Two Approaches to Second Language Acquisition: Universal Grammar and Emergentism

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1. THE TWO APPROACHES TO SECOND LANGUAGE ACQUISITION

Language presents us with many questions. Why does it have certain properties and features, but not others? Why does it vary and change in the ways that it does? How is it acquired with such ease by young children despite its evident complexity? And why do adults find it so difficult to acquire a second language (L2), despite their cognitive maturity and their access to well-designed pedagogical programs?

An impressive feature of Universal Grammar (UG), as it was traditionally conceived, is that it offers an integrated explanatory narrative—an inborn system of grammatical principles stipulates the architecture of language, including limits on variation and change, while also shedding light on the apparent magic of first language acquisition. With the help of additional assumptions, such as the full-transfer/full-access proposal of Bonnie D. Schwartz and Rex Sprouse (1996), it is even possible to offer an explanation for why the mastery of a L2 proves so challenging, but is perhaps nonetheless attainable.

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Yet, the UG-based program has encountered significant and sometimes heated resistance during the half century that it has dominated the theoretical side of linguistics. For a significant number of scholars, it is deeply problematic. The objections vary— the facts on which UG theories focus are better explained in other ways (Haspelmath, 2008; Hawkins, 2004; O'Grady, 2005), the type of nativism associated with classic work lacks evolutionary plausibility (Elman et al., 1996; MacWhinney, 2000), principles of UG are too abstract (Tomasello, 2003, pp. 3–7), a focus on faculty-specific principles alienates linguistics from the rest of cognitive science (Jackendoff, 1988, 2002), and so forth. Moreover, with the advent of Minimalism, even the most committed proponents of UG have begun to question the traditional view of its nature and content. Indeed, Chomsky himself has called for a rethinking of this notion, which has long been at the heart of his conception of language.

> There is no longer a conceptual barrier to the hope that the UG might be reduced to a much simpler form, and that the basic properties of the computational systems of language might have a principled explanation instead of being stipulated in terms of a highly restrictive language-specific format for grammars.
>
> (Chomsky, 2005, p. 8)

One alternative to the UG program draws on a set of ideas associated with an emergentist approach to language, which is well exemplified in two major collections of scholarship (MacWhinney, 1999; MacWhinney & O'Grady, 2015). In spite of the very considerable diversity of emergentist thought, at least one idea is shared by all of its various proponents: The complexity of language arises from the interaction of simpler and more basic non-linguistic factors. As MacWhinney (1999, p. x) puts it, "In the place of stipulation, emergentism provides accounts in which structures emerge from the interaction of known processes."

In the case of language, those factors and processes are typically taken to involve features of human anatomy (the vocal tract, for instance), the capacity of the perceptual mechanisms, the impact of pragmatic principles, the effects of social interaction, the functioning of the learning mechanisms, and restrictions on processing capacity and working memory—but not inborn grammatical principles.

The earliest emergentist work focused on the all-important question of how infants and toddlers acquire language in response to the experience available to them in childhood. There has also been increasing interest in the relevance of emergentism to understanding L2 acquisition, as reflected in the fact that three prestigious journals have published special issues devoted to this topic—*Applied Linguistics* 27/4 (2006), co-edited by Nick Ellis and Diane Larsen-Freeman, *The Modern Language Journal* 92/2 (2008), edited by Kees de Bot, and *Lingua* 118 (2008), edited by Roger Hawkins. Although still modest in comparison to

work in the UG framework, emergentist research on L2 acquisition offers analyses for a range of intriguing phenomena, including competition-based processing (MacWhinney, 2008), grammatical morphology (Ellis, 2006b), *want to* contraction (O'Grady et al., 2008), and quantifier scope (O'Grady, 2007, 2013), among others.

Emergentist approaches to language acquisition typically focus on one or the other of two explanatory strategies. One strategy emphasizes the role of the processor–working memory interface in language acquisition, seeking new explanations for linguistic development. O'Grady (2008a, 2008b) offers an introduction to this approach, which is pursued in more detail in recent work (O'Grady 2013, 2015, 2018). On the other hand, there is also an influential body of research that emphasizes the relevance of usage (also sometimes called 'input') for making sense of how language acquisition works. Ellis (2002, 2006a) provides extensive discussion of this approach. Work continues on a number of fronts.

