

Effects of frequency and simplicity in L2 English causative motion production

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A critical question for language production is how speakers choose a linguistic form over other options when describing a scene. Psycholinguistic studies have shown that the availability of different linguistic options to convey a particular message creates production difficulties, leading speakers to favor the most frequent and accessible forms (MacDonald 2013). While frequency and accessibility are understood to be important for both first language (L1) and second language (L2) speakers (Ellis 2002, 2016), relatively little is known about how they apply in L2 production. The CASP (Complex Adaptive System Principles) model (Hawkins & Filipović 2013) predicts that L2 learners should prefer frequently-used forms, forms that resemble those in their L1 ('positive transfer'), and/or structurally simple forms. The present study tests these predictions with causative motion expressions (e.g. *She chased the dog into the house*).

Participants recruited in this study were students in an American university. In the elicitation task, participants were instructed to use a single sentence to describe 21 animated videos depicting causative motion. English responses were elicited from L1 English speakers (n=10) and L1 Mandarin L2 English speakers of high (n=11) and intermediate (n=17) proficiency, as determined by scores (over vs. below 70%) on the LexTale lexical decision task (Lemhöfer & Broersma, 2012). To establish a baseline for possible transfer effects, Mandarin responses were elicited from a separate group of L1 Mandarin speakers (n=10). Responses were coded for lexical expression of Path (simple, complex, none) and choice of structure (canonical, passive, MAKE construction).

Results of L1 groups: Both L1 English and L1 Mandarin speakers consistently used simple Path (encoded by one lexical item), and rarely used complex Path (two lexical items), while the Mandarin group used the shorter form, null Path (no encoding) more often (Fig 1). Mandarin speakers used MAKE (agent-BA-patient-V) most frequently, followed by canonical transitive and passive (patient-BE-agent-V). L1 English speakers used only canonical transitive and (rarely) passive (Fig 2). They did not use MAKE (periphrastic causative) at all.

Results of L1 vs. L2 English groups: While group results for high and intermediate proficiency L2 English speakers are shown in the graphs (Fig. 3-4), there were no significant differences between the two L2 groups. Therefore, both groups were combined for comparison with the L1 English group. L1 and L2 English speakers showed a difference in frequency of lexical options for Path ($\chi^2 = 22.68$; $p < 0.001$). Both groups most often used a simple phrase (e.g. *into the house*) to express Path, an option which is highly available in English and Mandarin. However, the L2 group omitted the Path expression significantly more often than the L1 group, consistent with the prediction that L2 speakers should choose structurally simple forms (Fig. 3). The higher rate of null Path might also be related to transfer from Mandarin (Fig 1). Results showed no significant group differences for choice of syntactic structure (Fig. 4). Both groups avoided structures that are less frequent in English (passive and MAKE), suggesting that MAKE (BA-construction), the most frequent option in Mandarin (Fig 2), is not similar enough to English MAKE (periphrastic causative) to facilitate positive transfer in L2 production.

In summary, these results are consistent with the CASP model (Hawkins & Filipović 2013). In choice of syntactic structure, both L1 and L2 English speakers tended to use the most frequent forms from English, while no evidence of positive transfer from Mandarin was apparent. In choice of Path expression, L2 speakers used simpler structures more often than L1 speakers. Finally, level of L2 proficiency did not affect participants' expression of causative motion.

