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## BOOK REVIEW:

The language instinct. 1994. Harper Perennial. New York. Steven Pinker  
ISBN: 0-688-12141-1. P. 483

### Is Language an Instinct?

Dr. Rashid Al-Balushi  
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“The Language Instinct” provides several arguments that language is innate, that it is acquired by a specific mental faculty that only handles language, called the Language Faculty or Universal Grammar (UG). As such, argues Pinker, language is an instinct, that is, a distinct piece of the biological structure of our brains. This position is based on his views of language, how its acquired, and the brain.

For Pinker, language is a discrete combinatorial system.<sup>1</sup> This notion is explained by his analysis of the different linguistic elements: sounds, words, and sentences. First, after showing that our brains have the features that enable us to produce the sounds, he demonstrates that our implicit knowledge of sound structure (sounds and phonotactics) can be represented as a (mental) *tree* composed of the components that allow us to *generate* many outputs. He argues that speech production and perception are important components of the language instinct since even the sophisticated speech production and recognition machines fail to tackle the complexities handled by the human brain.

Second, Pinker demonstrates how the notion of ‘generativeness’ can explain how words are acquired and mentally represented and formed to express thought. He shows that the human mind is able to handle the complexities of word acquisition through the distribution of stems, affixes, and morphological and phonological rules necessary for word formation. He also shows how these word elements can be represented as a mental *tree*, and argues that words are like sentences in that they are infinite and cannot be generated by a chaining device.

Third, Pinker argues that our brains have innate knowledge of rules, transformations and lexical properties of words. He demonstrates how sentence elements are organized in the

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<sup>1</sup> That language is a discrete combinatorial system means that:

1. language units are separate from one another; 2. language combines small units into larger ones to create meaning, and 3. and the combinations start with the smallest units of language (sounds) and become progressively larger – sounds grouping into words, words into sentences, and sentences into discourse. All combinations are rule-governed and systematic, i.e., realized according to the rules of the language (McMenamin, 2002, p. 56).

brain as *tree* constituents that express proper chunks of thought. He states that language is independent from cognition since our brains can detect grammaticality in the ungrammatical, the ambiguous, and the anomalous sentences. He argues that the behavior of language exerts great demands on the processing (*generating*) device that only human brains are able to handle such complexities. This unique property of human language differentiates it from animal communication systems, which is why all the attempts to teach human language to animals failed.

Pinker also argues that our thinking is conducted by a silent medium or language of the mind, *mentalese*. As our thoughts are vocalized, they get clothed in words of the respective languages. Therefore, language does not shape thought because thought can exist before and/or without language and also because thoughts decide which language better conveys them, and often thoughts bring words into existence. Pinker further argues that humanity speaks *one* language because all the languages of the world employ the same symbol-manipulating machinery (having infinite linguistic forms created by a discrete combinatorial system). He presents compelling evidence for his claim that the languages of the world share a lot of their categories, and have undergone similar changes caused by the processes of learning, variation, and migration. He also argues that the rules of language and writing should reflect the natural workings of the language system, not the experts' prescriptions, because the innovations, exceptions and conventions are rule-governed, systematic and have psychological and logical bases, and so they should be welcome to serve communicative intents.

Although he acknowledges that the biology of the brain is not totally understood, Pinker states that the front of the perisylvian region is responsible for grammar, and its rear part is responsible for sounds, words, and some aspects of meaning. Believing in grammar genes, he thinks that the brain is organized in areas each of which is dedicated to handle a grammatical function, but we still do not have sufficient evidence for that. Along the same lines, Pinker argues for a universally structured human mind. To illustrate, for anything to be learned there should be some innate mechanism or a genetic basis. Though he acknowledges the roles of heredity and environment, he stresses the innateness aspect of learning. Pinker argues that all infants come into the world with linguistic skills. This is because they show speech perception in any language, pay attention to supra-segmental features of speech, recognize phonemes and allophones, and learn sound articulation skills, as early as one year of age, and segment speech, understand and differentiate types of words, and show knowledge of the word-order of their first language as early as eighteen months of age. He argues that grammar is wired into the child's brain and shows how a child's utterances are accommodated and bound by UG.

