**The Psychology of Video Game Avatars**

Source> http://www.psychologyofgames.com/2013/11/the-psychology-of-video-game-avatars/

Explaining why we adopt the avatars we do is sometimes easy: we decide to look like an elf because elves get +5 Intelligence and we want to max out our mage build. Put that one in your thesis and smoke it. But what about virtual playgrounds where we have options that aren’t constrained by the game’s mechanics? An emerging line of research says that when the choice is ours**, it’s often about building a better version of ourselves.**

“Studies have shown that, in general, people create slightly idealized avatars based on their actual selves,” says Nick Yee, who used to work as a research scientist at the Palo Alto Research Center but who now works at Ubisoft. He should know: before joining Ubisoft Yee has spent years studying the effects of avatars on human behavior in settings such as *Second Life* and *World Of Warcraft*. “But a compensation effect has been observed. **People with a higher body mass index – likely overweight or obese – create more physically idealized avatars, [which are] taller or thinner.** And people who are depressed or have low self-esteem create avatars with more idealized traits, [such as being] more gregarious and conscientious.”

Other researchers have found that the ability to create idealized versions of ourselves is strongly connected to how much we enjoy the game, how immersed we become, and how much we identify with the avatar. Assistant professor Seung-A ‘Annie’ Jin, who works at Emerson College’s Marketing Communication Department, did a series of experiments with Nintendo Miis and Wii Fit.[1](http://www.psychologyofgames.com/2013/11/the-psychology-of-video-game-avatars/" \l "foot_text_2072_1" \o "Jin, S. Self-Discrepancy and Regulatory Fit in Avatar-Based Exergames. Psychological Reports 111 (2012): 697-710.) **She found that players who were able to create a Mii that was approximately their ideal body shape generally felt more connected to that avatar and also felt more capable of changing their virtual self’s behavior – a fancy way of saying that the game felt more interactive and immersive.** This link was strongest, in fact, when there was a big discrepancy between participants’ perceptions of their ideal and actual selves.

“I would definitely **recommend that developers allow players to design and don whatever kinds of avatars they like**,” states Jim Blascovich, a professor of psychology at the University Of California in Santa Barbara, and co-author of the book *Infinite Reality: Avatars, Eternal Life, New Worlds, And The Dawn Of The Virtual Revolution*.[2](http://www.psychologyofgames.com/2013/11/the-psychology-of-video-game-avatars/" \l "foot_text_2072_2" \o "Blascovich, J., & Bailenson, J. (2011). Infinite reality: avatars, eternal life, new worlds, and the dawn of the virtual revolution. New York: William Morrow.) Doing so **tends to make the game more appealing and lets us connect more with our avatar and the world he or she inhabits**. But what then? Once we’ve adopted an avatar, how does its appearance affect how we play games and interact with other players?

This research has its roots in what’s called self-perception theory, a watershed concept in social psychology pioneered by physicist-turned-psychologist Daryl Bem in the 1960s. Essentially, the theory says that **we observe ourselves and use that information to make inferences about our attitudes or moods, as opposed to assuming our attitudes affect our behaviors**. For example, someone who hurls themselves out of an airplane with a parachute might think, “I’m skydiving, so I’m the kind of person who seeks out thrills.”

The study revealed that **an avatar’s attractiveness affected how its owner behaved**. Relative to those with ugly avatars, people assigned attractive looks both stood closer to the other person and disclosed more personal details about themselves to this stranger. Then, in a follow-up study using the same setup, Yee found that people using taller avatars were more assertive and confident when they engaged in a simple negotiation exercise. So, generally speaking, people with prettier and taller avatars were more confident and outgoing than those with ugly and stumpy virtual representations. Like in the real world, **we first make an observation about our avatar, infer something about our character, and then continue to act according to our perceived expectations.** We needn’t make a conscious decision to do it.

The Proteus effect, then, describes the phenomenon where people will change their in-game behavior based on how they think others expect them to behave. “In our studies at Stanford, we have demonstrated that avatars shape their owners,” agrees Jeremy Bailenson, an associate professor at Stanford University and *Infinite Reality’s* other author. “Avatars are not just ornaments – they alter the identity of the people who use them.” Subsequent research by Yee, Bailenson and others has even revealed that t**here doesn’t even have to be an audience for us to feel the need to conform to our avatar’s appearance** – an assumed one is sufficient.

But what about after we quit? Well, our avatars’ power extends beyond the game, and perhaps unsurprisingly, there’s an angle to this that involves selling you stuff. Imagine, for example, that you’re in the Xbox dashboard and you notice that your avatar is holding up a branded soft drink and grinning like some kind of moron. Do you think you’d be more likely to remember that brand and pick some up the next time you’re at the shops? Research by Bailenson and his colleague Sun Joo Ahn suggests you would.[6](http://www.psychologyofgames.com/2013/11/the-psychology-of-video-game-avatars/" \l "foot_text_2072_6" \o "Ahn, S. & Bailenson, J. (2011). Self-Endorsing Versus Other-Endorsing in Virtual Environments. Journal of Advertising, 40(2), 93-106.) In their study, the team altered photos of people to show them holding up fictitious brands of fizzy drinks like “Cassina” or “Nanaco.” Even though the participants knew the photo was doctored, they tended to express a preference for the fake brand, simply because they’d seen a representation of themselves holding it.

