

Crosslinguistic influence in L3 acquisition: Evidence from artificial language learning

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A widely discussed issue in L3/Ln acquisition is whether transfer/crosslinguistic influence (CLI) at early stages is dependent on overall typological similarity (Rothman 2015), or whether this influence can be selectively sourced from the L1 and/or the L2 depending on linguistic property-specific similarities (Westergaard et al. 2017, Westergaard 2021a, b).

For proponents of the former position, the grammatical system of one of the languages is transferred in its entirety, and the source language is selected based on overall typological similarity to the L3 with the lexicon being the most salient cue. The second proposal argues that CLI is due to co-activation of both previously acquired grammars. It is also argued that structural similarity between individual grammatical properties is a more important factor than overall typological proximity.

To test these two proposals, we designed a picture-sentence matching task employing a mini- artificial language as an L3. We followed the subtracted language groups design and tested two groups of participants: Norwegian and Norwegian-Russian speakers (n = 23 for each group). The L3 was constructed using Norwegian lexical roots combined with case marking suffixes, as in Russian. After a short training phase, where the participants were exposed to both SVO and OVS sentences (see examples 1-2), they were asked to decide if similar sentences accurately described pictures on a screen. Stimuli were correct/incorrect SVO and OVS sentences (see examples 3-6). Incorrect sentences used the wrong case (NOM on the object or ACC on the subject).

Our predictions were the following (see Fig1): If lexical similarity prompts transfer from Norwegian for both groups (as per the TPM), no difference between the groups was expected. However, if case-licensed flexible word order can be selectively supported by any previous language (as argued by the LPM), Russian-Norwegian bilinguals should have an advantage.

As shown in Fig2, our results show a higher accuracy for the two critical conditions for the Russian-Norwegian group, indicating that these learners are sensitive to the structural similarity between the L3 and Russian at an early stage, even though the L3 is lexically similar to Norwegian. This supports models of L3/Ln acquisition which assume that CLI is property by property from either or both previously acquired languages and that structural similarity is an important factor.

In this talk we also report on a follow-up study with Norwegian-Greek bilinguals (n=8, data collection ongoing), which tested whether this influence is dependent on the L3 structure in question being identical to the previously acquired language or whether a more abstract similarity has the same effect, more specifically whether case in the previously acquired language has to be marked as suffixes (as in Russian – and the L3) or whether case on prenominal articles (as in Greek) is sufficiently similar to the L3 to cause CLI. The preliminary results indicate an interesting trend suggesting that Greek-Norwegian participants might have an advantage in accepting OVS sentences with correct case marking than monolingual Norwegian speakers. A larger sample size will clarify if this trend is replicated for a larger population of participants.

500 words

- (1) *Sebra-il tegner sopp-su.*
Zebra-NOM draw mushroom-ACC
- (2) *Hatt-su holder rev-il.*
Hat-ACC hold fox-NOM
- (3) *Kylling-il spiser mais-su*
Chicken-NOM eat corn-ACC

- (4) **Baker-su spiser suppe-il.*
Baker-ACC eats soup-NOM
- (5) *Laks-su spiser sel-il.*
Salmon-ACC eats seal-NOM
- (6) **Mark-il spiser fugl-su.*
Worm-NOM eats bird-ACC

Figure 1: Predictions according to the TPM and the LPM


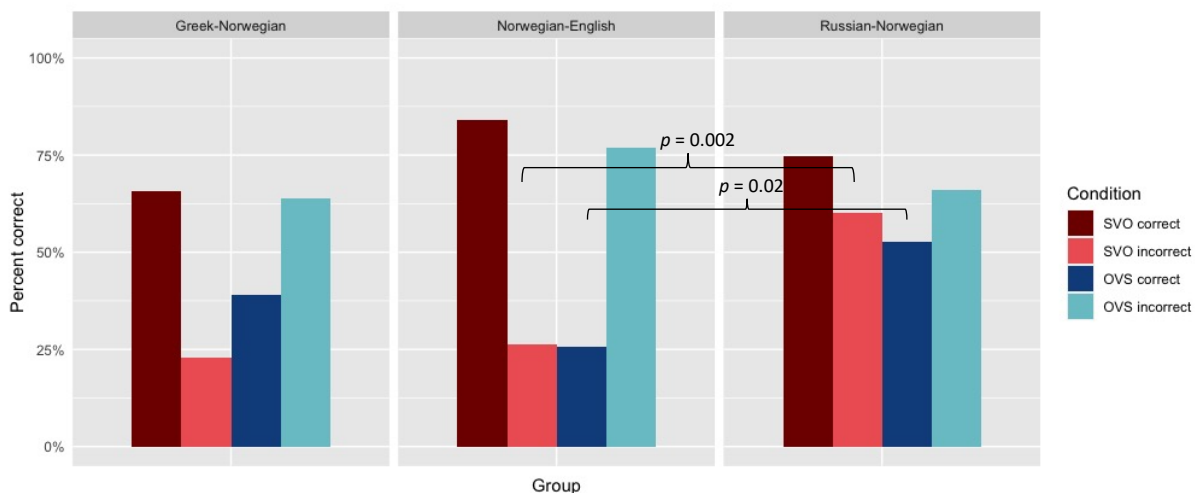
Picture: A rabbit finding a carrot 	Case	WO	NOR	NOR-RUS NOR-GRE (TBM)	NOR-RUS (LPM)	NOR-GRE (LPM)
A. Rabbit-NOM finds carrot-ACC	correct	SVO	Accept			
B. Rabbit-ACC finds carrot-NOM	incorrect	SVO	Accept	Reject	Reject?	
C. Carrot-ACC finds rabbit-NOM	correct	OVS	Reject	Accept	Accept?	
D. Carrot-NOM finds rabbit-ACC	incorrect	OVS	Reject			

Figure 2: Results



References

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