The project addresses the issue of numerical data processing in simultaneous interpreting – one of the most complex linguistic and cognitive processes. Empirical research in Translation and Interpreting Studies is not limited to investigating translation and interpretation as a product. Simultaneous interpreting is now more often studied as a process which can be influenced by a plethora of factors. It is a challenging task, as a message decoded in a source language must be immediately encoded in a target language which requires prompt reactions and decision-making on the part of the interpreter. A simultaneous interpreter listens and speaks at the same time, which means that at the moment of uttering a given phrase he or she already needs to listen to the next one (Lederer 1981, Gile 1995). Multitasking and the simultaneity of several processes embedded in simultaneous interpreting make it a very intriguing process to be researched from the cognitive point of view.

There are stimuli which require extra attention and skills from an interpreter. Among these, numbers is particularly interesting in terms of cognitive processes that need to be performed. Numbers are problematic due to their low predictability and, on the other hand, high informative content (Mazza 2001) – they often carry meaning which is crucial for mutual understanding between the interlocutors.

In our project we are going to investigate both simultaneous interpreting as a process as well as the linguistic and cognitive specificity of numerical data. Although numerical data processing in simultaneous interpreting is often assumed to be a challenging task to perform, empirical research on this notion is still scarce. In our experiment we are going to touch upon this problem and investigate whether access to visual materials facilitates number interpreting. We would also like to test our theoretical model of Simultaneous Interpreting of Numbers (SIN) empirically. In order to verify our hypothesis we are going to use the eye-tracking methodology which will enable us to examine the way in which interpreters use visual materials during the process of numerical data processing in booth interpreting.

The use of the eye-tracking methodology to investigate number processing in simultaneous interpreting is a novelty. The experiments described by us are unique as we are going to combine two distinct notions, i.e. simultaneous interpreting and number processing, both of them constituting complex cognitive processes. Their specificity should be tested empirically – combing them in one experiment may produce surprising results. The results of the study may have a significant impact on Translation and Interpreting Studies, since they will explain one of the most problematic aspects of simultaneous interpreting, i.e. numerical data processing.