Other researchers have found similar results when they showed people pictures of themselves in a certain brand of clothing, and one study by Rachel Bailey, Kevin Wise and Paul Bolls at the University Of Missouri in Columbia looked at how kids reacted to advertisements for sweets and junk food that were thinly disguised as Web games. If the ‘advergames’ allowed players to customize their avatars, the kids remembered the snacks better and said that they enjoyed the game more.[7](http://www.psychologyofgames.com/2013/11/the-psychology-of-video-game-avatars/" \l "foot_text_2072_7" \o "Bailey, R., WIse, K., and Bolls, P. (2009). How Avatar Customizability Affects Children’s Arousal and Subjective Presence During Junk Food-Sponsored Online Video Games. Cyberpsychology & Behavior 12(3). 277-283.)

It’s not all scary news, though. For example, psychiatrists use mental visualization as a technique for treating phobias and social disorders. Someone deathly afraid of swimming, for instance, might be coaxed into imagining themselves at a pool. Through this kind of repeated imaginary exposure, the person might eventually seize control of their phobia.

And along those same lines**, a body of work around social learning theory has shown that we can be encouraged to adopt new and beneficial behaviours by watching others perform them**. The more similar the other person is to us, the more likely it is to work. Today, the technology exists to take our likeness and show it exercising and eating vegetables instead of chugging soft drinks. In fact, some researchers are experimenting with such approaches. Jesse Fox and Bailenson at Stanford University recently published a paper in which they examined this exact possibility.[8](http://www.psychologyofgames.com/2013/11/the-psychology-of-video-game-avatars/" \l "foot_text_2072_8" \o "Fox, J., & Bailenson, J. N. (2010). Virtual Self-Modeling: The Effects of Vicarious Reinforcement and Identification on Exercise Behaviors. Media Psychology, 12(1), 1-25.)

In the study, the researchers outfitted participants with a head-mounted display and set of controls that let them experience and navigate a simple virtual environment. Some people saw avatars with photo-realistic images of their faces attached, while others saw no avatar, or an avatar with an unfamiliar face. Everyone was then told about the importance of physical activity, asked to practise some simple exercises, and invited to keep exercising for as long as they wanted. Through a series of experiments based on this setup, Fox and Bailenson found that when people saw avatars that looked like them mirroring the exercises they tended to work out for longer. The effect was even greater when they saw the avatar slim down in the process. When asked later, people who saw their face on happy avatars also reported hitting the gym after being dismissed.

***Footnotes:***

*[1](http://www.psychologyofgames.com/2013/11/the-psychology-of-video-game-avatars/" \l "foot_loc_2072_1). Jin, S. Self-Discrepancy and Regulatory Fit in Avatar-Based Exergames. Psychological Reports 111 (2012): 697-710.*

*[2](http://www.psychologyofgames.com/2013/11/the-psychology-of-video-game-avatars/" \l "foot_loc_2072_2). Blascovich, J., & Bailenson, J. (2011). Infinite reality: avatars, eternal life, new worlds, and the dawn of the virtual revolution. New York: William Morrow.*

*[3](http://www.psychologyofgames.com/2013/11/the-psychology-of-video-game-avatars/" \l "foot_loc_2072_3). Strack, F., Martin, L. L., & Stepper, S. (1988). Inhibiting And Facilitating Conditions Of The Human Smile: A Nonobtrusive Test Of The Facial Feedback Hypothesis.. Journal of Personality and Social Psychology, 54(5), 768-777.*

*[4](http://www.psychologyofgames.com/2013/11/the-psychology-of-video-game-avatars/" \l "foot_loc_2072_4). Valins, S. (1967). Emotionality And Information Concerning Internal Reactions. Journal of Personality and Social Psychology, 6(4, Pt.1), 458-463.*

*[5](http://www.psychologyofgames.com/2013/11/the-psychology-of-video-game-avatars/" \l "foot_loc_2072_5). Yee, N., & Bailenson, J. (2007). The Proteus Effect: The Effect Of Transformed Self-Representation On Behavior. Human Communication Research, 33(3), 271-290.*

*[6](http://www.psychologyofgames.com/2013/11/the-psychology-of-video-game-avatars/" \l "foot_loc_2072_6). Ahn, S. & Bailenson, J. (2011). Self-Endorsing Versus Other-Endorsing in Virtual Environments. Journal of Advertising, 40(2), 93-106.*

*[7](http://www.psychologyofgames.com/2013/11/the-psychology-of-video-game-avatars/" \l "foot_loc_2072_7). Bailey, R., WIse, K., and Bolls, P. (2009). How Avatar Customizability Affects Children’s Arousal and Subjective Presence During Junk Food-Sponsored Online Video Games. Cyberpsychology & Behavior 12(3). 277-283.*

*[8](http://www.psychologyofgames.com/2013/11/the-psychology-of-video-game-avatars/" \l "foot_loc_2072_8). Fox, J., & Bailenson, J. N. (2010). Virtual Self-Modeling: The Effects of Vicarious Reinforcement and Identification on Exercise Behaviors. Media Psychology, 12(1), 1-25.*