This Week's Citation Classic –

Fraser C, Bellugi U & Brown R. Control of grammar in imitation, comprehension, and production. J. Verb. Learn. Verb. Behav. 2:121-35, 1963. [Harvard University, Cambridge, MA]

The familiar assertion that, in language development, understanding precedes production was examined by testing the mastery of grammatical contrasts by threeyear-olds. Production proved consistently less advanced than comprehension, which was consistently less advanced than imitation. The relevance of these findings for alternative conceptions of imitation, comprehension, and production was considered. [The Social Sciences Citation Index[®] (SSCI[®]) indicates that this paper has been cited over 220 times since 1966.]

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"Just as developmental psycholinguistics was beginning its own development, I had the good fortune that my very first job, in 1960, was as research associate at MIT on a new project of Roger Brown, on the young child's acquisition of syntax. Almost straightaway we started exploratory work looking for patterning in the speech of twoyear-olds.¹ In 1961, Ursula Bellugi joined us and, in 1962, the three of us embarked on the study of Adam, Eve, and, subsequently, Sarah, which culminated in Roger's very fine book a decade later.² The present paper represents a slight digression undertaken during 1961-1962.

"We had started with the working assumption that we would detect the beginnings of syntax if we recorded the speech of children just starting to produce two- and multi-word utterances. I may have been the first of us to worry aloud about our starting point, though our paper was so consistently a joint endeavour that that could be hazy recollection enhancing selfimportance; the main reason my name appears first was that it was my turn.

"Anyway, we realised that if anything like a grammar of a two-year-old's production was going to be discoverable, we should also be thinking about a possible grammar of comprehension which might be developing Viable ways in the one-year-old. of systematically documenting the comprehension of a one-year-old did not suggest themselves, but we remained attracted to the possibility of exploring relation comprehension and its to production. Pairs of drawings of minimally different grammatical contrasts gave us a technique and a focus. Eventually, piloting convinced us that three-year-olds were the youngest children we could reliably get through our testing procedures. Before then, however, the three of us, and a few interested others, had spent many sessions relating our likely opera-tionalizations to alternative conceptions of comprehension, production, and imitation, painstakingly locating grammatical contrasts which could be unambiguously illustrated, commissioning and rejecting artist's drawings of the contrasts, and occasionally wondering if we were really doing anything of value.

"That this work should have become a Citation Classic is a pleasantly surprising tribute to an exceedingly enjoyable, as well as stimulating, three-way partnership. To have done full justice to our collaboration, however, the paper would have had to have been much funnier.

"As for reasons for the popularity of our paper, it was the first attempt within the new developmental psycholinguistic 'paradigm' to tackle the largely ignored issues of young children's comprehension of speech. Although our procedures and materials were open to criticism -all three tasks, for example, have problematic features-they produced very regular data and were relatively easily modified, making them attractive to others. They, and our paper, did not become obsolete as quickly as one might have hoped, because of inherent difficulties in advancing the study of young children's comprehension. Providing valid data about intrinsically unobservable processes remains a demanding task. A greater range of possibilities is now available,³ but on many relevant issues⁴ the volume of work on early comprehension remains dwarfed by that on speech production."

Brown R & Fraser C. The acquisition of syntax. (Cofer C N & Musgrave B S, eds.) Verbal behavior and learning: problems and processes. New York: McGraw-Hill, 1963. p. 158-97.

Brown R. A first language: the early stages. Cambridge, MA: Harvard University Press, 1973. 437 p.
 Cocking R R & McHale S. A comparative study of the use of pictures and objects in assessing

<sup>children's receptive and productive language. J. Child Lang. 8:1-13, 1981.
4. Wells C G & Robinson W P. The role of adult speech in language development. (Fraser C & Scherer K R, eds.) Advances in the social psychology of language. Cambridge: Cambridge University Press. To be published, 1982.</sup>