapping clauses under non-factive and factive predicates (exps. 1-3). We furthermore ran two translation-equivalent experiments in German which confirmed that the complementizer dass 'that' may not be present in embedded gapping clauses in that language (exps. 4-5). All five experiments were webbased studies. Participants judged ellipsis sentences, which where presented in a context that prepared the lexical material of the sentences, and facilitated accommodation of factive presuppositions in experiments 2, 3 and 5, cf. (2). Acceptability was judged on a scale of naturalness using a slider (coding: 1-100, where 1 is completely unnatural). All experiments had a 2×2 design with 24 items and 36 fillers. \blacklozenge Experiment 1 (27 participants) tested non-factives that select for indicative mood. There was no significant difference between sentences with vs. without overt que (LME model: b=2.4, SE=1.3, t=1.85, p=.08). In experiment 2 (27 p.), the non-factives of exp. 1 were replaced with 'true' factives that select for subjunctive mood, e.g. cree 'thinks' in (2) was replaced with desparueba 'disapproves'. Contexts were adjusted if necessary. Sentences with overt que were rated worse than sentences without que (b=6.3, SE=1.2, t=5.2, p<.001). Note that exps. 1&2 also each contrasted gapping with ellipsis with the polarity particle también 'too' $(\ldots y (que) la reina también)$, which has been suggested to be an independent type of ellipsis (TP-Ellipsis Villa-García 2016). In these sentences there was no significant difference in rating w.r.t. presence of que. In exp. 2 there was a corresponding interaction of the type of ellipsis and the presence of que. We will leave this issue aside and concentrate on gapping. \blacklozenge In order to replicate the findings, the gapping sentences with factive and non-factive predicates from exps. 1&2 were compared directly in experiment 3 (32 p.). Replication was successful: Sentences with overt que were rated significantly worse for factives (b=5.6, SE=1.1, t=5.1, p<.001) but not non-factives (b=1, SE=.9, t=1.1, p=.28).* The German experiments 4&5 (27/25 p.) confirmed that overt *dass* leads to severe unacceptability, regardless of the type of embedding predicate. In the two experiments there was a comparable main effect of the presence of dass $(b_4=31.7, SE_4=1.9, t_4=17, p_4<.001; b_5=25.8, SE_5=2.5, SE_5=2.5,$ $t_5=10.4, p_5<.001$). \blacklozenge The observed penalty for factive predicates in exps. 1-3 is reminiscent of a similar penalty observed by Bîlbîie/de la Fuente for Spanish gapping clauses that are embedded within their conjunct only (The king smokes every day and I think that the queen _ at *times*). Such structures were judged to be degraded, but not severely unacceptable under 'true' factive verbs, while non-factives were not degraded. Bîlbîie/de la Fuente reject the possibility of a syntactic constraint, because a violation of such a constraint should result in categorical and not a gradual difference in acceptability. They propose pragmatic account. Single conjunct embedded gapping is degraded under factives because factives introduce a QUD-mismatch between conjuncts that non-factives do not introduce. Such an account is plausible for single

^{*}A control experiment (35 p.) that contained the non-gapped material of exp. 3 (y (que) la reina **fuma** a veces) showed that a comparable que-effect is not present in full clauses. This indicates that the que-effect observed in exps. 1-3 is particular to gapping. A comparison of exp. 3 and the control experiment revealed no general effect of gapping on acceptability.





conjunct embedded gapping, but is not easily transferable to complementizer deletion, because no QUD-mismatch should arise if both conjuncts are embedded under the same verb. \blacklozenge We propose that our experimental findings supply evidence for the existence of two structures for gapping, both of which involve ellipsis of the verb. Gapping may be (a) the coordination of vPs so that there is only one complementizer position, or (b) the coordination of clauses so that there are two complementizer positions ((3)/(4), cf. Jung (2016) for Spanish, and Potter et al. (2017) for English, regarding 'low' vs. 'high' coordination analyses for gapping). ♦ We propose remnant constituents in gapping clauses headed by overt que occupy left-peripheral positions. These positions are not 'readily available' in factive complements, as suggested by Haegeman (2006), because factives only embed structurally 'little' clauses (e.g. FinP in Rizzi's 1997 system). Non-factives, in contrast, embed regular 'large' clauses (e.g. ForceP). The absence of the required positions means that overt que is in principle unavailable in factive gapping complements. However, we propose that the violation of this constraint is ameliorated by coercing a non-factive structure for the complement of a factive verb: As soon as a hearer encounters evidence for a 'large' clause (this evidence would be que in the second conjunct), they postulate such a structure, even if the embedding predicate is factive and should therefore typically select for a 'little' clause. This will improve the acceptability of que under factives but nevertheless result in degraded ratings. This assumption receives support from the observation that from a semantic point of view factivity is a gradual phenomenon (Tonhauser et al. forthc.). Furthermore, some predicates have factive and non-factive readings (Haegeman 2006). Thus there should be variability as to whether a given predicate is able to select for a 'large' or 'little' clause, but we leave this question to future research.
The obligatory absence of complementizers in German and English poses a problem for analyses relying on clausal coordination only. Such analyses will need additional mechanisms to account for the difference between these languages and Spanish. Our results suggest an invariant low coordination structure for English and German gapping in embedded clauses.

- (1) I believe that Peter will travel with his wife to India and (*that) Martin will travel with his colleagues to Switzerland. (Repp 2009: 210)
- (2) <u>Context:</u> Durante la cena se discuten los hábitos de la familia real. 'During dinner, the habits of the royal family are discussed.'
 - a. Target: Santiago cree que el rey fuma cada día y {que $| \emptyset$ } la reina, a veces. ⁷S. thinks that the king smokes every day and {that $| \emptyset$ } the queen at times.'
- (3) $\left[V \left[_{ForceP} \left[_{ForceP} que \ldots \right] \right] \right]$ high coordination

low coordination

(4) [V [$_{\text{Force/FinP}} que [_{vP} [_{vP} \dots] \& [_{vP} \dots]]]]$

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