

Does ontogeny recapitulate phylogeny? Prepositional polysemy in L2 Spanish

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This paper examines whether the order in which the different meanings of the Spanish preposition *a* are acquired by second language (L2) learners reflects the diachronic development of the semantic network. Thus, it is hypothesized that primary meanings are acquired before secondary ones, more transparent extensions precede less transparent ones, lexical uses are acquired before more grammatical ones, and specific collocations come before more generalized applications (Rice 1999, 2003).

A cross-sectional sample of 24 university Spanish learners from three proficiency levels (beginner, intermediate, and advanced) were asked to orally recount two stories, each consisting of 15 pictures, which were created specifically to elicit the different meanings of *a*. Based on the data collected, four general functions of *a* were identified: spatial ("direction towards"), temporal (the moment when an event occurs), lexical (*a* is a collocate with another word) and grammatical (to signal the object of a verb). The hypothesized order of acquisition, based on diachronic factors, was spatial > temporal > lexical > grammatical. However, the observed order of acquisition, based on accuracy of use, was temporal > spatial > lexical > grammatical, which only partially confirmed the hypothesis.

An analysis of errors suggests that non-conceptual factors, such as collocational tendencies, frequency of occurrence, communicative necessity, and similarity with the first language (L1), play a large role in determining which meanings are acquired first, especially at lower levels of proficiency. This finding corroborates those from the few existing studies on the acquisition order of prepositional meanings in L2 (e.g. Lafford & Ryan 1995, Navarro i Ferrando & Tricker 2000/2001, Pinto & Rex 2006, González-Alvarez & Doval-Suárez 2008). Semantic extension was not evident until the intermediate level, when learners began to extend the use of *a* beyond prototypical temporal and spatial expressions, with a consequent decrease in accuracy. However, the use of semantic extension appeared to be limited to within each function, as there was no evidence that learners perceived a link between temporal and spatial uses (cf. Rice 1996, Kemmerer 2005). As for the lexical and grammatical functions, the errors all point to a reliance on the L1, not an entirely surprising result given the tenuous semantic relationship between these functions and the spatial proto-scene, even among native speakers (Rice 1996).

The findings from this study suggest that the L2 acquisition of prepositions is not simply a matter of applying basic conceptual strategies of metaphor and extension, but rather is complicated by lexical factors. Thus, it appears that the acquisition process may involve both polysemy and homonymy. While the two are often portrayed as theoretical opposites (e.g. Tyler & Evans 2003), there is no practical reason why learners cannot adopt both as strategies for dealing with the multiplicity of meanings (cf. Sandra & Rice 1995). These results raise questions about the psychological reality of semantic network models of prepositional polysemy as well as about the pedagogical usefulness of presenting such models in the L2 classroom.

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