

Climbing up the Eiffel Tower

Berger, Ruth. 2008. *Warum der Mensch spricht. Eine Naturgeschichte der Sprache.* Berlin: Eichborn. (Why man speaks. A natural history of language.)

by Michael Crombach

On étonne toujours en disant que le problème de l'origine du langage n'est pas un problème d'ordre linguistique.
(Vendryes 1921: 6)

Ruth Berger presents an ambitious attempt on the origins and evolution of human language, she even maintains a website intended for regular updates on the topic (<http://www.sprache-und-evolution.de>). She lists over 400 references, and thereby shows great research efforts, although a sorted bibliography would be of great help. The book reminds of Kenneally (2007), reviewed in *Biolinguistics* recently (Jenkins 2008), although they arrive at completely different solution scenarios. Ruth Berger's is popular science writing that, although not authored by an expert in the field, provides a lot of insight into an ever-growing field. *Warum der Mensch spricht* ('Why man speaks') is somehow unusual for German popular science as it is written in a witty, colloquial style that is fast and easy to read, and it does not contain any obvious errors. Still, some of the pert statements are annoying and should not go uncommented — therefore this contribution. Another reason to review the book is to create awareness that research in the field of biolinguistics is also pursued in languages other than English. Hardly ever a work is translated like Oudeyer (2006); works on language (evolution) not published in English go mostly unnoticed by the academic community.

This has been the case with the anthropological-psychiatric couple Doris and David Jonas, who despite being an English-German melange decided to publish their book on the origins of language in German (Jonas & Jonas 1979). They did not receive much attention although they originally presented their results in English (Jonas & Jonas 1975); maybe the mid to late Seventies have not been the time to present a 'female' origin of language. Anyway, I can not follow Berger (212f.) in her claim that the arguments for a 'motherese' origin of language brought forth by Jonas & Jonas would be more elaborate than Falk (2004, 2009). The trouble with both explanations of the origin of language is that they miss the bigger picture. The loss of body hair, neoteny, and upright walk led to the evolution of language, the lateralization of the brain, etc. — these are the basic arguments of Jonas & Jonas (1975), Jonas & Jonas (1979), Falk (2004, 2009), but these premises of language development also need an explanation, otherwise it is not too prudent to base the explanation of language origins on it.

According to Berger, Falk represents the currently most popular



explanation for the origin of language. Still she devotes only seven lines of text in parentheses to one of the essential premises of this thesis, the loss of body hair (p. 211). I would expect more arguments, not only the hint that genetic evidence points to hairlessness in *homo ergaster*, why hominids have lost their body hair early in their evolutionary development. The *relative chronology* of events is essential to all evolutionary assumptions; if the loss of body hair is a premise of language evolution, because it lead to “putting the baby down” (Falk 2009: 58), then there should be an explanation why it is so sure that hominids lost body hair before they started to talk, and why they lost it at all (Dawkins 2004: 67 considers gain and loss of body hair as trivial; for possible scenarios, see e.g., Kingdon 2003, Morgan 1997, and Niemitz 2004). Otherwise the argument is not complete. Anyway, I think that the motherese hypothesis has some good points that should get more attention, and with the methodological precautions mentioned here this is a promising direction.

I read *Warum der Mensch spricht* in Finland, but while I read it I thought a lot about the Eiffel Tower. The escalator that takes visitors from the ground to the first platform slowly moves upwards passing steel beams, rivets, and paint. If you pass a box of rivets in a hardware store, you’ll surely call them ‘rivets’, but you’ll never see them as a part of the Eiffel Tower, although you might explain to your child that these are things are used for the Eiffel Tower. The major error of all gradualist approaches is that they ignore the insight of Aristotle’s *Metaphysics* (1041b), that the whole is more than the sum of its parts. There is no way to declare a pile of some 18,038 iron beams, 2.5×10^6 rivets, and 60 tons of paint the Eiffel Tower — being the Eiffel Tower is a quality in its own right and therefore can be studied independently. Human language shares features with (other) animal communication systems, but as Keller (2003: 44) explains:

Die Fähigkeit zur Kommunikation ist dem Sprachbesitz logisch vorgängig.
Eine Sprache erleichtert das Kommunizieren, ist aber nicht Bedingung
seiner Möglichkeit.¹

In the end, we have to accept that human language is unique, and there is no way to bridge the gap between the communication of animals and language of humans (see e.g., Bickerton 2008). Berger dares to claim that there is no principle difference between animal communication and language (p. 250), while a few pages later humans “slowly crossed a Rubicon” (p. 254). That is confusing, but I would say that hominids in curse of their evolution approached the Rubicon, crossed it, and now there is no turning back. It is even hard for us to imagine a communication system that is not ‘language’ — we use language, and even our thinking is essentially language, so we can hardly imaging being without it. It’s a bit like the pink elephant you can impossibly not think of if asked to do so.

Rather irritating within the book is something I would call ‘Chomsky bashing’ (pp. 18–27). Berger even announces “the failure of the Chomsky-project” (p. 27). I do not have any objections on critique towards Chomsky and his theories; as a matter of fact, I do think there is a lot of room for improvement. But

¹ ‘The ability to communicate is a precursor to the possession of language. Language makes communication easier but is not a premise to the possibility of communication.’

