Enhancing human experience in video games using sound

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Sound is an important component of immersive virtual environments and successful video games. Game audio has been shown to contribute positively towards the immersion of players into the game action and also proved to be an important tool for interaction between the user and the game. Different functions of sound within the gameplay can by utilized to improve the overall experience of a user. Sound has been traditionally a medium of transmitting information from the virtual environment to the user. Sound hits were used as a medium to enhance player's concentration and awareness, thus enhancing game completion. In addition, sound symbols help identify goals and shape the player's perception. Sound is also used to enhance the overall structure of a game or an environment.

Complementary to the traditional functions of sound within a game, new advancements in virtual technology create new uses for the phenomenon of sound within a gameplay or a virtual activity. New ways of interacting with games, like music rhythm games, can make sound a primary game output. Also, improvements in technologies, like speech recognition, transform sound to a primary input channel. As a result, sound has become a first class citizen when it comes to interacting with a virtual environment.

In this presentation, we will briefly cover the subject of the importance of sound as a medium for user interaction with a virtual environment, as well as recent development in the specific subject.