Virtual world allows paraplegics to 'walk'

Boffins at the UK's University College London are creating an immersive virtual world which can be navigated through thinking about moving, reports The New Scientist. In partnership with a team at the Graz University of Technology in Austria—which specialises in measuring signals from the brain via electrodes or implants—the two groups have joined together in order to create a virtual world which disabled players can navigate using only their imaginations.

To play the game, electrodes are attached to the player's scalp, and electroencephalogram (EEG) equipment monitors the electrical activity in their brain. Then the gamer simply imagines moving forwards, or raising their left or right arm, which move their avatar forward, or turns it left or right. To heighten the feeling of immersion, they sit inside a room at UCL where the game is projected onto the three walls in front of them, as well as the floor. A pair of shuttered glasses can also be worn, to create the illusion of 3D, which "intensifies the overall feeling of being inside the simulated reality."

During a trial, a paraplegic patient was tasked with using his thoughts to move his avatar towards various virtual characters to talk with them, and was able to do so approximately 90 percent of the time.

A team at Southampton University is already using brain controlled interfaces to treat people recovering from strokes, and it was also suggested that the technology could increase the prospects of the disabled to work and experience social interaction.

US-based Rochester Institute of Technology assistant computer science professor, Jessica Bayliss—who also specializes in brain-computer interfaces—commented, "A system such as this could be very motivational for a patient to use for training. It reminds me of how people with various handicaps are playing World of Warcraft, because they are able to do things in the virtual world that they can't do in the real world."

Category: Bulletin
Posted by Emma_UK, Jun 28, 2007 8:57 am PT  13 Comments

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Comments

JSharpe_187
Wow, looks like the technology isn't crap, it worked 90% of the time.

Posted Jun 28, 2007 9:00 am PT
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/ (+6)
Stock Watch

Today's GameSpot Watch List

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30-minute delay

Today's Poll

Has your Xbox 360 failed?

- Nope.
- Yeah, but I got it replaced for free.
- Yes. And I had to pay to get it fixed.
- Yes! Twice!
- @#$% YES!! More than twice!!!!!
- Pfft! You think I would actually buy an Xbox 360?

Vote!  View Results
Release Calendar

Ranked by GameSpot traffic

This Week (Jun 24, 2007)

The Darkness (X360)
Overlord (PC)
Transformers: The Game (X360)
The Darkness (PS3)
Overlord (X360)

More Results »

Next Week (Jul 01, 2007)

Terror Strike (PC)
Ninja Gaiden Sigma (PS3)
Vampire Rain (X360)
Seven Kingdoms: Conquest (PC)
Chicken Shoot (WII)

More Results »