

Joakim Vindenes, Barbara Wasson

A Postphenomenological Approach to Modelling Intended Mediations of Virtual Reality Applications

In this paper, we present a postphenomenological approach to modelling VR applications according to their intended mediations of user and environment. Postphenomenology is a philosophy of technology concerned with empirical data, that understands technology as mediators of human-world relationships. We argue postphenomenology is useful for qualitatively analysing VR experiences because of their explicit mediations of both the objective environment in which users are situated and their subjective position towards that virtual environment. Moreover, as the mediation offered by the medium is what causes its versatile use and effectiveness, the value of postphenomenology lies in its ability to provide an understanding of the mediated experience. In this paper, we account for key components within postphenomenology and its recent developments towards a more proactive approach in Human-Computer Interaction. Through an analysis of a selected variety of VR applications within health and education, we model various ways in which VR applications define subject positions in terms of the virtual environment. The models are meant to aid designer researchers in reflective design practice, analysing the virtually constituted subjectivity and objectivity, as well as how this experience may mediate human-world relationships outside of the simulation. In this way, the models are a tool that can aid in grounding the designers' role as not just designing artefacts, but as designing mediators of human-world relations. Throughout the analysis and subsequent discussion, we argue that modelling intended mediations can be useful in design processes focussing on the phenomenology of VEs—anticipatorily and retrospectively.