Prosody–Information Structure Mapping in L2 German: The Role of Proficiency and L1 Typology

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According to the Interface Hypothesis [1], syntax–discourse mappings are especially vulnerable in L2 acquisition. Similar difficulties have been reported at the prosody–information structure interface: L2 English studies show persistent problems mapping pitch accent to givenness or focus, with delayed acquisition and L1-related effects [2–4], while recent L2 German case studies suggest comparable transfer effects [5, 6]. However, beginning learners and broader cross-linguistic comparisons remain underexplored. We therefore ask whether learners of German are sensitive to prosody–information structure mappings already at beginning proficiency levels, and how L1 typology and proficiency shape this sensitivity.

We tested 119 learners of German from 33 L1s and 35 L1 speakers of German in a naturalness-judgment task (12 items per participant, six-point scale). In each item, one constituent was discourse-new; target-like accentuation placed the pitch accent on this constituent and deaccented the background, while two non-target-like conditions instead accented sentence-final given material or included no prominent pitch accent. Ratings were analyzed with mixed-effects models including focus condition, proficiency, and L1 typology as fixed effects. Proficiency was determined by course level (A1, A2, B1, B2/C1); B2 and C1 were combined, as course enrollment beyond B2 was too sparse to reliably distinguish the two. L1 typology classified languages by similarity to German in prosodic focus marking (German-like; intermediate, requiring additional grammatical/lexical means; divergent, with highly restricted marking; see Supplemental Materials for the classification rationale).

Native speakers clearly preferred the target-like pattern over both non-target-like realizations. The most robust learner effect was a significant interaction between focus condition and L1 typology, indicating that learners with German-like L1 prosody distinguished target-like from non-target-like accentuation more strongly. Even A1 learners already showed a significant effect of focus condition, and this sensitivity did not increase reliably across higher proficiency levels (Focus x Proficiency, n.s.); even advanced learners remained comparatively tolerant of pitch accents on discourse-given material.

These findings show that L2 learners detect accent–information-status mismatches already at beginning proficiency levels, but that native-like evaluation does not improve steadily with proficiency and remains shaped primarily by L1-specific prosodic patterns. The study extends interface-based accounts of L2 difficulty to the prosody–discourse domain.

Supplemental materials

Example item *(Capital letters indicate the syllable carrying the pitch accent)*

Context: Wann hast du Urlaub? (“When are you on vacation?”)
Target-like: Ich mache im SepTEMber Urlaub. (“I'm going on vacation in September.“)
Non-target-like A: Ich mache im September URlaub.
Non-target-like B: Ich mache im September Urlaub.

L1 typology: a continuous measure was considered but rejected for lack of a principled ranking criterion; cell sizes across L1 typology x proficiency varied given 33 L1 backgrounds.

Key mixed-effects results

Effect	**F(df1, df2)**	**p**
Focus1	57.845 (2, 1275)	<.001
Proficiency	0.485 (3, 107)	.693
L1 Typology	2.073 (2, 107)	.131
Focus x Proficiency	1.213 (6, 1277)	.297
Focus x L1 Typology	3.601 (4, 1277)	.006
Focus x Prof. x L1 Typology	1.449 (12, 1280)	.137

The critical learner effect is Focus x L1 Typology; Focus x Proficiency and the three-way interaction do not reach significance.

References

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[1] This predictor indicates whether the pitch accent falls on the new constituent, on a given constituent, or whether there is no prominent pitch accent at all.