Image-schematic representations of conceptual space - for experts only? Estonian verbs in drawing task

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As cognitive linguists, we are interested in finding patterns in the general conceptual structure that is reflected in language. The assumption that our embodied experience is likely to be used for describing events has been tested before (cf. Meteyard & Vigliocco 2009, Spivey et al. 2005, Perlman Gibbs 2013). "Drawing" linguistic units has been a staple in Cognitive Linguistics since Langacker introduced his diagrams in 1980s (Langacker 1987) but the question remains whether non-experts can also come up with such visual representations.

The experiment was designed to study the direction of verbs. In a free-form drawing task with video screen captures, 21 participants were asked to draw directions of 24 verbs in Estonian. 20 verbs which express non-tangible concepts we chosen: *armub* 'falls in love'; *elab* 'lives'; *hakkab* 'starts'; *igatseb* 'misses'; *imestab* 'wonders'; *jääb* 'stays'; *jätab* 'leaves'; *juhtub* 'it happens'; *kardab* 'fears'; *lubab* 'allows~promises'; *määrab* 'determines'; *mäletab* 'remembers'; *meeldib* 'likes'; *mõtleb* 'thinks'; *palub* 'asks'; *suudab* 'can~manages; *tahab* 'wants'; *teab* 'knows'; *tunneb* 'feels'; *unustab* 'forgets'. Verbs from different semantic classes, e.g. schematic verbs, verbs of emotion, communication, memory, and perception were included. The verbs vary in their extent of polysemy and argument structure. Four concrete verbs (*sukeldub* 'dives'; *veereb* 'rolls'; *tõuseb* 'rises'; *taganeb* 'retreats') were used as controls.

Correlations were expected to be found between the visual representations of verbs in cognitive grammar (e.g. Langacker 1987) and non-experts, and with the results of previous studies. Manually coded features on the drawings were subjected to cluster analysis. This paper will present the results regarding the arrows used by participants. The most surprising result was that the direction to the right was not the main feature of any cluster of verbs. Drawings that did feature a right-direction arrow very often also included arrow(s) to other directions. More detailed results and possible reasons for them will be discussed in the presentation.

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