The Information

How a VR Museum Will Tell LGBTQ+ Stories

By Mathew Olson

June 28, 2021

An image from the VR-based LGBTQ+ museum.

While I enjoyed a week of rest and relaxation away from VR and AR (and, most of the time, WiFi), there was still plenty of news during 2021's first week of summer. In the newsletter's last installment, I covered Facebook's first foray into advertising inside VR games. Those plans quickly changed: Resolution Games, developers of the multiplayer VR title Blaston, pulled back from using that game as the first testbed for Facebook's new ads.

Lest we take this as a sign that VR ads are dead on arrival, Resolution will instead be testing out these ads in Bait!, a free fishing game. Backlash and backpedaling always grab attention,

so I'm curious to see if Facebook's test will fly under the radar now that we have been through the Blaston news cycle.

Last week, we also learned that VRChat raised $80 million in a round led by Anthos Capital, one of the bigger VR deals of the year so far. As it stands today, VRChat is practically the antithesis to the kinds of content Facebook could hope to monetize with ads—it has safety measures and moderation tools in place, but it is also a platform where users create and share mature content and regularly skirt copyright restrictions. The influx of cash could mean better tools and paths toward monetization for those same creators, but growth could also bring limits on expression.

As virtual and augmented reality evolve, we're likely to see the demands of business and the wishes of users clash in unexpected ways. The opportunity to use VR as a means of self-expression, and as a venue for activism, is an issue I discussed recently with Antonia Forster, a technical specialist at Unity, which makes the engine used by many of today's most prominent VR and AR apps.

Pride Month Meets the Power of VR

A few years ago, Forster made waves with a TED talk on diversity in sexuality and gender in the animal kingdom by pushing back against the notion that heterosexuality and monogamy are natural norms.

While Forster has since moved on from zoology research, she has forged a path that integrates LGBTQ+ advocacy into explorations of virtual reality. In her role at Unity, Forster leads regular talks on topics like VR training and 3D scanning. Forster now is aiming to launch a personal project before the end of July that unites her activism and her expertise in immersive technology.

The LGBTQ+ VR museum, a first-of-its-kind exhibit, will be viewable using VR headsets like the Quest 2. The digital museum collects images of artwork from LGBTQ+ artists around the world, exhibited alongside 3D scans of real-world objects. Each object will be accompanied by an audio recording from its contributor explaining the object's ties to their personal journey—

how it was integral to their coming out, or how it was attached to a feeling of gender euphoria. I spoke with Forster ahead of the museum's launch to discuss the unique opportunities and challenges presented by curating works in VR. We also discussed Forster's hopes for how immersive technologies like AR and VR will contribute to activism and self-expression. This conversation has been edited for length and clarity.

The Information: What initially spurred your interest in VR and AR, and how did that path lead you to working at Unity?

Antonia Forster: My background is actually in zoology and animal behavior. I started out working in laboratories studying animal behavior, and moved into science communication as a presenter at zoos and science centers. Eventually I started working in the U.K.'s only 3D planetarium, in Bristol. I became interested in 360 degree 3D content, and how I could use that in the dome. From there, it was a sort of natural leap to moving into virtual reality.
I taught myself Unity, and C#, using online resources like Udemy and YouTube videos. I think I spent maybe 10 pounds (about $14) in total on my VR education. After about a year of this, I became a full-time VR developer at a company called Ultraleap, who do hand tracking. I eventually got a call from Unity to combine my background in public speaking with my experience as an AR/VR developer as an XR technical specialist.

Being an LGBTQ+ activist working in a growing medium, do you feel like there is more opportunity to effect change than there is in more established fields?

Yes. I think, in some ways, tech democratizes the ability to tell stories.

I think one of the very best things that technology can do is not only give everyone the ability to platform the stories that they feel are important, but also to unlock new ways to tell those stories. VR and AR give creators the unique ability to put you in someone's shoes, as it were, and walk you through their story.

The museum's centerpiece is a 3D scan of a real-life monument. How did you select the piece, secure permission to exhibit it and then capture its fine details for VR?

For context, “Memorial to a Marriage” (2002) is a marble statue by the artist Patricia Cronin. It's an absolutely beautiful work that depicts two women lying, covered in a sheet, sort of entangled. It depicts Patricia herself and her now wife (artist Deborah Kass), created at a time when it was not legal for them to be married. The only legal recognition that queer couples would have was in death certificates or hospital admissions—documentation around mortality. So Patricia created the work to ensure that they would be recognized as a couple, if only in death, and it was installed on their grave plot in Woodlawn Cemetery in New York. The monument on the plot was replaced by a bronze version, while the marble one is now in Patricia's studio.

The story behind it was incredibly moving to me, as someone who has been in the closet for the vast majority of their life and who struggled with homophobic responses when I came out. So I reached out on Twitter to ask if anyone knew Patricia. She responded directly, saying that she would love to be involved. I had a connection in New York, Jesslyn, who was able to go to Patricia’s studio herself and take Covid-safe measures. She took a series of photographs of the marble original from as many different angles as possible.

Then we sent that huge batch of photos to a volunteer who has been absolutely indispensable, Andrew McHugh. Photogrammetry can struggle with reflective materials—so anything that is plain white or anything shiny like metal is difficult to capture correctly. Andrew did an amazing job correcting any issues and produced the 3D model, which we now have as the centerpiece. It's the first and, I believe, still the only monument to marriage equality in the world.

You mentioned that VR can let more people act as curators, but how will you ensure that the LGBTQ+ VR museum itself is accessible to a wide audience?

This is a real struggle at the moment. Accessibility was extremely important to me in this project. For example, we've subtitled the audio component. We couldn't find a plausible way to make the experience accessible for visually impaired or blind users—it's something I would love to incorporate in the future, but I don't have enough expertise in that field as it is. And of course, one of the biggest difficulties is access to VR headsets themselves, because not everyone has a VR headset.

My intention is also to exhibit this at [in-person] festivals. I really wanted to have a web version of the experience available. As soon as the VR version is released, I want to work on that.

You're an advocate for self-expression in VR, especially for people using avatars that don't look like their physical bodies. How can VR products and experiences be designed in ways that leave room for freedom of identity?

You want any kind of communal online space to have some level of safety, inclusion and accessibility. I think some level of moderation is needed for safety, particularly in the immersive environment of VR, where you have a sense of physical presence. On the other hand, I think policing someone's self-expression is damaging. One of the reasons I love VR is that I can explore gender identities, or non-humanoid physical forms, and not be judged by how I look in real life. I can have certain aspects of identity as an option, particularly if I'm not using voice. So I think there's a fine line to be walked between moderation for safety, and heavy policing, which limits expression. I don't have the answer on the best way to do that.

What I hope to see is inclusive, diverse spaces and—in particular—more diverse creators. When we enter a world in virtual, mixed or augmented reality, we're really entering the imagination of someone. If we're only entering worlds created by one demographic, that's a troubling and problematic situation to be in.