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Seeing Is Believing: Using Virtual Reality to Change You and Society

BY: PAUL SOLMAN

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Virtual reality research suggests that seeing your face morphed with that of a political candidate may make you more likely to vote for that candidate. Would a virtual resemblance to Mitt Romney, left, or President Barack Obama, right, influence Paul's political choices?

In his Making Sen$e report on virtual reality, slated to air on PBS NewsHour Thursday, Paul Solman speaks with Jeremy Bailenson, founding director of Stanford University's Virtual Human Interaction Lab, about virtual reality's psychological effects on individuals and society. In his lab, Bailenson has experimented with using virtual reality to help younger people imagine their future, older selves, inspiring in them concern for their future economic well-being, and hopefully, convincing them to save more for that future. But Bailenson is just as attuned to the ways in which advertisers will be able to exploit virtual reality's psychological effects, even to the point of influencing voting behavior. A transcript of Paul's extended conversation with Bailenson appears below.

Jeremy Bailenson: There is a growing portion of our population that views face-to-face interaction as the exception. They would rather be viewing Facebook than talking to people like you or me. They could be sitting in the same room, side by side, not looking at one another, preferring to talk to people who are 1,000 miles away. This is the norm for them. And we need to start understanding both the positive aspects and the negative aspects of a world in which you can have any experience virtually, and at any given time, be surrounded by a thousand of your virtual friends. It's a different model of thinking, and it's not one that I advocate, but it's one, unfortunately, that we must confront.

I don't have a Facebook account; I don't play video games; I don't endorse virtual reality as a hobby in any way or form. What we need to know as a society is that this is coming.

Paul Solman: But, you're developing the technology; you're on the cutting edge of it, so you're part of the problem instead of part of the solution.

Jeremy Bailenson: My job is to create virtual experiences that can help, and also to inoculate the world to understand that when you have these virtual experiences, they're not free. They change the way you think about yourself; they change the way you think about others. We've run experiments with elementary school children; we've brought them in, given them a very intense virtual experience where they see their own doppelgangers swimming with whales. A week later, we bring those same kids in and 50 percent of them have formed false memories, meaning that they believe that they have been physically to Seaworld and have swum with whales. That's 50 percent -- one in two of our children form false memories. Virtual experiences can change the cognitive structure of your brain.

Paul Solman: Yikes!

Jeremy Bailenson: Yikes -- and we should really limit the time we spend in virtual worlds, and we should think about the amount of our personal data we give away.

If there's two pieces of advice I can give to the audience, one is take down all those high-resolution photos of you. Replace them with low-resolution photos so that we can't build these virtual versions of you -- your head on avatar bodies -- that are doing violent or sexual things. There's all sorts of strange scenarios that emerge once we have built your virtual self.

The second is that all of these devices that capture your movements -- video game consoles like the Microsoft Kinect or the Nintendo Wii -- when you leave these things plugged into the Internet, you're sharing your gestures and your movements with the world. And we can learn a lot about your physical self from what we call your digital footprint, the way you move around in video game world. We've run a lot of experiments, for example, showing that just from the movements we get from you while you play a video game, we can determine if you're going to buy a product or if you're going to perform well in an exam.

Paul Solman: How would, say, advertisers exploit this information?

Jeremy Bailenson: In our experiments, we've demonstrated that when you see yourself, or your virtual self, using a product you've never used before, later on you prefer that product. You look on a billboard and you see your doppelganger using a product, say, drinking a soft drink. That's in the third person. But what if it was first person? A lot of video games now already have product placement. What if you looked down in a video game and your arm had a logo on it? Do you then later on prefer this product?

We ran an experiment a week before the 2004 election, where we sent voters pictures where their own face had been morphed into the face of either George W. Bush or John Kerry. When you excluded card-carrying Republicans and Democrats, subjects preferred the candidate with whom their face had been morphed. Those in the middle were more likely to vote for George W. Bush when he had been subliminally morphed to look like them. And they were more likely to vote for John Kerry when Kerry's face had been morphed to look like them.

Paul Solman: So do you think that in the next election cycle, or maybe the one after that, campaigns will be delivering individual messages to voters with these subliminally morphed photos?

Jeremy Bailenson: From a technological standpoint, it's trivial. When we did our study, we had to do all the morphing by hand. Now, it can be done automatically. It's my hope that from an ethical standpoint we don't see this. But even beyond ethics, from a functional standpoint, what we demonstrated is that if a voter consciously detects when own face has been manipulated, there's a huge backlash. So the only way a politician could pull this off is if nobody knows consciously. And so another job that we have is to pay attention to political advertisements when they come out and to look for this stuff.

Morphed photos of Paul Solman with Mitt Romney and President Obama are courtesy of Cody Karutz at the Stanford University Virtual Human Interaction Lab.

This entry is cross-posted on the Making Sen$e page, where correspondent Paul Solman answers your economic and business questions.

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