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DISCUSSION

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Nativist versus constructivist goals in studying child language*

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Crain & Thornton (1998: 5) are admirably clear in stating the aims of their research programme: they 'hope to convince a greater number of students and researchers in child language of the correctness of the Innateness Hypothesis and the theory of Universal Grammar'. As Drozd notes, however, their assumptions under Modularity Matching 'set the stage for a research programme unlike those typically adopted by developmental psycholinguists'. Whereas C&T are avowedly committed to the continuity assumption (clearly preferring 'special nativism' over 'general nativism'; O'Grady, 1997),[1] constructivists are more interested in the question of how children 'get from here to there' (Tomasello, 2003) – that is, from immature levels of language comprehension and use to adultlike levels (and, it is important to note that adultlike levels are not always characterized in generativist terms). Most constructivists are also committed to studying the relations between language development and other simultaneously developing social and cognitive skills (Clark, 2003), whereas nativists tend to be interested in 'pure' linguistic ability uncontaminated by nonlinguistic influences. The main goal of nativists then is to verify a specific theory of linguistic competence that suggests that linguistic knowledge is innate and modular and to account for children's linguistic development in terms of UG, whereas the main goal for constructivists is to account for development (change) in the child's language system (beginning from perhaps no predetermined linguistic knowledge) and how it relates to other aspects of development. It is this fundamental difference in goals that makes one quite pessimistic that constructivist and nativist researchers in syntactic

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[1] I use the terms *nativist* and *nativism* to refer to what O'Grady (1997) calls 'special nativism'; that is, the view that the innate mechanisms and representations children use are specifically linguistic in nature (see also Elman, Bates, Johnson, Karmiloff-Smith, Parisi & Plunkett, 1996).

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development can learn anything from one another; they are simply engaged in separate tasks.

But perhaps we can find some common ground in the data? After all we are all studying what children say and understand. Even here, however, there is little hope because what is considered worthy of study differs as well. C&T seem to believe that the only useful data come from experiments and only very specific types of experiments. They are not particularly interested in what children say in their everyday lives, nor in how children's interpretations of sentences may differ from those of adults. As Drozd points out, C&T are interested mainly in children's 'optimal performance' (p. 6) so they deliberately design experiments to elicit adultlike performance from children (and only include children old enough to perform well on their tasks). Constructivists, however, often focus explicitly on errors (e.g. over-regularizations) as windows into the child's processing system and they conduct studies that highlight differences in younger and older children's performance in an effort to identify how children's understanding and use of language (in real-life contexts as well as experimental contexts) change over time.

When C&T's data indicate that children are using representations that are not found in their target language, they say that 'parameters are one source of such deviations; another possible source is maturation' (p. 121). They go on to claim that any remaining errors that children make – those 'that cannot be readily explained by appealing to the LAD, linguistic theory, or maturation' – can be explained by '(a) artifacts in experimental design, (b) extralinguistic knowledge that develops over time, (c) the complexity of nonlinguistic processes that are needed to provide correct answers in a psycholinguistic task, and (d) performance factors that influence the linguistic behaviour of both children and adults' (p. 121). The focus on optimal performance – and the ways in which sub-optimal performance is explained – reveals quite clearly that the basic approach adopted by C&T (and many other nativists) makes the continuity assumption unfalsifiable. If every instance in which children display sub-optimal performance can be explained by extralinguistic demands, performance factors, parametric variation, or maturation of UG principles, then what could possibly count as evidence against continuity?

A related issue is that the entire nativist approach relies on the poverty of the stimulus argument initially proposed by Chomsky (1980) and elaborated upon by Crain (1991) among others. The argument takes many forms but the basic idea is this: children appear to know linguistic facts that they have not been exposed to; that is, without experience, they know what is and is not grammatical. The conclusion of course is that they must have innate knowledge of linguistic structure. While this argument has served as the basis for many nativist claims, there is actually very little empirical support

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for it. Pullum & Scholz (2002); also see Sampson (2002) recently examined the empirical evidence bearing on some widely cited cases in which children are claimed to comprehend and produce constructions they purportedly could not have been exposed to. They conclude that the poverty of the stimulus argument 'still awaits even a single good supporting example' (p. 47).

Many nativists remain unconvinced by these kinds of data (witness some of the responses to Pullum & Scholz). The bottom line is this: nativists BELIEVE in continuity and constructivists BELIEVE in development; these are the fundamental assumptions on which these two approaches are based. Researchers design their studies and interpret their data on the basis of these assumptions; they do not, as a rule, directly test these assumptions. Neither side is likely to be convinced by the other side's arguments or data. Indeed it is difficult to imagine what kind of data might cause a nativist to 'convert' to constructivism or *vice versa*. These are essentially different worldviews based on radically different assumptions, goals, values, and beliefs; researchers coming from these two perspectives are attempting to accomplish separate tasks (Braine, 1994; Sampson, 1997). In the end this means we are studying very different things which in turn means that what nativists and constructivists can learn from one another's data is quite limited.

Rather than end on such a pessimistic note, I'd like to suggest that there are ways in which the field as a whole can benefit from the presence of such disparate theoretical views. One involves constructivists taking seriously some of the linguistic phenomena the nativists study. Although there is considerable debate over what actually constitutes the end-point of linguistic development, and I am not advocating that constructivists devote all of their time to trying to explain what nativists see as hallmarks of the linguistic capacity, it is clear that there is much work to be done to explain how children might construct an understanding of things like noun–noun compounding (Alegre & Gordon, 1996; Haskell, MacDonald & Seidenberg, 2003) or appropriate use of anaphoric *one* (Baker, 1978; Lidz, Waxman & Freedman, 2003) through data-driven learning (Pullum & Scholz, 2002). Another potential benefit involves the improved experimental designs that can result when one is cognizant of how 'the other side' might interpret one's data. In some studies I have included control conditions I would never have come up with if I hadn't been thinking 'How might a nativist interpret my findings?' These kinds of controls are valuable as they can test and eliminate alternative explanations of the data, thereby allowing stronger conclusions. If taking the opposite perspective leads to better studies, then the existence of these two very different theoretical approaches to child language can be productive for both sides.

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