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My contribution is focused on the issue how differences in encoding of space in Czech Sign Language and in spoken Czech affects the non-linguistic spatial thought of the users of the respective languages. As previous research on American Sign Language (ASL) and spoken English suggests (Emmorey et al., 1998), the way deaf signers of ASL use the perspective-switching when describing spatial scenes may influence their ability in non-linguistics tasks demanding mental rotation (Shepard – Metzler, 1971). Influence on spatial reasoning of the users of ASL is significant in comparison to hearing English speakers.

In my paper I will present results of my replication of Emmorey et al.'s experimental design applied to Czech and Czech Sign Language. Experiment consists of two tasks. In first task, only the Deaf subject participated, for it was aimed at testing the capacity of mental rotation within linguistic processing in Czech Sign Language. In second task participated both deaf and hearing subjects. This part of experiment was fully non-linguistic and only the mental rotation ability was tested (using visual stimuli).

Results will be discussed in the context of neo-Whorfian research of language-cognition relationships.

References:

EMMOREY, Karen – KLIMA, Edward – HICKOK, Gregory (1998): Mental rotation within linguistic and non-linguistic domains in user of American Sign Language. *Cognition*, 68, pp. 221-246.

SHEPARD, Roger N. – METZLER, Jacqueline (1971): Mental rotation of three-dimensional object. *Science*, 3972, pp. 701-703.