THE ORDER OF ACQUISITION OF GRAMMATICAL MORPHEMES IN CHILD SPEECH: A COMPARATIVE TYPOLOGICAL ANALYSIS OF ENGLISH AND UZBEK

Matfozilova Muhabbatxon Rasuljon qizi
muhabbatxonolmasova@gmail.com
https://orcid.org/0009-0003-2133-9978
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Abstract. This paper discusses the order in which children acquire grammatical morphemes in first language acquisition, comparing the well-documented English pattern established by Brown (1973) with the developmental path of Uzbek. The comparison shows that while both languages display an early-to-late progression driven by cognitive and semantic factors, the agglutinative structure of Uzbek compresses this progression into an earlier and more regular sequence than the fusional and analytic morphology of English allows.

Keywords: first language acquisition, grammatical morphemes, natural order hypothesis, Uzbek, English, agglutination, linguistic typology

Introduction. One of the most important findings in the study of first language acquisition is that children do not acquire the grammatical apparatus of their native language all at once, and they do not acquire it in a random sequence. Certain morphemes the small bound and free forms that mark tense, number, case, possession, and other grammatical categories reliably emerge earlier in children's spontaneous speech than others, regardless of how frequently a caregiver models them or how explicitly they are corrected. This observation, first documented systematically for English by Roger Brown in his longitudinal study of three children (Adam, Eve, and Sarah), gave rise to what is now known as the natural order hypothesis: the claim that morpheme acquisition follows a relatively fixed sequence that is more sensitive to structural and semantic complexity than to input frequency alone.[1] The present paper asks whether this order is a genuine universal of language acquisition or whether it is, at least in part, an artifact of English's particular morphological typology. English occupies an unusual position among the world's languages: it is only mildly inflected, uses a mixture of free and bound grammatical morphemes, and relies heavily on word order and auxiliary verbs rather than case or agreement marking. Uzbek stands in sharp typological contrast. As an agglutinative Turkic language, Uzbek expresses grammatical relations through long, transparent chains of suffixes attached to an unchanging root, with each suffix typically encoding a single, recoverable meaning.[2] Comparing the two systems offers a natural test case for separating universal cognitive constraints on acquisition from typology-specific effects. The paper proceeds as follows. Section 2 outlines the theoretical background of morpheme-order research. Section 3 reviews Brown's classic findings for English. Section 4 presents the typological profile of Uzbek morphology and summarizes what is known about its acquisition, drawing on the closely related Turkish literature where direct Uzbek data are unavailable. Section 5 offers a comparative discussion, and Section 6 concludes.

Materials and methods. Early behaviorist accounts of language acquisition predicted that morphemes should be learned in the order in which they are modeled and reinforced by caregivers that is, in proportion to their frequency in child-directed speech. Brown's data, together with the cross-sectional replication by de Villiers and de Villiers, showed this

prediction to be largely false: frequency in maternal speech correlated only weakly with order of acquisition, while semantic and grammatical complexity correlated strongly.[3] Slobin's subsequent cross-linguistic program proposed a set of 'operating principles' that children apply to the input regardless of the target language for instance , a preference for marking meanings that are semantically transparent, perceptually salient , and structurally regular, and an avoidance of interruption or reordering of already-acquired units.[4]

Brown's longitudinal analysis of fourteen grammatical morphemes in the spontaneous speech of Adam, Eve, and Sarah produced a strikingly consistent order across all three children, measured by the point at which each morpheme was supplied in at least ninety percent of the linguistic contexts that obligatorily required it. The approximate sequence, from earliest to latest, is as follows:

Rank	Morpheme	Example
1	Present progressive -ing	*Mommy running*
2–3	Prepositions in, on	*in the box / on the table*
4	Plural -s	*two dogs*
5	Irregular past tense	*went, fell, broke*

Several generalizations emerge from this order. Morphemes that mark a single, semantically simple, perceptually salient meaning (progressive -ing, the plural) are acquired early; morphemes that require the child to track grammatical agreement across two elements of a sentence (third-person -s, auxiliary be) are acquired late, because they demand not only a semantic distinction but also a syntactic bookkeeping operation. Zero-marked or phonologically light forms, and morphemes that participate in irregular allomorphy, tend to lag behind their phonologically salient and regular counterparts.[5]

