Language as a Handicap

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According with principle of handicap (Zahavi 1975), some non-functional features of the organism provide a win in the evolutionary race, because carriers of these properties prove their endurance, demonstrating survival with non-functional features.

Purpose of study is to analyze the possibility of considering language as a species-specific handicap. The conclusions are based on longitudinal observations for 2-4 years of the development of preschoolers from 24-48 month and experimental investigation of language expression of certainty.

The following provisions are submitted: 1) use of language is “more expensive” for a biologically weak individual than for a biologically strong individual; 2) the ability for perfect use of language is associated with a weakening of biological fitness of its carrier.

The appearance of the language made “visible for the selection” abilities a) for sequential movements of the articulation organs (kinetic cortex); b) to perform precisely an each articulatory position (somatosensory cortex). To achieve a normative level of functioning, an individual, using language, must have more highly developed cortical regions that provide movements of articulatory organs, than it was before appearance of language. The impairment of kinetic / somatosensory cortex leads to difficulties in the formation of speech motor skills, which provides impairment in the language processing. Thus, Specific Language Impairment is a certain biological weakness. An individual with SLI spends more cognitive effort and time to master a language. These efforts are the “pay” that an individual gives for the possibility of using language.

The contradiction between biological fitness and the perfect use of language is examined on the basis of an analysis of two strategies of development, one of which provides adaptation to a real environment based on independent decision-making; the other one provides adaptation to the memosphere based of abilities of “good imitator”. These strategies rely on the functioning of different cortex regions, so the prevalence of one adaptation implies the impairment of the other one.

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