

Mark C. Baker, *The Atoms of Language: The Mind's Hidden Rules of Grammar*. New York: Basic books, 2001.

Of the many competing models of mind proposed in recent times, those of Freud and Chomsky have enjoyed unusual authority. Despite the philosopher John Searle's claim that the Chomskian revolution has failed,<sup>i</sup> most professional linguists believe that Chomsky's ideas have gone through a complex evolution over the last forty years.

A particularly important step in that evolution was taken in 1981<sup>ii</sup> when Chomsky introduced the concept of 'parameter' as a means for understanding the relation between universal grammar (UG) and particular languages. The most accessible account of how parametric theory might change our view of language has been provided by Mark Baker in *The Atoms of Language*.<sup>iii</sup>

To get some idea of what Baker does, it will be useful to keep in mind two sets of doublets used by linguists. The first dyad is a distinction Chomsky introduced almost thirty years ago. As had Saussure before him, he sought to answer the question, What is the subject that linguists study? And he came up with an answer that had two parts. There is first of all what he called I-language,

where I was meant to convey ‘intensional’ and ‘internal’. It was a deep level of structure that supplied the armature for his postulate of a Universal Grammar underlying all languages. I-language is never found in actual use—it is a set of potentials. But the potentials are not laid up in a hypothetical heaven of NeoPlatonic otherness. On the contrary, their presence can be deduced and demonstrated through several features that exist in words actually used by any speaker of any language---what Chomsky called the E-level of language, where E stands for Expressive, insofar as it is actually produced in human speech. It is this distinction that marks as well the levels between *competence* in knowing all the rules of a particular language (many of which are never articulated in expression) on the one hand and on the other, *performance*, when the rules produce actually articulated utterances in everyday life.

Chomsky’s assumption of a Universal Grammar met with (and continues to encounter) strong resistance across a broad spectrum of disciplines, from neuroscientists and philosophers to other linguists. In further elucidating his position, Chomsky

developed another set of terms to define language as a hard wired set of possibilities present in all healthy human brains. Among the more productive of these terms are those that constitute the second dyad I wish to use in my further remarks, the distinction posited by Chomsky in the late seventies and early eighties (following on the important ‘government-binding’ talks delivered at Cambridge) as P/P, or principle/parameter.

With the introduction of the category of parameter, Chomsky accomplished several goals at once. He first of all gave an answer to those who had accused him of excessive abstraction, of being a theorist whose model had a huge black hole at its center, the void between the I and the E levels of language. Much as Plato had been charged with a too radical cut off between his realm of pure ideas and the realm of everyday life, Chomsky was frequently attacked for insufficient thickness of description in his account of how I-level rules gradually transformed themselves into E-level phenomena. The answer Chomsky and his followers proposed after 1981 was an intermediary category between the rules of I-

level and the actually articulated words of the E-level. Parameters are the key to this new way of thinking, insofar as they are the links of the chain connecting the highest level of generality with the greatest degree of specificity in language.

Baker, a Chomsky student who done a great deal of work to clarify parametric theory, finds normative models in the history of physics and chemistry. In asking what Linguistics should be able to produce if it is really a science, he puts forward the example of the Table of Elements. That is, a description of language should be *complete*, much as the Table of elements contains every possible element in the universe, even those that had not been discovered when Mendeleev first proposed it (he was able “to predict the existence of germanium, scandium, and gallium because he found that his periodic table worked best if he left blank boxes near silicon, boron, and aluminum” [Baker, 160]). Secondly, a description should be *systematic* in the way that the periodic table manifests system. That is, “not only are all elements included, but they are placed in a natural order. The atomic number of each

element is exactly one more than the element to its left, and the chemical valence of each element is the same as the one just above it. Thus the arrangement of elements in the table communicates essential properties to the informed observer at a glance.” (Baker, pp. 159-160).

For a fuller review and interview with Baker, see: Brenda Fowler, “Expert Says He Discerns ‘Hard-Wired Grammar Rules.’” *New York Times*, January 15, 2002, p. F5.

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<sup>i</sup> John r. Searle, “End of the Revolution,” in *The New York Review of books*, vol. XLIX, number 3 (Feb. 28, 2002), pp. 33-36.

<sup>ii</sup> Noam Chomsky, *Lectures on Government and Binding*. Dordrecht: Foris. Important in this process was Chomsky’s student Richard Kayne and the Italian linguist, Luigi Rizzi. The pioneering work of the great linguistic anthropologist Joseph Greenberg has been crucial in providing myriad examples of how parameters foliate from rules.

<sup>iii</sup> Mark C. Baker, *The Atoms of Language: The Mind’s Hidden Rules of Grammar*. New York: Basic books, 2001.