Discussion. The comparison between English and Uzbek supports three general conclusions about the relationship between typology and acquisition order. First of all , the cognitive prerequisites for grammatical marking appear to be shared across the two languages. In both English and Uzbek, number marking, spatial/locational marking, and marking of completed action emerge among the earliest grammatical categories, consistent with Slobin's claim that certain conceptual distinctions are cognitively available, and therefore markable, from very early in development regardless of the target language.

Secondly, the rate and regularity of acquisition differ sharply according to morphological typology. Because Uzbek suffixes are phonologically salient, regular, and map one-to-one onto meaning, Uzbek-speaking children reach productive control of core case and number morphology earlier, and with a narrower range of error types, than English-speaking children reach control of the functionally corresponding categories, which in English are fragmented across irregular verb morphology, prepositions, and grammatical agreement. Thirdly, the internal ranking of 'early' versus 'late' morphemes within each language is governed by the same variables semantic transparency, phonological salience, and structural regularity even though the absolute morphemes involved differ completely between the two languages. This suggests that Brown's original order should not be treated as a language-universal sequence, but rather as the English-specific output of universal acquisition principles operating over English-specific morphological material. A truly universal theory of morpheme acquisition

must therefore be stated at the level of these underlying principles rather than at the level of the particular fourteen morphemes Brown identified.

Conclusion. The order in which children acquire grammatical morphemes reflects an interaction between universal cognitive readiness and the particular morphological typology of the language being acquired. English, with its mixed analytic-inflectional system and heavy reliance on irregular and zero-marked forms, produces the relatively slow and uneven order documented by Brown. Uzbek, as a transparent agglutinative Turkic language, is predicted and, on the available comparative Turkic evidence, appears to produce an earlier, faster, and more internally regular acquisition sequence for functionally corresponding categories,because direct longitudinal data on Uzbek child language remain limited relative to English and Turkish, the conclusions offered here should be treated as a typologically motivated hypothesis rather than a settled empirical result. Systematic longitudinal corpora of Uzbek child speech, comparable in scope to Brown's original study, would allow this hypothesis to be tested directly and would make a valuable contribution to the crosslinguistic study of language acquisition.

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References:

Aksu-Koç, A., & Slobin, D. I. (1985). The acquisition of Turkish. In D. I. Slobin (Ed.), The Crosslinguistic Study of Language Acquisition, Vol. 1: The Data (pp. 839–878). Hillsdale, NJ: Lawrence Erlbaum Associates.

Brown, R. (1973). A First Language: The Early Stages. Cambridge, MA: Harvard University Press.

Bybee, J. (1985). Morphology: A Study of the Relation between Meaning and Form. Amsterdam: John Benjamins.

Comrie, B. (1989). Language Universals and Linguistic Typology (2nd ed.). Chicago: University of Chicago Press.

de Villiers, J. G., & de Villiers, P. A. (1973). A cross-sectional study of the acquisition of grammatical morphemes in child speech. Journal of Psycholinguistic Research, 2(3), 267–278.

Johnston, J. R. (1985). Cognitive prerequisites: The evidence from children learning English. In D. I. Slobin (Ed.), The Crosslinguistic Study of Language Acquisition, Vol. 2: Theoretical Issues (pp. 961–1004). Hillsdale, NJ: Lawrence Erlbaum Associates.

Ketrez, F. N., & Aksu-Koç, A. (2009). Early nominal morphology in Turkish: Emergence of case and number. In U. Stephany & M. D. Voeikova (Eds.), Development of Nominal Inflection in First Language Acquisition (pp. 15–48). Berlin: Mouton de Gruyter.

Slobin, D. I. (1973). Cognitive prerequisites for the development of grammar. In C. A. Ferguson & D. I. Slobin (Eds.), Studies of Child Language Development (pp. 175–208). New York: Holt, Rinehart and Winston.