Do Symbols Matter in Language Evolution?

Justin Sulik J.W.B.Sulik@sms.ed.ac.uk LEC, University of Edinburgh

It is reasonably common to claim that among the things specific to humans is our ability to communicate using symbols (cf. Deacon 1997). Dissenting voices (such as Hurford 2010) claim that non-humans can use symbols. This seems to be an argument about the similarities and differences between animal and human behaviour, and the argument purports to have relevance to the evolution of human language. I show that the argument says more about how people use the term symbol than it does about similarities between human and non-human communicative behaviour or about language evolution. I unpack common definitions (such as "symbols are arbitrary or conventional signs") to show that talk of symbols is not ultimately useful as anything more than a shorthand, obscuring the question of which ancestral traits are important in our story of language evolution.

I trace the influence of Saussure's and Hockett's claims that symbols are arbitrary, showing that the term offers nothing concrete to language evolution. Saussure claims linguistic signs are arbitrary in that they are unmotivated, but talk of motivation either relies entirely on subjective criteria or fails to capture a relevant distinction between words and primate alarm cries, for instance. Hockett relies too heavily on defining arbitrariness as non-iconicity. Given that vervet cries are non-iconic, this approach would have to treat vervet cries and words as being equally symbolic. One problem is that this would not allow us to distinguish stimulus-response behaviour from our more sophisticated mental time travel. Rather, we should (for now) follow Saussure's tactic of eventually admitting that "arbitrary" means "conventional".

Common definitions of convention include Lewis (1969), Gilbert (2008) and Millikan (2005). Lewis seeks to explain how conventions can arise without having to be set up linguistically. He offers a game-theoretic account, requiring that agents compute the results of their own expectations and those of others, and base their behaviour on these expectations (and expectations about expectations, and so on). On one hand, Lewis's definition offers clear-cut and empirically testable criteria allowing us to decide which species are capable of symbolic behaviour. On the other hand, his definition requires coordination of beliefs, which may be impossible for non-linguistic species. Such a definition of symbol, then, would be unhelpful for discussing language evolution. Gilbert objects that Lewis's definition fails to capture the social dimension of convention, and the role of our society in language evolution is well established. However, Gilbert's social definition is incompatible with any pre-linguistic species having conventions. Millikan

does offer a broader definition of convention than Lewis, but unlike Lewis's, this definition fails to provide anything testable.

Keller (1994) does not explicitly define convention, but his discussion of phenomena of the third kind does offer firm foundations for what kind of thing a convention might be. Unlike Lewis's account, Keller's is sufficiently broad. Unlike Millikan's, though, it does offer empirically testable criteria. Like Gilbert's, it is intrinsically social. However, relating it to language evolution requires such a detour through philosophy of action, belief and rationality that we have moved far away from talk of symbols. While it thus offers a clear and objectively empirical account of symbols, at the same time it highlights the fact that symbols are not what we should be talking about in language evolution.

References

Deacon, T. (1997). The Symbolic Species. London: Penguin.

Gilbert, M. (2008). Social Convention Revisited. Topoi (27), 5-16.

Hurford, J. (in press). *The Origins of Grammar: Language In the Light of Evolution*. Oxford: Oxford University Press.

Keller, R. (1994). On Language Change: The Invisible Hand in Language. London: Routledge.

Lewis, D. (1969). Convention. Oxford: Blackwell.

Millikan, R. (2005). Language: A Biological Model. Oxford: Oxford University Press.