

L2 Acquisition, Age, and Generativist Reasoning. Commentary on Birdsong

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Birdsong's highly informative overview of the theoretical issues and facts on age and second language acquisition (L2A) has made me realize again how deceptively appealing it is to put two and two together in this overall discussion of age and acquisition. Let me explain what I mean by this temptation. If one takes the view that the goal of linguistic theory is to seek an explanation for the problem of language acquisition, for some linguists, myself included, part of the solution will be found in postulating Universal Grammar (UG) as a theory of an innate language faculty. Such a nativist approach provides a plausible answer to the successful, rapid, and pretty much uniform attainment of L1. In the majority of cases of adult L2A, we see anything but successful, rapid, or uniform language attainment: "The outcome . . . is demonstrably different" (Birdsong, this volume, p. 9). If an innate language faculty plays a decisive role in the success of acquisition, it is tempting to explain the lack of success by pointing to a hypothesized absence of that same faculty. If not total absence, then at least limited availability. If one adopts an essentially biolinguistic approach to the study of language, it is all too easy to feel confident that some form of explanation for a maturation-based critical period will ultimately make sense. Indeed, the maturational factor

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in L2 acquisition has received a variety of explanatory mechanisms (cf. Birdsong, 1999; Singleton & Ryan, 2004).

It seems to me that this is the way many of us who have not specifically studied age and rates of development or attainment in L2 have maintained this fairly traditional and somewhat naive outlook on the differences between L1 and L2. No doubt, we were initially persuaded that the findings and views put forward in such contributions as those by Lenneberg (1967), Johnson and Newport (1989), and Pinker (1994) will immediately do as an explanation. The “window of opportunity” gets shut, and maturation is the key to why it gets closed. At such moments, it is good to be critically reminded by researchers like Birdsong that “a superficial difference in ends [here: nativelike performance] does not necessarily imply an underlying difference in means,” and likewise that “similarity of ends/products [does not] necessarily imply similar means/processes” (p. 10).

That such warnings are necessary is, in my view, partly due to a sometimes observed misconception of UG. UG is a theory of the innate language faculty that allows natives to overcome the poverty-of-the-stimulus problem—the fact that our linguistic knowledge is underdetermined by the primary linguistic data. UG is not a theory of language acquisition. It is a central component in a complex architecture of cognitive modules that make native language acquisition successful, unique perhaps, but still just one of many components. In L2 performance UG’s role might be confounded by a great variety of factors of cognitive development (cf. Singleton & Ryan, 2004), and Birdsong points out some, such as effects of a processing nature, quantitative differences as artifacts of the nature of bilingualism, and cognitive aging (pp. 28–31).

Birdsong repeats his argument that the notion of a critical period is “a poor fit for [L2A] age effect data” (Birdsong, 2005, p. 109). In quite a number of studies, the observed age effects are not limited to a temporally bounded period, but they persist over the entire span of the Age of Acquisition (AoA). The relationship is a linear function, suggesting that AoA can predict success even for postpubertal L2 learners. Birdsong’s work on the temporal

and the geometric features of the age function, his conceptual discussions of the timing of maturational effects, and his reinterpretation of the outcomes when the data are broken up force one to reconsider the traditional, somewhat naive look at the Critical Period Hypothesis (CPH).

Yet, despite the impressive range of studies that Birdsong lists with high incidences of nativelikeness as counterexamples to the CPH, my main interest as a grammarian in the properties of UG keeps my attention focused on the question of whether there is a qualitative difference between the learning mechanisms underlying L1 and L2; for example, what happens in those cases in which natelike proficiency is *not* found in advanced L2 learners (i.e., when adult L2 end-state grammars are found to differ from native-speaker grammars)? Schwartz (1990) has pointed out that this does not necessarily mean that the two grammars are epistemologically nonequivalent. It is possible that adult L2 learners might not have natelike L2 grammars, but that these grammars are nevertheless still constrained in the same way as native-speaker grammars. Here we can draw the analogy with work in L1 acquisition (L1A), where we can show that children's developing grammars have not reached the end state, yet are still very much UG-constrained.

So, if Birdsong succeeds in convincing us that there is no discontinuity to be found in the age gradient, we might suspect that there is no change in learning mechanisms, but we would still have to show that the developing L2 system is determined by something like UG, in the way it is conceived of in L1A. Given this perspective, I see no reason, like White (1989), to approach L2A in any other way than L1A, by stressing the logic of the poverty-of-the-stimulus argumentation, and to investigate the strongest possible instances for which a truly explanatory grammatical analysis can be given. In the words of Dekydtspotter, Sprouse, and Thyre (1999/2000, p. 266):

it is important to realize that the strongest empirical arguments for UG involvement in L2 acquisition would in principle rely not on the mere compatibility of interlanguage data with the constraints of UG, but rather on the

demonstration that at least some aspects of interlanguage knowledge are underdetermined by the input in domain-specific ways—that is, they require UG.

Such a poverty-of-the-stimulus problem is posed by the interrogative *combien* for English L2 learners of French. It can appear together with or separated from its nominal complement, and the resulting continuous and discontinuous constituents differ in interpretation.

