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How Second Life Affects Real Life

By Kristina Dell

About a year ago in my first visit to [Second Life](#), the popular online virtual world, I spent half an hour trying to make my avatar, or online character, look like a hotter version of myself — which isn't easy when you don't know how to use the tools. When I finally made it onto Money Island to mingle, a stranger approached me and said, "Hello there, Devon." I froze. Then I tried to run. I was desperately searching for the teleport tool when my sister walked into the room, peered over my shoulder at the computer screen and said, "Why'd you make your avatar ugly?" I logged off.

I didn't realize how instructive my sister's question was until recently, when I discovered research being done at Stanford University's [Virtual Human Interaction Lab \(VHIL\)](#). Jeremy Bailenson, head of the lab and an assistant professor of communication at Stanford, studies the way self-perception affects behavior. No surprise that what we think about ourselves affects the confidence with which we approach the world. What is a surprise is that this applies in the virtual world too. With my plain Jane avatar and my inexperience in Second Life, I did what most people would want to do in an uncomfortable social situation: run away.

What's more, Bailenson's research suggests that the qualities you acquire online — whether it's confidence or insecurity — can spill over and change your conduct in the real world, often without your awareness. Bailenson has found that even 90 seconds spent chatting it up with avatars is enough to elicit behavioral changes offline — at least in the short-term. "When we cloak ourselves in avatars, it subtly alters the manner in which we behave," says Bailenson. "It's about self-perception and self-confidence." But researchers are still trying to figure out the psychological mechanisms at work, and which way the effect flows: "Do you consciously wear your power suit to feel confident, or is it that you're in this suit and you're feeling up, but you're unaware of the reason?" says Bailenson.

Bailenson's findings have a lot more real-world meaning than you'd think, if only because so many people are spending a so much time in the unreal world. Some 13 million people have visited Second Life at least once, with about 450,000 residents online in a given week. Even more popular is the online game [World of Warcraft](#), which has 10 million active subscribers who pay to participate. People spend on average about 20 hours a week in alternate worlds like these, and at VHIL, whose high-tech virtual world is entered by way of a \$24,000 helmet, Bailenson and his Ph.D. students are trying to figure out how these increasingly common virtual experiences bleed into reality. "I've been doing this for years and people have been laughing at me," says Bailenson. "All of a sudden, I have people calling and asking about what I do."

In one experiment, published in *Human Communication Research* last year, researchers assessed how an avatar's attractiveness affected human behavior, both online and off. Thirty-two volunteers were randomly assigned an attractive or unattractive avatar (attractiveness was rated by undergrads in a survey beforehand) and instructed to look at them in a virtual mirror for 90 seconds. Then they were asked to interact with other avatars, controlled by the experimenters, in a classroom-like setting. Overall, subjects using good-looking avatars tended to display more confidence, friendliness and extraversion, just as in the real world: they approached avatar strangers within three feet, and in conversations tended to disclose more personal details. Ugly duckling avatars, meanwhile, stayed five and a half feet away from strangers and were more tight-lipped.

Lead researcher Nick Yee, a former Stanford graduate student who now works for the nearby Palo Alto Research Center, replicated his study, then appended a second part: an hour after their forays online, the same volunteers were told they were participating in an unrelated study about online romance. They were instructed to pick two potential dates out of nine photos in an online-dating pool. People who had used attractive avatars seemed to hang onto some of the self-assurance that came from being handsome, choosing better-looking dates than those who had homely avatars. "They thought they had a shot," says Bailenson.

If feeling pretty builds confidence, what does height do for you? To find out, Yee recruited 50 volunteers, randomly assigned them to short or tall avatars, then instructed them to divide a virtual pool of \$100 with another participant — one player would suggest how to split the pot, and the other could accept or reject the offer, with each person getting nothing if offers were rejected. People with tall avatars (three or four inches taller than the stranger avatar) negotiated more aggressively than the short ones, while short avatars were twice as likely as the tall ones to accept an unfair split — \$25 versus \$75.

Again, the behavior held up in real life. When Yee had the subjects shed their avatars and negotiate face-to-face, sitting down, people who had inhabited tall avatars bargained more aggressively, suggesting unfair splits more often. And participants who had had short avatars accepted less-than-even money more often than the tall ones. How tall the people were themselves became less important, if only temporarily, than the height of their online alter-egos.

Virtual behavior may even affect real-world health. Stanford graduate student Jesse Fox randomly assigned avatars to 75 volunteers and divided them into three groups: one group watched their look-alike avatars run on treadmills for about five and a half minutes; another group saw their virtual counterparts lounge around; and a third watched avatars who did not look like them, but were of the same age and sex, run on treadmills. A day later, Fox found that participants who watched avatars of their own likeness exercising had themselves exercised an hour more in the intervening 24-hour period than people in the other two groups. (It's worth noting that the volunteers were all Stanford undergraduates, who were likely more active and fitter to start than the average adult.) "What I'm hoping to find out by picking apart these mechanisms is what motivates people and why this works," says Fox. "If you are energized by seeing yourself run, maybe you can put an avatar on the bottom of your computer screen for five minutes and it would persuade you to go to the gym."

The possibilities are — virtually — endless. Inhabit buffed-up versions of yourself to lose weight, cuter versions of yourself to gain confidence, or older versions to start putting money away for the future (that last one is being studied at Stanford now). "The most stunning part is how subtle the manipulations are and how difficult they are to detect," says Bailenson, "but how much it affects real life later on."

Of course, the effect could potentially work both ways — for good or for bad. "In a therapy setting, we could use these virtual environments to get people to become more confident," says Yee. "But they can also be used in advertising and as propaganda."

Before I entered Second Life again I upgraded my avatar to much cuter dimensions. This time I found myself conversing with people instead of logging off. I was more outgoing. Next, I'm considering giving my avatar a cottage by the sea and a job doing charitable work. Maybe some of the positive vibes will rub off into my real life. I'll let you know how it works out.

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