Abstract:

Investigating CLI in multilingual acquisition through an artificial language

The Linguistic Proximity Model (LPM) argues that humans can draw on resources from both/all their previously acquired languages in developing a grammar of a new language (Ln), whether this transfer is facilitative or non-facilitative (Westergaard, Mitrofanova, Mykhaylyk & Rodina 2017). This is in contrast to the Typological Primacy Model (Rothman et al. 2019), which argues that there is wholesale transfer of the previously acquired language most similar to the Ln.

Mitrofanova, Leivada & Westergaard (2022) used a semi-artificial language (lexically similar to Norwegian, but with case-marking on nouns, as in Russian) in a Sentence-Picture Matching Task (SPMT) with Russian-Norwegian, English-Norwegian and Greek-Norwegian participants (Greek has case-making on determiners, English has no case). Results showed that Russian-Norwegian bilinguals scored significantly higher than English-Norwegians and Greek-Norwegians. The authors conclude that syntactic similarity is facilitative, but only when the expression of a property also has superficial similarity to a previously acquired language.

The current SPMT study replicates the previous study with a twist: two *different* artificial languages lexically similar to Norwegian. Language A has case-marking on nouns (similar to Polish, Figure 1) and Language B has case-marking on determiners (different from both languages, Figure 2). A subtractive language-groups design is used, with two participant groups: Polish-Norwegian-English multilinguals and Norwegian-English bilinguals. The presence of English is not problematic in this design, as it does not have case-marking.

Participants are exposed to 20 grammatically correct sentences in the artificial language assigned to them (A or B), with ten SVO sentences (Figure 3) and ten OVS sentences (Figure 4). They then perform the SPMT, hearing a total of 60 sentences, of which 15 each are SVO correct, SVO incorrect, OVS correct, and OVS incorrect. This is followed by a Norwegian proficiency test for the Polish-Norwegian-English multilinguals, and a language background questionnaire in order to exclude L1 Norwegian speakers with A2+ knowledge of a language with case.

For Language A we predict that the Polish-Norwegian speakers will perform better than the Norwegian speakers, with facilitative CLI from Polish. For language B, we predict that, similar to the Greek-Norwegians above, there will be less of a facilitative effect for non-superficial structural similarity. Preliminary results show that Polish-Norwegian multilinguals perform significantly better than Norwegian-English bilinguals in the noun condition. Interestingly, the Norwegian-English bilinguals perform much more strongly in the article condition than in the noun condition. The difference in performance between Polish-Norwegian multilinguals and Norwegian-English bilinguals might indicate that multilingual learners do not transfer one of their previously acquired languages based on the lexical Ln input, but rather that both/all pre-existing languages influence the acquisition process.

Bibliography:

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Rothman, J., Alonso, J. G., & Puig-Mayenco, E. (2019).Third language acquisition and linguistic transfer. Cambridge University Press.

Westergaard, M., Mitrofanova, N., Mykhalyk, R., & Rodina, Y. (2017). Crosslinguistic influence inthe acquisition of a third language: The Linguistic Proximity Model. International Journal ofBilingualism,21(6), 666-682
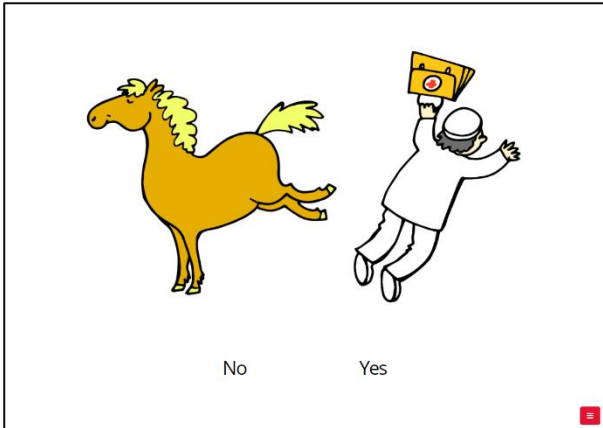
Figures:

Figure 1: Case marking on nouns, SPMT

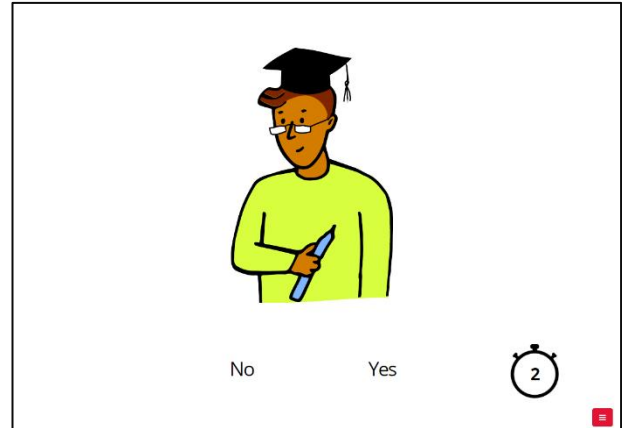Audio: Hest-il sparker lege-su.

Figure 2: Case marking on articles, SPMT

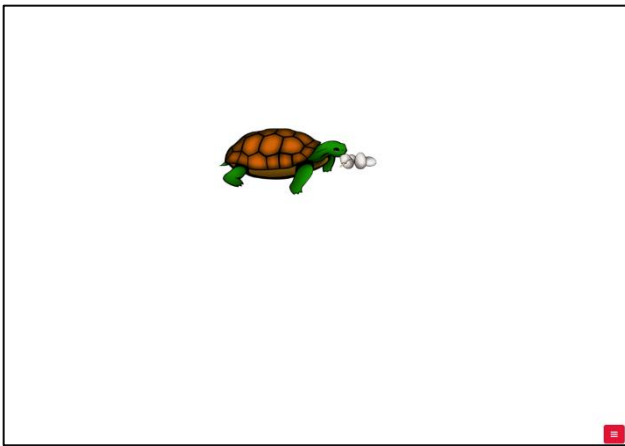Audio: Il student holder su blyant.

Figure 3: SVO correct, case on noun, exposure
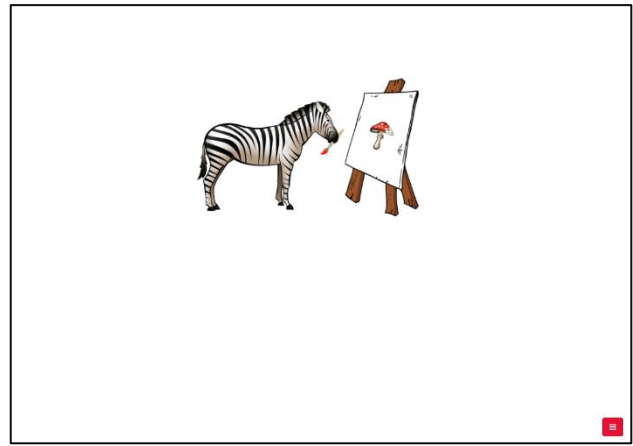
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Figure 4: OVS correct, case on noun, exposure

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