- (1) a. *Combien de livres est-ce que tous les étudiants lisent?*
 how many of books is-it that all the students read
 How many books do all the students read?
- b. *Combien est-ce que tous les étudiants lisent de livres?*
 how many is-it that all the students read of books

Example (1a), like its English equivalent, can either be answered collectively or distributively. In a situation in which one student reads books A, B, and C and another student reads books B, C, and D, the collective answer would be “two” (because there are two books read by all of the students). The distributive reading would lead to the answer “three,” asking for the number of books per student. Example (1b) can only be understood on the distributive reading. Example (1a) is an ambiguous question; (1b) is not. The unavailability of the collective reading in (1b) results from the interaction of various syntactic and interface constraints (Dekydtspotter, Sprouse, Swanson, & Thyre, 1999; Obenauer, 1984/1985).

The English L2 learner of French somehow has to come to know this fact, but nothing in the L2 input will lead him to this awareness. Because the equivalent form of (1b) does not exist in English, he cannot rely on his L1. There is nothing in the L2 input or in the L1 to prevent him from assuming—incorrectly—that the discontinuous pattern in (1b) is simply a rewrite variant of the continuous pattern in (1a). After all, the reading for (1b) forms a proper subset of the readings allowed by (1a).

Dekydtspotter et al. (1999) argued that if L2 learners demonstrate knowledge of this property of French, this must result from the L2 hypothesis space being severely constrained, in a similar fashion to L1A. Results from a judgment task show that beginning-intermediate group L2 learners failed to make a distinction between the continuous and discontinuous questions in the collective condition, whereas like the native controls, advanced L2 learners did make such a distinction. They consistently rejected the collective reading for the discontinuous question more frequently than for the continuous question. Dekydtspotter et al. (1999, p. 170) concluded that this knowledge “could not feasibly be acquired without a [UG-based] restricted relation between levels of syntactic and conceptual structure representations.”

A comparable example is the phenomenon of object scrambling, extensively studied by Unsworth (2005). In Dutch and German, but not in English, the direct object can be moved away from the verb, across an adverb, or across negation. This is shown in (2), with the object—here an indefinite noun phrase—italicized.

- (2) a. Het meisje heeft twee keer *een aap* gekieteld.
 the girl has two times a monkey tickled
 The girl tickled a(ny) monkey twice.
- b. Het meisje heeft *een aap* twee keer gekieteld.
 the girl has a monkey two times tickled
 The girl tickled a (certain) monkey twice.

These different positions correspond with a difference in meaning. When the object appears to the right of the adverb in a non-scrambled position, the indefinite object receives a nonspecific interpretation, whereas when it occurs to the left of the adverb, in a scrambled position, it gets a specific interpretation. Example (2b) singles out a certain monkey that the girl tickled on two different occasions, whereas the non-scrambled indefinite object in (2a) can refer to just any monkey. The net result is that (2a) allows for multiple interpretations (one or two monkeys involved): the scrambled version in (2b) only one.

The English sentence *The girl tickled a monkey twice* has both meanings and might be compared to the unscrambled form in (2a). Learning the interpretive constraints on scrambled (indefinite) objects once again constitutes a poverty-of-the-stimulus problem, for the native learner as well as the English L2 learner of Dutch. Like in the *combien* case, there is nothing in the input to inform L2 learners that (2b) is not simply a rewrite variant of (2a). Successful acquisition of these syntax-semantics interface properties must be enabled by UG intervention. Unsworth (2005) meticulously showed how English adult learners of Dutch are able to acquire nativelike knowledge of these properties of object scrambling. They demonstrated knowledge of the specific interpretation of the scrambled indefinite object and appeared to share the native preferences in their responses on the nonscrambled version.

What is more, Unsworth (2005) took the phenomenon of scrambling as an ideal testing ground for Schwartz's (1992) thesis that to determine the exact role of UG in postmaturation L2A, one should really compare the developmental patterns of adult and child L2 learners with the same L1. Two factors are important in this respect: age and L1 transfer. L2 children and L2 adults are, by definition, similar in that both groups have knowledge of another language and this allows for the potential of L1 transfer. However, these two groups differ with respect to age, because the L2 children are younger than L2 adults, and in this sense more similar to L1 children, insofar as their language-learning capacities can still be assumed to be constrained by UG. Unsworth investigated whether the three groups (L1 children, L2 adults, and L2 children) pass through the same developmental sequences in their acquisition of direct object scrambling in Dutch. She found truly remarkable similarities in patterns of development between the L2 children and L2 adults, of course with an initial L1 transfer stage that differentiates them from L1 children.

This, I think, is the best we can do from a nativist grammarian's perspective. Finding empirical evidence for a language

faculty that not only allows us to get around a poverty-of-the-stimulus problem but also helps in shedding light on why we can find similarities in patterns and rates of development in L1A and L2A, both early and late. This is where I see the link with the interesting work and multitude of ideas in Birdsong's overview.

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