

Abstract

The function of four types of co-speech gestures was analyzed in the study. 24 college students (17 females, 7 males) were recruited; they were asked to memorize a set of mathematic questions and reported back the images and questions to the video camera. They were told that this was a group task, and their videos would be played to another participant who was going to calculate the questions with the video as the only source of information. The level of complexity of the task was manipulated by the dimensionality of the images (2D and 3D). Significant effects was found on the amount of iconic gesturing across trials for the complex level, with an increasing trend towards the end of the task, supporting that iconic gestures was integral to speech delivery. Trends supporting for the existence of both integral and complementary gestures were found the experiments, and details would be discussed in details.