Acquisition of English verb transitivity by native speakers of Japanese
Tomonori Nagano
CUNY Graduate Center
contact: tnagano@gc.cuny.edu

This study investigates native Japanese speakers’ acquisition of English lexical causativity (Bowerman, 1974). Semantic class and frequency of verbs (Levin, 1993; Brooks & Tomasello, 1999) have been proposed as influences on the first language (L1) acquisition of verb causativity. The goal of this study is to investigate the role of these two factors in second language (L2) acquisition.

Recent studies argue that children acquire L1 lexical causativity through verb semantics and that high-frequency verbs are acquired earlier than low-frequency ones (Ambridge et al., 2008). For example, verbs whose meaning entails willed or volitional acts (e.g., work, toil, smile, grin) are typically pure intransitives in most languages and are not allowed in the transitive construction. Among those verbs, high-frequency forms, such as work and smile, are expected to be acquired faster than low-frequency ones such as toil and grin.

In addition, the subset-superset relationship between L1 and L2 (Inagaki, 2001,2002; Izumi, 1998; Montrul, 2001) may play a role in SLA because the way each language manifests lexical causativity varies (Haskelmath, 1993; Jacobsen, 1992). In Japanese, lexical causatives exist not only in typical unaccusative verbs (e.g., open, break, bounce), but also in unaccusative verbs lacking the causative alternation in English; that is, inherently-directed motion verbs (e.g., oriru/orosu “descend\textsubscript{INTRANS/TRANS}, go, tumble) and verbs of disappearance (e.g., kieru/kesu “disappear\textsubscript{INTRANS/TRANS}, die, vanish). The subset-superset relationship predicts learnability problem for Japanese native speakers acquiring L2 English when the learners encounter inherently-directed motion verbs and verbs of disappearance. In addition, the learnability problem from the lack of negative evidence is expected to be stronger with low-frequency tokens than with high-frequency ones.

Twenty-six native English speakers and 18 high- and 17 low-proficiency Japanese ESL learners participated in a computer-based experiment which consisted of a series of short movie clips followed by an English sentence. The sentences contained verbs from different frequency strata (frequency counts in CELEX2). For example, die (high-frequency), disappear (mid-frequency), and vanish (low-frequency) were selected from the disappearance verb class. Each verb was used in three different frames: an agent intransitive frame (e.g., “*The man vanished.” in the sense of the man made something disappear), a theme intransitive frame (e.g., “The coin vanished.”), and a transitive frame (“*The man vanished the coin.”). The subjects were asked to rate each sentence’s acceptability (Likert scale 1-5).

The data were analyzed with a 3x2x3 RM ANOVA using Proficiency as a between-subjects factor and Verb Semantic Class and Frequency as within-subjects factors. There were significant main effects for all three variables, a two-way interaction between Frequency and Semantic Class \((F(10,580) = 5.48, p < .001)\), and a three-way interaction \((F(20,580) = 5.48, p < .05)\). As expected, post-hoc analyses showed significant Frequency and Proficiency effects in the disappear and inherently-directed motion verbs, but not in the prototypical unaccusative verb class, supporting the hypothesis that L2 learners acquire verb causativity under the influence of Semantic Class, Frequency, and learnability predicted by the subset relationship.
References:


