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## Real fear in a virtual world

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So, I walked up to a virtual pit.

It was maybe 30 feet deep. With a wood plank crossing it.

Somewhere deep down in my rational brain, I knew the hole wasn't real - that it was a virtual reality scenario in a cramped office at Stanford University, where the floor seemed completely pit-free until I put on a clunky piece of hardware called a "headmount."

But that headmount changed everything.

Using a system of cameras, ultraviolet lights and an "inertia cube," the headmount - which looks sort of like a cross between sunglasses and a hard hat - knew right where I was and where I was looking. It fed that info to a computer which put a realistic virtual display in front of my eyes.

The result looked like a video game version of the room I had just been standing in.

Only with a big - and really believable - hole in the center.

Kathryn Segovia, a PhD student and manager of the [Virtual-Human Interaction Lab](#) here, asked me to walk toward the pit and then cross it on the plank.

My pulse quickened. I felt the kind of nerves you do before a big drop on a roller coaster, or that tingle in your stomach you get when walking on the roof of a building.

Segovia says people have real, emotional reactions to virtual reality. Some become ill. Others fall. And, increasing it's becoming apparent that virtual experiences can impact who we are out here in real life. Researchers in her lab for instance, [have shown](#) that people who watch themselves exercise in virtual reality are more likely to do so in real life, she said. And those who watch lifelike avatars eat healthy virtual foods are more likely to make healthy eating choices later.

This leads to all kinds of possible scenarios, where virtual environments could be used to help with a person's fear of heights, or help someone with an eating disorder. The real world informs how we design virtual reality, and how we act in virtual realms, she says, but the virtual can also change the real.

And it seems the two are becoming less distinct.

Back in front of the gaping hole, I walked across the plank without much problem. But I was surprised by how real felt, how I used my arms to steady my balance and actually worried a bit about falling.

Then things got even weirder.

In round two of this virtual gut-check, Segovia put other "virtual humans" in the scenario with me - a bunch of concerned-looking men in blue shirts.

As they entered through a virtual door, I felt their eyes on me. I started to wave "hello" to them (yeah, I'm that lame but, much to my real dismay, they started running. Then, one by one, just like lemmings, they jumped into the pit - their virtual deaths.

I actually wanted to try to stop them. But it happened so fast.

Segovia, who was controlling this scenario from the outside, and seemed much less concerned about these pixel people than me, asked me to walk out on the plank and look down at the digital wreckage.

I steadied myself and walked to the center of the plank, over the virtual hole. I saw a tangle of those "agents," as researchers call computer-controlled virtual people, at the bottom of the pit - splayed out like virtual stew.

There was no gore to it, but it was actually disturbing. I wanted to get away, so I scurried off the plank.

So fast, in fact, that Segovia had to put out a hand to stop me.

I was about to run into a real wall.

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