

Draw free, think aloud: The image schematic representation of Estonian abstract verbs

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Keywords: abstract verbs, image schemas, think aloud protocol, free form drawing task, Estonian

The present paper discusses an innovative experimental design to study the meaning and image-schematic representation of abstract verbs. We employ a free form drawing task together with video screen captures and a think-aloud protocol, allowing participants to choose their own image-schematic representation of abstract verbs. The results of our study highlight some of the shortcomings of the previous studies where the participants have had to choose between the image-schematic representations predetermined by the researchers (cf. Meteyard & Vigliocco 2009, Spivey et al. 2005). We proceed from the assumption that our (embodied) experience is likely to be used when describing the events expressed by abstract verbs (when drawing or explaining the drawings) (cf. the embodied nature of language as discussed in Gibbs 2005 and Barsalou 2008). The captures of the video screen together with the think-aloud protocol provide us with valuable information in terms of what is relevant for speakers when they represent abstract verbs.

In our paper, we report the findings of a free form drawing task conducted with 20 native speakers of Estonian. In the experiment, participants were asked to create and explain their own schematic representations of 20 abstract verbs in Estonian. We used an iPad to capture and trace the on-line processing of abstract verbs. The verbs were presented to the participants without context. In the instruction the participants were asked whether they thought the verbs have a direction and instructed to draw it. In addition, they were asked to explain aloud their thinking while completing the task. The recordings of the explanations were transcribed and the subsequent video clips were subjected to manual qualitative data analysis. We have identified a set of features for each of the drawings produced for the abstract verbs, including the type and shape of arrows or lines, the presence of ego and/or patient etc. We hypothesise that the features present on the image-schematic representations of the abstract verbs produced by the participants allow us access to the underlying semantic features of event “configuration” for each of the verbs. We expect to find correlations between the valency, transitivity, and the potential of the abstract verb to be part of VV constructions and its image-schematic representations produced in the drawing task.

Our study shows that the shape, type, order and number of arrows or lines ties nicely up with vectorial classification of verbs (cf. McGregor 2002). While the majority of the verbs in the experiment have been represented by an arrow, the following three verbs have consistently been represented by other means: *armub* “falls in love”, *jääb* “stays”, *teab* “knows” and *tunneb* “feels/knows”. In addition, the manner of the action implied by the verb can be seen in the type and shape of the arrow and/or line used to represent the verb. For example, while some verbs have a clear direction (e.g. *meeldima* ‘like’), other verbs are depicted by a variety of lines. Still, similar strategies were noticed across the test subjects, for example *elama* ‘live’ was often depicted with a wavy line, a zig-zag or a spiral, *mõtleva* ‘think’ correlates with circular motion and *määrama* ‘determine’ with a dot or a square (punctual representation). In order to test whether a difference in the writing system affects the results, we conducted the same experiment with 12 speakers of Mandarin Chinese. The preliminary results indicate that the results are similar for the two languages.

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