

MIRROR NEURONS, VERBALIZATION FILTER AND BIOFEEDBACK

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In previous papers we described the verbalization filter as an integrative informational level of psychic model conceived by us. Its particularity consists in awareness of logical informational process, not reflected by verbalization or figurative representation. Filter verbalization generates the "silent speech" and eidetic process of psychic.

The localization of mirror neurons in the proximity of the two centers of language could confirm their role in the learning and development of speech and implicitly of the thought process based on words or on inner speech.

Verbalization filter involves three feedback loops. First loop is in part an external loop that encompasses pronunciation, the sonorous model and auditory reception of words.

Closing of this first loop during the first years of childhood coincides with gradually internalize of this circuit between subliminal motor commands and direct perception from periphery screen of sounds that subject wants to pronounce, hence forming the second loop.

The third loop develops once with maturity and is established by direct connection between motor programs and sensory programs of the same word. This phenomenon is certainly based on mirror neurons function. Thus it could be explain why even without periphery the filter can continue to work for a while.

Including of noosphera level in our model of psychic generates other debates about the role of mirror neurons. The generous idea regarding the bio-psycho-social model, conceived and published by Engel, was anticipatory described by our model of informational levels of psychic.