Furthermore, Pinker argues that we have a grammatical parser that analyzes the structure of sentences as we hear them (employing lexical and grammatical knowledge). This helps us understand the sentences by building their tree structures and filling in terminal and phrasal slots, thus reconstituting the meanings of the sentences. Compared to computer programs,

argues Pinker, our parser is much more effective because of its decision-making facility. He also provides evidence for the dissociating language from the other cognitive and analytical abilities, by discussing cases of Williams syndrome individuals whose linguistic abilities are normal, and some linguistically retarded patients who can display organized and sound thinking.

Through his discussion of some of the issues that he presents, Pinker provides different alternatives (e.g. the word-chain system, the artificial neural networks, the speech production and recognition programs, etc...) and shows their shortcomings in comparison to the human brain. His arguments for the recognition of innovations, conventions, and exceptions as linguistically accepted operations are plausible. He presents a convincing case when he argues that animals cannot learn our language (or grammar), since, to do so, they must exhibit the same linguistic behavior that we show.

Despite this largely convincing case, it seems that Pinker ignored some equally plausible explanations for some of the phenomena that he discusses. For example, when discussing our phonological abilities, he does not consider categorical perception as being a general auditory capacity since animals like chinchilla (Kuhl & Miller, 1975), nonhuman primates (Ramus, Hauser, Miller, Morris, & Mehler, 2000), birds (Hauser, Chomsky, & Fitch, 2002), and dogs (Fukuzawa, Mills, & Cooper, 2005) have it, and also because children can perceive non-speech sounds. In addition, he does not consider statistical probabilities as a speech segmentation strategy; that is, speech segmentation is done on an experience-dependent basis, using sequencing and transitional probabilities (Saffran, Aslin, & Newport, 1996, Smith & Yu, 2008, Pelucchi, Hay, & Saffran, 2009). Furthermore, since prosodic cues are more meaningful for infants than language, then there might not be mental grammatical rules, but rather general cognitive auditory capabilities (Fernald, 1989:1497, Gervain & Werker, 2013, de Diego-Balaguer, Rodríguez-Fornells, & Bachoud-Lévi, 2015). In addition, he does not discuss the finding (or possibility) that mutual exclusivity (or generally the social/pragmatic/cognitive cues/constraints children employ in word acquisition) is a general cognitive skill and not language-specific (Clark, 1990, Diesendruck & Markson, 2001, de Marchena, Eigsti, Worek, Ono, & Snedeker, 2011). Similarly, Pinker does not consider data-driven learning of grammatical structures (as opposed to parameter-setting) when discussing grammar acquisition (Akhtar, 1999, Matthews, Lieven, Theakston, & Tomasello, 2005). Moreover, when discussing Williams Syndrome individuals as evidence for the modularity of language, he does not discuss their linguistic deficits, which, correlating with their cognitive disabilities, might be evidence for a link between language and cognition (Karmiloff-Smith, Klima, Bellugi, Grant, & Baron-Cohen, 1995, Brock, 2007). Besides, when discussing the uniqueness of grammar, he does not mention the link between lexical and grammatical development (Bates, 2003, Moyle, Ellis Weismer, Evans, & Lindstrom, 2007). Furthermore, he does not consider the finding that the two hemispheres are involved in language development (Bryan, 1988, Lindell, 2006) since frontal damage to the left hemisphere and right hemisphere produces expressive language delays, and damage to the right hemisphere

results in language problems. Finally, he does not consider the finding that deaf children born for hearing parents, thus having linguistic problems, have an increased risk of academic (cognitive) problems. Compared to late acquirers, the native speakers of American Sign Language show enhanced spatial and cognitive skills as well as academic advantages. I think that it is an extreme position to propose that everything that we learn has a specialized innate biological basis. If this were the case, then why do other parts take over some functions when their respective modules get damaged?

In general, “The Language Instinct” is a very interesting and beneficial book. The author’s discussion, together with the examples he provides, is illustrative. Most of the time, he provides sufficient and convincing evidence for his claims, though he sometimes ignores some alternatives the evidence for which had already been available. Overall, I think that he makes a good case in an enjoyable, artistic, and well-planned argumentation style.

