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Info C262

Reading Response 6: VR & Mixed Reality

One of the most fascinating aspects of VR is that with a single VR device, we can transport to a virtually different world. With a touch of a button, I can be under an ocean, exploring the deep sea creatures or on a mountain top looking over the vast nature. I think VR is a great way of having a first-hand like second-hand experience to immerse in an environment that is physically difficult, such as being in a deep ocean or in the fantasy land. For example, VR can provide more meaningful interaction for patients or people with disabilities.

As for the HTC Vive technology itself, I was impressed by how smooth the controller interface was and only after the first initial trial, I was quickly able to adapt and grasp the user interface. My favorite program was shooting arrows on top of the castle. As a fan of archery, I liked how instead of traditional joysticks in which pressing a button would shoot an arrow, the VR controller allows me to physically move my arms and body to imitate the actual shooting motion, which greatly augmented my immersive experience. There was the actual motion metaphor of shooting the arrows. As I imitate the action, it felt like I was Legolas from *The Lord of the Rings* and hunting down the enemies. I thought I could play it all day to become the master of archery and also burn my calories at the same time.

On the other hand, I also felt some of the interactions were limiting. While I was able to move around in some programs, the number of interactions I could do were quite limiting. Those limitations gave me sense that the environment was virtual.

Another limiting factor was that there was no way of interaction between the actual player and spectators. As I was watching one of the peers play with Tilt Brush, it felt strange how the user was in a totally different world despite our actual physical distance. Even though technologies allow to engage multiple users into the scene, I thought it would be interesting to see improvements in how spectators can also become players into the scene. As players wore headsets that are intended to block all the outside stimuli in order to create a more immersive experience, there was no way for spectators to engage with the actual players beside just watching what they were doing.

As an alternative design solution, I thought of using a full room to be converted to immersive VR by having projectors display the visual output and walls to become the canvas. This way, players do not have to wear headsets that block most of the sensory information from the outside world, and any people in the room have a chance to interact with the virtual world. While having a main character wear sensors for the system and projector to display that first person view, the spectators can also be supporting players who can engage with the VR objects.