Lexical ambiguity in Russian multimodal advertising posters

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This study deals with the processing of verbal and non-verbal information in multimodal advertising posters and the interpretation of lexical ambiguity in a multimodal text. Multimodality in advertising posters suggests a combination of text fragments and illustrations, as a result this mixing and melding of modalities represents multimodality. Usually, the pictures related to a text slow down the reading process; this effect might be explained by the reader's extra cognitive effort to connect the illustration to the text (Beymer, Orton, Russell, 2007). Besides, advertising posters are reported to be remembered by its picture, not by the text (Rayner et al. 2001; Radach et al. 2003), although the total time picture is viewed depends on the instruction the participant was given before viewing the advertisements (Rayner, Miller, Rotello, 2008). Eye-tracking studies have shown that readers fixate longer on the ambiguous words and make more regressions back to them, if the disambiguating information appears after the ambiguous word and the subordinate meaning is instantiated (Kambe et al., 2001).

The **aim** of our research is to check if posters with lexical ambiguity in headings are recognized better than unambiguous advertisements and if an eye-tracking data of processing multimodal advertising texts correlates with the mechanisms of poster recognition.

Methods. This study consists of two parts. In the first one (Exp. 1), the advertising posters were examined using the method of semantic differential and in recognition task, and high-level processes of text perception (understanding, memorization) were investigated. First, participants were asked to rate 28 advertising posters by 6 parameters (how attractive, original, effective, understandable, evoking positive emotions, matching with the product that it advertises the poster is) on a scale from 1 to 5. Three or four weeks later the participants were presented the “halves” of the posters and fillers (pictures or verbal parts) and asked to recall whether they had seen this poster during scaling experiment. The aim of the second part of the study (Exp. 2) was to reveal if there is any difference in eye movement parameters (total dwell time, total fixation count, average fixation duration for each verbal and non-verbal zone of the text) while reading ambiguous and unambiguous posters.

Material. 14 advertisements with ambiguous slogans (one meaning supported by the picture and the second one by the advertising text), 14 unambiguous advertisements (both the picture and the text had the same meaning). All the posters were edited and equalized by the size, font, color and the layout of the elements (see the examples of posters in Image 1, 2).

Participants. All participants were native speakers of Russian. 104 participants rated the posters (female=68, M_{age}=25 (SD=10.6)), 71 of them completed the recognition task (female=48, M_{age}=25, SD=11.4). Eye-movement data was collected from 39 participants (female=30, M_{age}=23, SD=5).

Results. Ambiguous advertisements are rated as more attractive, original, effective, and positive than unambiguous posters. Ambiguous advertisements are recognized better than unambiguous ones (both verbal and non-verbal parts) (χ^2 = 18.35, p<.001). We assume that the ambiguity in the heading makes the information processing more resource-intensive and hence leads to the better delayed recognition of the advertisements.

The eye-tracking study has been carried out, though the results have not been analyzed yet. We will present them at the conference. We suppose that the eye-tracking data will demonstrate that ambiguous slogans and ambiguous target words are fixated longer than unambiguous. For ambiguous posters, readers alternate fixations between the text and picture more often, and this switching is triggered by the ambiguous word. For unambiguous posters, readers do not alternate fixations between the text and picture part of the advertisement, and view and process the poster as (Rayner et al. 2001) describe: the large print first, then the smaller print, and then they look at the picture.

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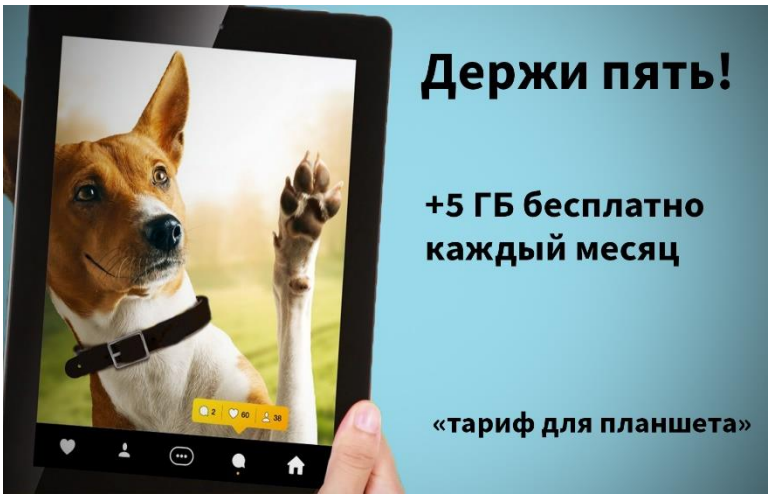

Image 1. Ambiguous poster.
High five!
+5 GB for free every month
“data plan for the tablet”

Image 2. Unambiguous poster.
Fresh milk is our job
natural product without preservatives
“Favorite” milk

References

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