

Phonomimesis and directional predication in child language

Children must learn not only the lexicalizations of onomatopoeia in their particular language, but also how to integrate such forms into syntactic structures. Languages vary significantly as to how particular sounds may be lexicalized in the expression of motion events, and as to the frequencies of these lexicalization patterns, but arguably conform to universal principles regarding their dependence on other syntactic elements in directional predication. The focus of this paper is on how phonomimesis is comparatively integrated into the syntax of directional predicates in Japanese and English, and whether apparently universal constraints on such integration are in play in the early stages of first language acquisition.

The differences in phonomimetic expression between Japanese and English are relatively well-understood in descriptive terms, though they are rarely treated in a broader context of predicate-argument structure. In Japanese, lexicalization is generally in the form of reduplicated *giseigo/giongo* ‘phonomimes’ or *gitaigo* ‘phonomimes’. Reduplicated forms in general do not find expression in V unless they are derived from V (e.g. *masu* ‘increase, grow’ → *masu masu* ‘more and more’), and indeed their categorial status is unclear (Shibatani, 1990). They are ultimately expressed in adjuncts, as in (1), and amplitude is most often varied through consonant alternation, as in (2). In English, syntactic expression may be in a ‘verb of sound emission’ (Levin, 1993; Levin, Song and Atkins, 1997), an adpositional modifier, or a zero-related nominal in an adjunct, and the amplitude of the sound may be varied through vowel alternation, as shown in (3).

In a novel experiment targeting the acquisition of directional predication in Japanese and English, 901 relevant utterances were elicited from children aged 3-7 years, using a picture-story. Mimetic expressions in the data reveal differences in lexicalization and in performance preferences, but a common syntax in evidence throughout the age range. In the early Japanese data, the proportion of syntactically integrated onomatopoeia to instances of path predication was 60/164 (36.6%) at 3-4 yrs; the English data furnished only 5/221 (2.3%) at 3-4 yrs, (excluding ‘expressive’ manner V), confirming previously reported patterns (e.g. Kuntai and Nakamura, 2004). In Japanese, mimetic expressions were expressed as adjuncts, supported by (i) deictic predicates such as *iku* ‘go’ or *oriru* ‘go-down’; (ii) light V such as *suru* ‘do’ or *naru* ‘go/get’; or (iii) manner V assigning accusative case to the direct object, as exemplified in (4), (5) and (6). In English, all onomatopoeia was lexicalized as V and merged with directional prepositions, as in (7) and (8).

Despite often radically different analyses, research on the syntax of motion events usually distinguishes manner verbs which are inherently directional and those that are not (*run, fly, slide, *dance, *float, *twist*) (Folli, 2001; Zubizarreta and Oh, 2007, Beavers et al., 2008), and adpositions that pattern in the same way (*to, from, towards, *in, *on, *within*) (den Dikken, 2006; Emonds, 2000; Svenonius, to appear). An emergent generalization from these experimental data is that onomatopoeia is never attested in directional contexts in either language without the support of an unambiguously directional V or P, i.e. Japanese *hashiru* ‘run’ but **naru* ‘get’; *kara* ‘from’ but **ni* (LocP); English *into* but **in*. In this regard, the syntax of phonomimesis mirrors the syntax of non-directional manner V. Pre-school children appear to already know that directionality must be syntactically coerced. The results support recent work on the syntax of motion events that emphasizes common combinatorial principles irrespective of ‘verb-framed’ or ‘satellite-framed’ tendencies (van Riemsdijk and Huybregts, 2007; Beavers et al., 2008), tying syntactic variation to the learning of the lexicon.

Examples

- (1) Kawa ni *pasha pasha*-te haitte itta.
river LocP splash splash-TE enter-TE go-PST
'(He) went splashing into the river.'
- (2) *hyu hyu* 'breeze', *pyu pyu* 'wind', *byu byu* 'gale'
- (3) He *splashed* into the pool / He went *splish* into the puddle / He jumped in with a *splash*.
- (4) kawa ni *zagoon*-te haichatta (Japanese, 3-yr-old)
river LocP splash-TE enter-ASP-PST
'(He) splashed into the river'
- (5) koko kara *koron-koron*-te nachatta (Japanese, 4-yr-old)
here from bump bump bump-TE get-ASP-PST
'(He) went bumpety-bump from here.'
- (6) ishi o *piyon*-tte tonjatta (Japanese, 4-yr-old)
stone ACC boing-TE leap-ASP-PST
'(He) boinged over the rock.'
- (7) he *splashes* into the river (English, 3-yr-old)
- (8) he *boings* over (English, 3-yr-old)

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