

Embodiment and Human-Computer Game Interaction

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Abstract

The activities of using computer applications and playing computer games have clearly much in common as both require humans to interact with a computer based interface. For some reasons, researchers interested in games have largely focused on the (psychological) impact that games have on people, but relatively little on game interfaces and game usability. In recent years, even the HCI-community has picked up on the increasing interest in games. One of the main concerns of HCI researchers has been how game technology best could be applied to and used in standard computer applications. Having a background in cognitive science, we would like to suggest and discuss a few ideas related to human-game interaction with an emphasis on embodiment aspects. Using simply a keyboard in order to navigate through a virtual environment must feel quite unnatural for most people. Human-game interaction does, in other words, not necessarily have to be limited to a number of buttons on a keyboard or a joystick. Having, for instance, the opportunity to actually walk through a virtual environment may have a positive impact on to what extent people can recall details from their walk. Our ideas are based on theories within the theoretical framework of embodied cognition where researchers heavily stress the importance of body actions to human cognition.