A valuable feature of this volume is that it offers readers an opportunity to consider the two major theoretical approaches: Three chapters adopt an emergentist perspective and two assume a UG framework. It is vital that today's young scholars be familiar with both approaches and that they be able to engage in informed discussion about the merits of each theory. Research on first and second language acquisition in the coming decade could well lead to fundamental changes in how we think about language, and may even allow us to bring together competing perspectives. With its long tradition of scholarship on language learning, Korea is well equipped to make a major contribution to this enterprise.

2. THE PAPERS IN THIS ISSUE

The five papers in this special issue discuss two contrasting theoretical positions that have attracted a fair amount of attention in the fields of first language (L1) and L2 acquisition, one based on UG and the other on emergentism. Each of the papers provides empirical evidence regarding specific mechanisms underlying L2 acquisition and processing: Nam's (2020) study and Jo, Hong, and Kim's (2020) study in support of the UG approach, and Kim, Rah, and Hwang's (2020), Chun's (2020), and Choi and Sung's (2020) studies in support of the emergentism approach.

Nam (2020) discusses the role of UG in EFL learners' acquisition of English *be*, specifically the so-called '*be*-insertion phenomenon' in interlanguage English (e.g. *She is love ice-cream*). To test the proposal that *be*-forms can be topic markers transferred from L1s, she administered an oral production task and a grammaticality judgment task to L1-Korean and L1-Russian EFL learners. The results suggest that *be*-forms can indeed mark topics in the early stages of interlanguage of both language groups. Nam discusses how

these results cast light on the idea of full access to UG in L2 acquisition.

Jo, Hong, and Kim (2020) explore third language (L3) acquisition, which has recently gained traction among adherents of UG as an area for testing linguistic transfer. The study deals with the sources of linguistic transfer in L3 acquisition, a matter of on-going debate. Using an elicitation task with L1-Russian and L1-Chinese children living in Korea, Jo, Hong, and Kim analyzed the learners' production of L3-English sentences. They focus on the errors of *be*-underuse (e.g., *John happy*) and *be*-overuse (e.g., *John is love Mary*), and report evidence that L1 can affect the learners' production of English *be*. For example, the L1-Russian children showed more omission errors than the proficiency-matched L1-Chinese children, which can be attributed to an L1 effect, as copulas in Russian are dropped in the present tense.

The three remaining papers discuss L2 acquisition in terms of the role of input frequency, experience, and working memory, all key topics in emergentism. On the theoretical basis of the usage-based approach, Kim, Rah, and Hwang (2020) investigate whether L2 learners' acquisition of English argument structure constructions follows a developmental trajectory similar to that of L1 children. Employing sentence-sorting and translation tasks, they found that as learners move toward higher proficiency, they become more able to distinguish the form-meaning properties of different argument structure constructions, rely less heavily on basic verbs to comprehend constructional meanings, and demonstrate better knowledge of complex constructions. As these patterns are comparable to those found among L1 children, Kim, Rah, and Hwang conclude that L2 acquisition of constructions is affected by language input and learners' experience, the same factors underlying L1 acquisition, which is consistent with the main tenets of usage-based theories of language acquisition.

Chun (2020) explores the role of the anticipatory mechanism in L2 processing by testing whether L2 learners can engage in predictive processing based on prior experience of errors, and investigating the interaction of working memory and vocabulary size in L2 predictive processing. A visual-world eye-tracking experiment showed that the L2 participants' proactive expectations for upcoming information in spoken-language comprehension were shaped by error-driven biases, and that this tendency remained consistent regardless of learners' working memory capacity and vocabulary size. Chun concludes that recent and long-term linguistic experience have a significant impact on L2 speakers' predictive processing.

Lastly, Choi and Sung's (2020) study investigates L2 learners' fluency in spoken interaction by analyzing the number and types of sentences they produced in five communicative tasks. The learners' fluency was found to be associated with the frequency and complexity of the different sentence types they produced, suggesting a specific developmental sequence of constructional patterns in the emergence of speaking fluency.

All in all, the five empirical studies presented in this special issue, representing the two major frameworks of UG and emergentism, provide new insights and interesting discussion points as well as pedagogical implications for the field of L2 acquisition.

Applicable levels: Early childhood, elementary, secondary, tertiary

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