Berger devotes a lot of energy in showing how wrong Chomsky was, though I can not see where she offers an alternative. Again the Eiffel Tower: Many single explanations do not make a theory; the theory as a whole has a value in its own right, and as long as there are only details changed, the theory can stay in place. Chomsky has been and will remain to be a controversial figure, but I do not think that Chomsky is to blame for everything that went wrong in linguistics in the last 60 years or so. All linguists have had the opportunity to make up their own minds. And as long as there is no convincing alternative to Generative Grammar as a theory, I would not abandon it. When Berger states in the end that Chomsky was right with the assumption that the language faculty is innate (p. 255), this somehow leads back to the start — so, why first condemn Chomsky, his ideas, and his pupils?

The claim by Berger that linguists are “traditionally left” (p. 130) must not go uncommented either, as it leaves out a lot of dark history of linguistics. To cut this short, I dare to claim that it is one of the biggest achievements of Noam Chomsky to have freed linguistics of the racist, fascist heritage and suspicion that was burdened onto it by men from Arthur de Gobineau to Walter Wüst. The mindless mixture of linguistic terminology with racism has discredited generations of linguistic research. It is essential that science keeps sound distance to ideology; ideology is non-scientific. Berger embeds her statement in the discussion, whether or not all “native speakers” share the same competence, as if degree of language skills was of any relevance to the basic principle described by the innateness of language.

Berger creates the impression that the emergence and evolution of language are a biological necessity (pp. 252–254). She does not make a clear distinction between ‘target’ and target (Jenkins 2008). Language is the ‘target’ (i.e. the result) of human evolution, but not the target (i.e. the goal). There is no teleological necessity in the rise of language. Berger correctly understands the evolution of language as a process stretching over millions of years, but she arrives at the rather strange conclusion that “language was at the beginning and not at the end of the human evolution” (p. 259). She believes in a developmental continuum of language evolution stretching over 2.6 million years on the one hand, while on the other hand, language capability was the prerequisite for the evolution of *homo sapiens*. This contradiction asks for a solution I cannot offer here.

The book starts with the observation that language origins have mainly been the concern of linguists and not of biologists. This is true, and a pity — as the evolution and the origin of language are not a problem of linguistics as already observed by Vendryes (1921). The evolution of language is a biological problem and has to be solved by biological means. But as long as biologists do care so little about this issue, linguists/linguistics have/has to stand in for them. Berger does not explain why biologists ignore language evolution, although the blurb states that she studied “Turk languages, Hebrew and English, general linguistics and biology”. Maybe the true solution is the interdisciplinary cooperation proposed and demonstrated by Hauser *et al.* (2002). But still, I think the evolution of language is focused too narrowly on language. Jonas & Jonas and Falk try to add other aspects, but still are focused on language. In my opinion,

explanations need to be found for all of the small but significant differences between humans and apes — from the loss of body hair to bipedal locomotion, from the white in the eyes to art and music, etc. — to really understand the origins and evolution of language, and what it means to be human.

Berger's book, like Kenneally's, is a valuable source for resources. Although Berger maintains her website for updates, she should have stressed the fact that most of the things dealt with in the study of language evolution are in permanent movement and the main skill for any scientist is to balance probabilities, exclude impossibilities, and reorder events. Or as Bickerton (2007: 524f.) has put it:

[The study of language evolution is] still a paper-and-pencil field, though with immeasurable amounts of reading and thinking involved. It is, accordingly, an ideal field for any ambitious young scholar itching to make his academic bone. But take care, it's a minefield out there.

References

- Bickerton, Derek. 2007. Language evolution: A brief guide for linguists. *Lingua* 117, 510–526.
- Bickerton, Derek. 2008. Two neglected factors in language evolution. In Andrew D.M. Smith, Kenny Smith & Ramon Ferrer i Cancho (eds.), *The Evolution of Language: Proceedings of the 7th International Conference (Evolang 7)*, 26–33. New Jersey, NJ: World Scientific Publishing.
- Dawkins, Richard. 2004. *The Ancestor's Tale: A Pilgrimage to the Dawn of Evolution*. Boston: Houghton Mifflin Harcourt.
- Falk, Dean. 2004. Prelinguistic evolution in early hominins: Whence motherese? *Behavioral and Brain Science* 27, 491–503.
- Falk, Dean. 2009. *Finding Our Tongues: Mothers, Infants, and the Origins of Language*. New York: Basic Books.
- Hauser, Marc, Noam Chomsky & W. Tecumseh Fitch. 2002. The faculty of language: What is it, who has it, and how did it evolve? *Science* 298, 1569–1579.
- Jenkins, Lyle. 2008. Not the only Word. *Biolinguistics* 2, 342–347.
- Jonas, Doris F. & A. David Jonas. 1975. Gender differences in mental function: A clue to the origin of language. *Current Anthropology* 16, 626–630.
- Jonas, Doris F. & A. David Jonas. 1979. *Das erste Wort: Wie die Menschen sprechen lernten*. Hamburg: Hoffmann und Campe.
- Keller, Rudi. 2003. *Sprachwandel*. 3rd edn. Tübingen: UTB.
- Kenneally, Christine. 2007. *The First Word: The Search for the Origins of Language*. New York: Penguin Books.
- Kingdon, Jonathan. 2003. *Lowly Origin: Where, When and Why Our Ancestors First Stood Up*. Princeton, NJ: Princeton University Press.
- Morgan, Elaine. 1997. *The Aquatic Ape Hypothesis*. London: Souvenir Press.
- Niemitz, Carsten. 2004. *Das Geheimnis des aufrechten Gangs. Unsere Evolution verlief anders*. München: C. H. Beck Verlag.

Oudeyer, Pierre-Yves. 2006. *Self-Organization in the Evolution of Speech*. Oxford: Oxford University Press.

Vendryes, Joseph. 1921. *Le langage : Introduction a l'histoire*. Paris: La Renaissance du livre.

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