In my dissertation I will study the different meanings which are expressed by the spatial cases in Udmurt. Mostly these meanings are spatial, but meanings in other cognitive domains (e.g. time) are also possible. I define meaning as the additional semantic material the cases give to utterances, I. e. how the semantic content of a clause or sentence changes when a spatial case is added to it. The data for my dissertation is collected from the Udmurt Corpus, of which I extract utterances containing spatial cases. The corpus contains texts written in standard Udmurt, and it consists of various newspapers, non-fictional text (blog posts, Udmurt Wikipedia, and the like), and gospel translations. Newspaper texts make up the most part (91%) of the corpus. The corpus contains about 7.3 million word tokens. After the manual cleaning of the material, I analyzed the compiled material qualitatively. In a qualitative analysis, I determine what meanings are expressed with each spatial case and what are the elements that influence the formation of these meanings. The meanings are differentiated by the means of proto-scene and functional element, which define the semantic skeleton and the meaningful semantic element of a meaning, respectively.

Most of the previous research about spatial expressions has been based on the linguistic intuition of the researcher, but after qualitative analysis, I use quantitative methods to analyze the formation of meanings of spatial cases in Udmurt. It is possible to utilize statistical methods to verify such intuition-based analysis, as they make it possible to verify the linguistic elements and their interactions relevant to meaning formation. On the other hand, statistical methods can also be used to determine which linguistic elements, or their interactions, are not essential for meaning formation. These results are significant for both the study of the structure of Udmurt, and spatial expressions more generally.