(Non)Attitude Verbs and Control Shift - Evidence from German

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Summary: Recent work on obligatory control (OC) phenomena (see in particular Landau 2015) holds that certain non-canonical construals such as partial control, implicit control or control shift are generally possible with matrix attitude verbs but not with nonattitude verbs. The crosslinguistic validity of this empirical generalization however is subject to ongoing research. For German, it has explicitly been disputed for the case of implicit control (Pitteroff & Schäfer 2019), but supported for partial control (Pitteroff et al. 2017). We contribute novel experimental evidence for an attitude/nonattitude contrast in the availability of control shift in German. Our results also indicate that the relevant difference concerns the interpretation rather than the acceptability of the triggering construction, thus adding some nuance to the empirical picture on control shift.

Background: For a long time, syntactic and semantic approaches to control phenomena advanced in a largely unconnected fashion. Landau (2015, 2018) proposes a theory of OC that reconciles these two perspectives and takes into account that certain readings in OC constructions arise only in the complement of attitude verbs (see e.g. Pearson 2013, 2016, White & Grano 2014 on partial control). In this theory, OC in attitude vs. nonattitude contexts involves two distinct types of control (i.e. logophoric vs. predicative). Empirical differences include the availability of partial, split and implicit control as well as control shift, all of which are restricted to attitude contexts according to Landau (2015). Our focus is on (object-to-subject) control shift, i.e. cases in which obligatory object control verbs allow for a subject control reading when embedding a 'de-agentivized' (e.g. passivized or modalized) infinitive complement. For instance, in English control shift is licensed by the attitude verb ask (1a), but not by nonattitude verbs such as force and compel (1b).

(1) a. \lim_{i} asked Mary [PRO_i to be allowed to get himself a new dog]. (Landau 2015, 75/6) b. ?*She_i forced/compelled her parents [PRO_i to be allowed to quit school].

As pointed out in Landau (2015) and much previous literature, control shift is subject to variation across speakers and languages. In particular, previous empirical work suggests that German is more prone to control shift than English (Panther & Köpcke 1993). Moreover, Pitteroff & Schäfer (2019) find crosslinguistic variation in the availability of implicit control, e.g., nonattitude verbs prohibit implicit control in English (in line with Landau's generalization), but not in German.

Experiment: In light of this variation, we tested whether attitude and nonattitude object control verbs in German differ in the availability of control shift as triggered by passivization of the complement clause. Using a 2×2 design with the factors *verb type* and *voice*, we presented 80 German native speakers with control constructions with an embedding verb of the attitude class, as in (2a) and (3a) or the nonattitude class, as in (2b) and (3b). The sentences either contained an active infinitival complement as in (2a,b) or a passivized one as in (3a,b). Each participant saw 12 target items in total, intermixed with 40 fillers in pseudorandomized order. Participants were asked to rate the acceptability of the target sentence on a scale from 1–7 and then answer a question on its interpretation in a multiple choice task; the questions (see (2c) and (3c)) were constructed to elicit the possible control interpretations of the target. The response options (shown in (2d)) correspond to (i) canonical (object) control, (ii) control shift, (iii) split control and (iv) no control (NC); the order of responses (i)–(iii) was varied across items. Participants could choose one or more responses and were instructed to select all response options they considered plausible.

(2) Complement clause: active

- a. Der Diktator befiehlt dem Minister, den General nach Frankreich zu bringen. 'The dictator commands the secretary to bring the general to France.' **attitude**
- b. Der Diktator zwingt den Minister, den General nach Frankreich zu bringen.
 'The dictator forces the secretary to bring the general to France.' nonattitude
- c. Question: Wer soll den General nach Frankreich bringen? ('Who is supposed to bring the general to France?')

- d. (i) der Minister (the secretary)
 - (ii) der Diktator (the dictator)
 - (iii) der Diktator und der Minister zusammen (the dictator and the secretary together)
 - (iv) jemand anderes (sb. else)

[CANONICAL (OBJECT) CONTROL]
[SHIFTED (SUBJECT) CONTROL]
[SPLIT CONTROL]

[NO CONTROL]

(3) **Complement clause: passive** [= control shift trigger]

- a. Der Diktator befiehlt dem Minister, nach Frankreich gebracht zu werden. 'The dictator commands the secretary to be brought to France.' **attitude**
- b. Der Diktator zwingt den Minister, nach Frankreich gebracht zu werden. 'The dictator forces the secretary to be brought to France.' **nonattitude**
- c. Question: Wer soll nach Frankreich gebracht werden? ('Who is supposed to be brought to France?')
- d. (as above)

The results of the multiple choice task are depicted in Fig.1. A logit model fitted to the control shift responses revealed a significant effect of *voice* ($\chi^2 = 284.4$, p < .001), a significant effect of *verb* type ($\chi^2 = 19.3$, p < .001) and a significant interaction between the two factors ($\chi^2 = 6.3$, p = .012): passivization in the complement clause triggered control shift readings across the board, but more so with attitude than with nonattitude verbs. Fig.2 shows the results of the acceptability judgment task: sentences with attitude verbs received slightly higher ratings than sentences with nonattitude verbs (F = 4.2, p = .041) and passivization leads to lower acceptability ratings (F = 224.4, p < .001). However, there is no interaction between the factors here (p = .69): passivization in the complement clause does not decrease acceptability more in nonattitude than in attitude contexts.

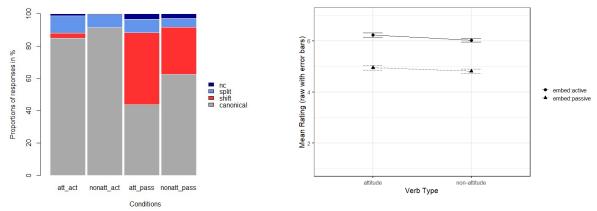


Figure 1: Control readings across conditions

Figure 2: Acceptability ratings

Discussion: We tested Landau's (2015) generalization that control shift is possible with (some) attitude verbs but not with nonattitude verbs in a study on German. We found considerable proportions of control shift responses with both verb types, in line with previous work showing that German is a rather 'control shift-friendly' language (Panther & Köpcke 1993). However, there was a significant difference between the two verb classes in line with Landau's generalization: attitude verbs were more likely to license control shift than nonattitude verbs. Our data thus provide empirical evidence for the attitude/nonattitude split, but the apparent availability of control shift with nonattitude verbs needs explanation. The study was designed to tease apart the effects of a control shift trigger on acceptability and interpretation, a differentiation that is rarely made in the literature. Our results suggest that passive in the complement clause affects overall acceptability to the same extent in attitude and nonattitude contexts; the relevant difference is in whether or not a control shift interpretation is licensed. We conjecture that this is the case with nonattitude verbs when they can be coerced into an attitude-like reading, as will be discussed in the presentation.

Selected references: • Landau, I. (2015). A two-tiered theory of control. MIT Press • Panther, K.-U. & K.-M. Köpcke (1993). A cognitive approach to obligatory control phenomena in English and German. Folia Linguistica • Pearson, H. (2016). The semantics of partial control. NLLT • Pitteroff, M. & F. Schäfer (2019). Implicit control crosslinguistically. Language • White, A. S. & T. Grano (2014). An experimental investigation of partial control. Proceedings of SuB 18