Children gesture before beginning to speak: is this an evidence for phylogeny?

Michèle Guidetti Université Toulouse II-Le Mirail, Laboratoire « Cognition, Communication et Développement » (JE n°2395), France.

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Abstract

As language and communication do not fossilize, the empirical study of their evolution is quite difficult. One way to overcome this difficulty is to use comparative methods (Hauser, Chomsky & Fitch, 2002). What is at stake here is the use of gestures in children communication and how gestures and pragmatics can help us to make hypothesis about continuity and discontinuity in communication and language in phylogeny.

Children gesture before beginning to speak and go on using gestures as they grow up and when they become adults (e.g. when they use conventional gestures, c.f.. Guidetti, 2000, 2002). They will combine them with speech but they also can use them alone (i.e. without speech). From the beginning, these gestures accompagnied or not with vocalizations such as pointing, shaking or nodding express pragmatic functions like requesting or asserting as will be shown from data collected from children under three. The pragmatic aspects of language and communication are based on the social functions and extra-linguistic conventions which govern their use. One pragmatic theory, the speech act theory (Searle & Vanderveken, 1985), allows us precisely to define the communicative context and to link the forms and the functions of communication. The data presented focus on the forms and functions of conventional gestures and their variations in forms across functions and ages.

My position is that to understand the continuity in pragmatic competencies both in ontogenesis and phylogenesis, we must take into account the role played by conventional gestures in human communication development and to refer both to interactionist theories of development such as Vygotsky's (1931/1978), Bruner's (1975) and to pragmatic theories such as the speech act theory.

I will discuss in this talk the questions of continuity in pragmatic competencies between the prelinguistic and linguistic period and put forward the hypothesis that if gestures and pragmatics play a so important role in the emergence of human communication, they could also have played an important role in the history of our species. Actually, concerning gestural communication and regarding the continuity between the prelinguistic and the linguistic period, ontogenesis and phylogenesis are linked: if one thinks in terms of discontinuity, language is a characteristic of homo sapiens only; in this case, the phylogenetic research of language origins has no sense as other species don't use it. If one thinks in terms of continuity, one can speculate that language may have evolved from manual gestures, this is the hypothesis of the gestural origins of language (Corballis, 2002) which also recently appears to be supported by developmental data (Volterra, Caselli, Capirci & Pizzuto, 2004). The question of the continuity of communication from the phylogenetic point of view can also be considered through gestural communication and pragmatics in apes (Tomasello, 2003). These questions are part of the new field of psychology of evolution but have been noted a long time ago by Vygotsky.

Through the study of the forms and functions of conventional gestures and their variations, we'll see the merits of addressing the issue of pragmatic skill emergence in the development of communication and language from both an ontogenetic and a phylogenetic point of view.

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