## The Perils of Making the Virtual More Real

've always been fascinated by the interrelationship of real and virtual worlds, and how technological advancement has brought them steadily closer together. The simplest virtual worlds—those created in your head with your imagination, perhaps with the aid of a good book—are easily differentiated from reality (by most humans, anyway). Early digital virtual worlds, like EverQuest or Discworld MUD, started to blur the lines with persistence, graphics, and other interactive elements that trigger very "real world" reactions, both physical and psychosomatic. And now, as we move into an era of ultra-high-resolution displays, 3D audio, and advanced AI, it's possible to create some very real virtual worlds indeed.

I don't think we've yet seen someone actually scared to death by a modern 3D/VR setup, but it's only a matter of time. The precedent has certainly been set over the last few years, especially when it comes to MMOs and other "grindy" games—there have been a handful of cases of people dying of exhaustion because they neglected their basic needs (food, sleep, exercise). In some cases, these people had some kind of underlying condition that made such physically and emotionally intensive experiences more likely to cause death. But as the technology becomes ever more immersive, and designers and architects create games and virtual worlds that are indiscernible



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from the real thing, I think VR death will be a somewhat regular occurrence.

Even if you don't agree that VR will scare people to death, at the very least I think we can agree that full VR experiences will be incredibly absorbing. If an MMO like World of Warcraft or Lineage can keep people sitting down for days on end, VR will up the ante considerably. I'm not saying that people will start dropping like flies as soon as the first immersive VR experiences become readily available, but there will definitely be more deaths from exhaustion and users generally not looking after their physical and emotional needs.

This is before we consider the other inevitable VR-related problems that will be caused by misuse of the technology, irresponsible developers, and dozens of other indirect issues. If an iPod and some headphones can distract someone enough that they walk into traffic or in the path of an oncoming train, imagine the perils of using VR outside the safety of a room—even wandering around your house could be dangerous. Despite the relatively low-quality VR produced by Oculus Rift, there are already reports of people experiencing the odd sensation of a fraying, blurring divide between real and virtual that persists for a few minutes after detaching from a VR device. A curious and/or malevolent game developer, after getting a taste for the immersion provided by VR, could easily craft an experience that's intended to cause mental or physical harm.

Indirectly, but still significantly, a whole host of issues might arise if a significant proportion of the populace is constantly strapped into a VR setup. There have already been a few sad cases of parents being so engrossed by a virtual world that

their baby/child died from neglect, and I'm sure it'll only get worse as advanced VR tech matures.

## YOU THINK YOU'RE BREATHING AIR?

One of the best examples of fully immersive VR in fiction is *The Matrix*, in which humans all think they're leading normal lives, but are actually wired up to a huge computer that creates a highly accurate simulation. You can escape from the simulation (and the rather gooey VR apparatus) and live in the "real world"—but if your virtual body dies, then you die in the real world as well. The film doesn't fully explain why this is the case; Morpheus just says "The body cannot live without the mind" and leaves it at that.

Obviously this isn't really the place for discussing what your mind is capable of—or whether "minds" or "souls" even exist in the first place—but the wad of fleshy, fatty neurons and hormones that we call a brain is obviously capable of affecting or imposing a wide range of conditions. The placebo effect, somatic disorders, hypochondria—the brain, for whatever reason, has a strong grip over both your physiology and psychology. If real-life experiences can trigger depression or body dysmorphia, then I see no reason that a suitably high-quality VR experience couldn't also trigger similar physiological or psychological responses.

## **VIRTUAL MORALITY**

Most people in the modern world have been brought up in such a way that it's both ethically and morally wrong to murder someone or abuse a child. I would argue that if our virtual experiences approach the realism of real life—which they surely will—then it would be a good idea for us to try and behave with at least a modicum of

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morality. This could be as simple as a code of conduct for developers and publishers of VR experiences, or as complex/overreaching as an active policing system that keeps VR users within bounds.

I think it's a foregone conclusion that as VR improves we'll begin to lose our grip on what is real and what isn't. When that happens, we'll need some kind of system to regularly remind us that we're in the real world—perhaps a small earbud that blasts every 30 seconds, "Do not, I repeat, do not attempt to jump from the roof of a skyscraper." Failing that, we'll at least need to make sure that those VR experiences aren't cultivating a civilization of amoral barbarous thugs that love nothing more than gunning down nuns and ram-raiding banks.

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