

Can mimesis provide the “missing link” to language?

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Within the current context of many competing theories of the origin of language, an attractive idea is Donald's (1991, 1998, 2001) proposal of a mediating form of cognition, communication and culture between those of the common ape-human ancestor and modern humans based on *mimesis*. Donald defines mimesis most succinctly as “the ability to produce conscious, self-initiated, representational acts that are intentional but not linguistic” (Donald 1991: 168). Thus, mimesis constitutes a system of semiotic potential that is intermediate between animal communication and human language. Like language it is culturally learned, flexible and *potentially triadic* (see below), while lacking critical features such as full conventionality, arbitrariness and extensive systematicity. The mimetic hypothesis has also been backed up by evidence from archeology, neurobiology, cognitive psychology and developmental psychology, e.g. the homology between “mirror neuron” systems in monkeys and neural structures for the control of imitation, mentalizing and even language in human beings (Donald 1991; Zlatev 2002; Corballis 2002).

However, there are problems with Donald's proposal: On the one hand, his theory seems to underestimate the cognition of non-human primates with respect to planning, tool-making, gesture and the ability to understand intentions. On the other hand, it attributes so much representational complexity to mimesis (features such as reference, intentionality, autocuing, generativity...) that it in practice obviates the need for a second cognitive transition to language (Laakso 1993). Donald's formulation of mimesis can be said to give too little to apes and too much to *Homo erectus*, making it difficult to envision how this gulf can be bridged by a single transition.

In this paper, we attempt to remedy these drawbacks by reviewing the relevant primate evidence in order to see if certain mimetic skills are not within the grasp of non-human apes. In particular, we interpret ape cognitive-communicative capacities in three domains closely related to mimesis: *imitation*, *intersubjectivity* (“theory of mind”) and *gesture*. In all three cases apes exhibit simple forms of these capacities which do *not* involve the central feature of mimesis – understanding “representative activity” (Piaget 1951) – and therefore can be regarded as *pre-mimetic*. Furthermore we distinguish between a *dyadic* form of mimesis – in which attention is paid to the distinction between self and represented object/action, or between self and other, but not to all three – and a *triadic* form of mimesis in which the addressee is (minimally) intended to pay attention to the referent. The primate evidence for the first form is robust, for example the spontaneous gestural communication of zoo-living gorillas (Tanner and Byrne 1999). However, as regards the triadic form, the evidence is debatable. Some language trained apes display it, but this could plausibly be a consequence of grasping the triadic nature of language itself. Therefore, we also consider what forms of imitation, intersubjectivity and gesture seem to be dependent on language, and are thus by definition *post-mimetic*. Such forms can by definition not be regarded as precursors to language.

In analyzing the progression: pre-mimetic > dyadic mimetic > triadic mimetic > post-mimetic, our study suggests possible evolutionary precursors to mimesis, such as neonatal mimicking. It also focuses attention on the type of mimesis that *could* provide the “missing link” to language – true *triadic* mimesis that is not dependent on language. However, the primate evidence is so far inconclusive on this point.