

Observations on the Embodied Use of Target Objects in the Telepathy Virtual Environment

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The University of Manchester and Liverpool Hope University have been collaborating on a project which uses immersive virtual reality (IVR) as an experimental environment and medium for telepathy. IVR denotes the use of three-dimensional computer graphics technology to generate artificial environments that afford real-time interaction and exploration. These are intended to give the user an impression of being present ('telepresence') or immersed in a computer-generated world. A sense of immersion is promoted through the use of head mounted displays (HMDs). These present stereo images and sound to create a perceptually encompassing computer environment. An instrumented data glove allows participants to interact with virtual objects. We argue that IVR has a number of features which make it well suited for the study of telepathy, including a higher degree of experimental control, the co-location of senders and receivers, and the opportunity for more 'natural' and meaningful (to participants) experimental trials.

A further possible benefit of IVR in telepathy research is its facilitation of embodied attempts at telepathy. If the Sender (S) and Receiver (R) in a telepathy trial are allowed to interact with the target pool (such as a book, a vase, or a chair) this might also facilitate both the acts of sending and receiving. This would also go some way to addressing some of the problems with telepathy research identified by researchers who argue against a purely visual transfer model of telepathy, and would be a further move to more complex (on a number of levels) target material now widely supported in the research literature. Personal handling of target pool objects by both S and R might be expected to add other aspects to the telepathic communication process usually absent in the methodological design of research on this topic: indeed there are anecdotal accounts in the research literature of research participants who spontaneously try to act out aspects of the pictorial content of targets. As the relationship between S, R and the target pool objects becomes more interactive this might facilitate the transfer of emotions, meanings and experiences that better convey what these are. An object which can be handled might be expected to make accessible the personal meanings, purposes of use, and so on, of the object for S and R than might possibly be achieved via a static (or even moving) image or written name (which are more commonly used in telepathy research studies). Such a view would find support from work in ecological psychology, particular work on optical flow and affordances.

In this presentation we will focus on the qualitative observations of the telepathy IVR system in use, and in particular on (1) the occasions when participants interact with target pool objects in an embodied manner and (2) participants expressions of 'like' and 'dislike' of certain objects, and the reasons which they provide. We believe such qualitative observations are valuable in aiding the refinement of future experimental telepathy studies, including the types of target objects used. The presentation will include an audio-visual presentation of the telepathy virtual environment in use to illustrate our qualitative findings.