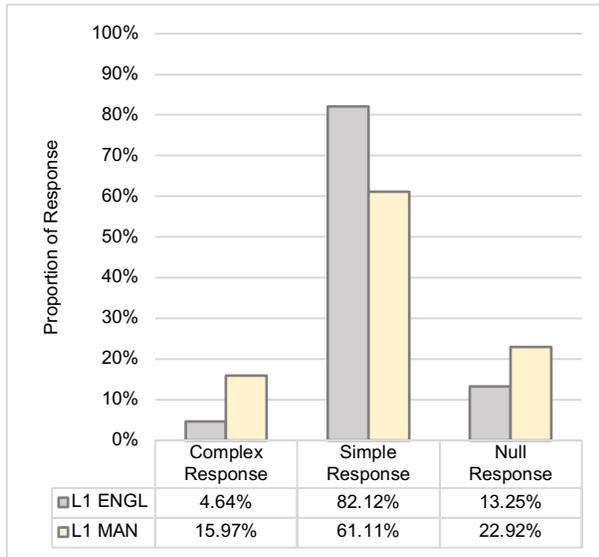


Fig. 1

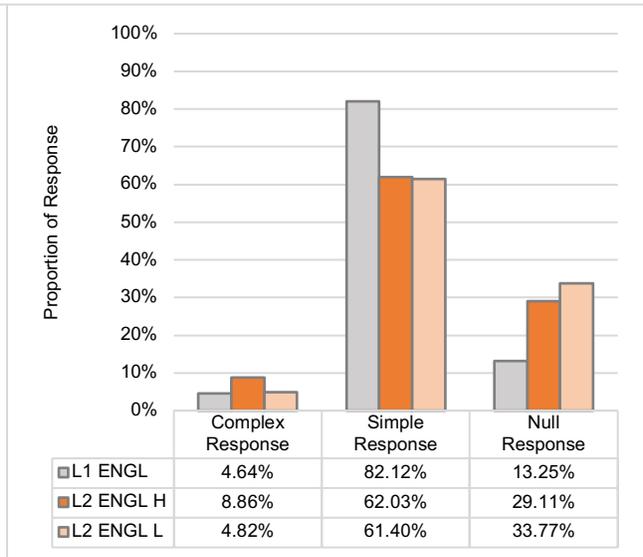


Fig. 3

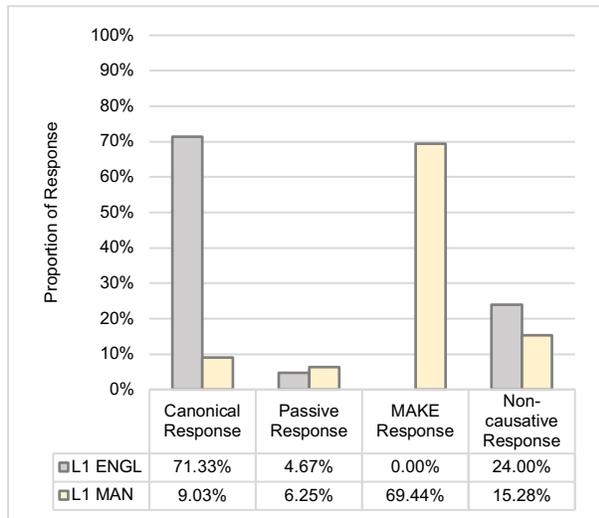


Fig. 2

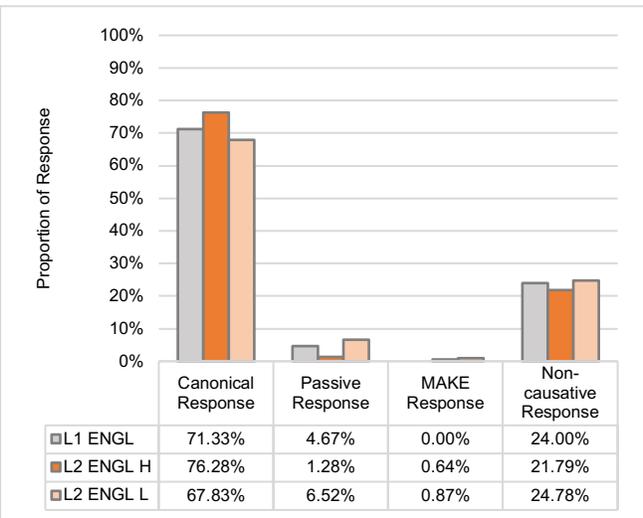


Fig. 4