## References

- Akhtar, N. (1999). Acquiring basic word order: Evidence from data-driven learning of syntactic structure. *Child Language*, 26(2), 339–356.
- Bates, E. (2003). On the nature and nurture of language. In E. Bizzi, P. Catissano, & V. Volterra (Eds.), *Frontiere della Biologia [Frontiers of biology]. Il Cervello di Homo Sapiens [The brain of homo sapiens]*. Roma: Giovanni Treccani.  
<http://crl.ucsd.edu/~bates/papers/pdf/bates-inpress.pdf>
- Brock, J. (2007). Language abilities in Williams syndrome: A critical review. *Development and Psychopathology*, 19(1), 97–127.
- Bryan, K. (1988). Assessment of language disorders after right hemisphere damage. *The British Journal of Disorders of Communication*, 23(2), 111–125.
- Clark, E. (1990). On the pragmatics of contrast. *Journal of Child Language*, 17(2), 417–431.
- de Diego-Balaguer, R., Rodríguez-Fornells, A., & Bachoud-Lévi, A.-C. (2015). Prosodic cues enhance rule learning by changing speech segmentation mechanisms. *Frontiers in Psychology*, 6, 1478.  
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4588126/>
- de Marchena, A., Eigsti, I.-M., Worek, A., Ono, K., & Snedeker, J. (2011). Mutual exclusivity in autism spectrum disorders: testing the pragmatic hypothesis. *Cognition*, 119(1), 96–113.
- Diesendruck, G., & Markson, L. (2001). Children’s avoidance of lexical overlap: A pragmatic account. *Developmental Psychology*, 37(5), 530–641.
- Fernald, A. (1989). Intonation and communicative intent in mothers’ speech to infants. *Child Development*, 60(6), 1497–1510.
- Fukuzawa, M., Mills, D., & Cooper, J. (2005). The effect of human command phonetic characteristics on auditory cognition in dogs. *Journal of Comparative Psychology*, 119(1), 117–120.



- Gervain, J., & Werker, J. (2013). Prosody cues word order in 7-month-old bilingual infants. *Nature Communications*, 4(1490), 1–6.
- Hauser, M., Chomsky, N., & Fitch, T. (2002). The faculty of language: What is it, who has it, and how did it evolve? *Science*, 298(5598), 1569–1579.
- Karmiloff-Smith, A., Klima, E., Bellugi, U., Grant, J., & Baron-Cohen, S. (1995). Is there a social module? Language, face processing, and theory of mind in individuals with Williams Syndrome. *Journal of Cognitive Neuroscience*, 7(2), 196–208.
- Kuhl, P., & Miller, J. (1975). Speech perception by the chinchilla: Voiced-voiceless distinction in alveolar plosive consonants. *Science*, 190(4209), 69–72.
- Lindell, A. (2006). In your right mind: Right hemisphere contributions to language processing and production. *Neuropsychology Review*, 16(3), 131–148.
- Matthews, D., Lieven, E., Theakston, A., & Tomasello, M. (2005). The role of frequency in the acquisition of English word order. *Cognitive Development*, 20(1), 121–136.
- McMenamin, G. (2002). *Forensic linguistics: Advances in forensic stylistics*. CRC Press.
- Moyle, M., Ellis Weismer, S., Evans, J., & Lindstrom, M. (2007). Longitudinal relationships between lexical and grammatical development in typical and late talker children. *Journal of Speech, Language, and Hearing Research*, 50(2), 508–528.
- Pelucchi, B., Hay, J., & Saffran J. (2009). Statistical learning in a natural language by 8-month-old infants. *Child Development*, 80(3), 674–685.
- Pinker, S. (1994). *The language instinct*. New York: Harper Perennial.
- Ramus, F., Hauser, M., Miller, C., Morris, D., & Mehler, J. (2000). Language discrimination by human newborns and by cotton-top tamarin monkeys. *Science*, 288(5464), 349–351.
- Saffran, J., Aslin, R., & Newport, E. (1996). Statistical learning by 8-month-old infants. *Science*, 274(5294), 1926–1928.
- Smith, L., & Yu, C. (2008). Infants rapidly learn word-referent mappings via cross-situational statistics. *Cognition*, 106(3), 1558–1568.