TAKE *THAT* (OR DON'T) – RHYTHMIC EFFECTS ON OPTIONAL *THAT* PRODUCTION IN L2 ENGLISH

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Finite complement clauses (CC) in English and German come in two (semantically roughly equivalent) varieties, viz. i) those that are introduced by a complementiser (*that* or *dass*) and ii) un-introduced CCs. In German, introduced CCs (1a) display verb-final syntax. In unintroduced CCs (1b), the tensed verb is in second position (V2). English CCs display SVO order irrespective of the presence of the complementiser (see examples in Table 1 overleaf).

(1) a. Martha denkt, dass Lúzie/Luíse den Arzt gerufen hat. *V-final CC*
b. Martha denkt, Lúzie/Luíse hat den Arzt geholt. *V2 CC*

Complementiser use in English is, among other factors, susceptible to the rhythmic-phonological environment (Lee & Gibbons 2007, LG07): *that*-omission is increased if this would promote rhythmic alternation of stressed and unstressed syllables (higher rate of *that*-omission when the following embedded subject starts in an unstressed syllable), suggesting overt complementiser production in English to be ultimately determined at the phonological encoding stage of language production (*that*-omission as phonological ellipsis). Various word order decisions have been shown to be likewise affected by linguistic rhythm in both English and German (cf. synopsis in Kentner & Franz 2019, KF19). However, KF19 report that CC structure choice in German is immune to phonological effects. KF19 assume that the CC-inherent decision regarding the verb position (V-final with *dass* vs V2 without) is already fixed during grammatical encoding when elementary structures for clauses are computed (Ferreira 2000); arguably, this decision cannot be undone at the stage of phonological encoding.

This cross-linguistic difference regarding the choice between introduced and unintroduced CC in language production raises questions as to the processing of the complementiser *that* in German speakers' L2 English. Rhythmic-phonological effects on the use of the complementiser in German speakers' L2 English would suggest that processing of *that* is essentially native-like. Conversely, immunity to phonological influences would indicate that German speakers' production of L2 *that* is not processed like native English *that* but possibly modelled on the processing of the German cognate *dass*.

We present results of a written questionnaire study (binary forced choice between CCs with or without *that*). 62 participants (L1 German with L2 English) chose their preference among the 32 test items by LG07 (and 32 fillers). The stress pattern of the name at the top of the CC (e.g. trochaic *Lucy* vs iambic *Louise*) was systematically varied, as was the presentation order (CC with *that* presented first or second).

Bayesian linear mixed effects regressions reveal that speakers of L2 English with L1 German take the local linguistic rhythm into account when choosing among English CC structures (Table 2; Fig. 1 shows the posterior distribution of the effect of rhythm on *that*-mention in comparison to L1 English and L1 German), and they do so irrespective of their competence level (as measured by LexTALE, Lemhöfer & Broersma 2012). This suggests that German speakers of L2 English, like native speakers of English (LG07), shift the decision regarding optional *that* to the stage of phonological encoding even though they take the corresponding decision on cognate *dass* during grammatical encoding in their native language.

Table 1: Example stimuli of binary forced choice questionnaire

O Richard sensed Lindsey betrayed her friend.
O Richard sensed that Lindsey betrayed her friend.
[…]
O Matt announced that Nicole joined the army.
O Matt announced Nicole joined the army.
[…]

Table 2: Coefficients of interest of Bayesian linear mixed regression (*that*-choice as dichotomous dependent variable). Clearly non-zero effects marked in yellow.

	Est	SE	95% CI
[Rhythm: stress on embedded subject]	0.26	0.13	0.01, 0.51
[LexTALE: score in English test]	0.00	0.02	-0.03, 0.03
[serial no. of item in questionnaire]	-0.02	0.01	-0.03, -0.001
[that First: presentation order]	0.20	0.11	-0.02, 0.43
[Rhythm : LexTALE interaction]	0.01	0.01	-0.01, 0.02

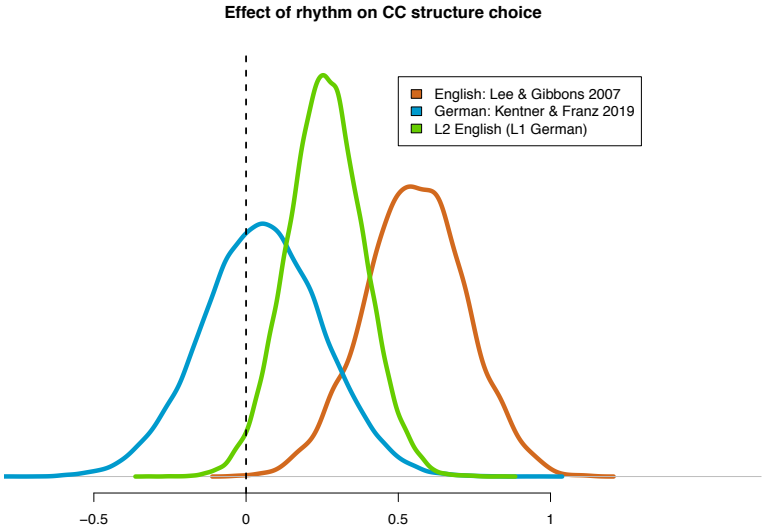

Figure 1: Posterior distributions for the effect of rhythm on CC structure choice in L2 English (green, mean ~.26), compared to L1 English (red, mean ~.55, reanalysed data by Lee & Gibbons 2007) and German (blue, mean ~.1, Kentner & Franz 2019).

References

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