

# One man's endless hunt for a dopamine rush in virtual reality

TECHNOLOGY | Wolf Heffelfinger has spent a decade trying to immerse himself in VR, which has yet to go fully mainstream. He believes there's still plenty of room for growth.

On a recent Thursday evening at the City Life Community Center in Missoula, Montana, Wolf Heffelfinger played laser tag.

Wearing a pair of heavy goggles, he bobbed across the gymnasium, firing faux laser guns with both hands. It was not all that different from any other game of laser tag — except he was playing in virtual reality.

As he and a friend raced around the gym, he saw himself sprinting down the neon-lit corridors of a spacecraft. So did his friend. With virtual reality goggles strapped over their eyes, they could not see each other.

But they could chase each other in an imaginary world.

For Heffelfinger, a 48-year-old musician, entrepreneur and free spirit, the game was another step in a decadelong obsession with virtual reality. Since the arrival of the seminal Oculus headset in 2013, he has played games in virtual reality, watched movies, visited distant lands and assumed new identities.

He sees his virtual adventures as a relentless search for the dopamine rush

that comes when the technology takes him somewhere new. When he reaches the edge of what the technology can do, the rush wanes. He has put his many headsets on the shelf, where they have sat for months.

But when advances arrive, he leaps back in.

Heffelfinger's on-and-off preoccupation synchronizes with the tech industry's on-and-off affair with virtual reality, investing billions in a concept that has for several years appeared just a few steps from going mainstream without quite getting there.

Now virtual reality technology may be another step closer to a mass market, with Facebook's Mark Zuckerberg and other wellknown executives heralding the arrival of "the metaverse" — a digital world where people can communicate via virtual reality and other new and yet-to-be-invented technologies — and repeated rumors that Apple will jump into the mix.

There is a question, however, if virtual reality is truly ready for mainstream consumers.

Over the years, improvements have never quite matched expectations.

It is as if science fiction — decades of novels, movies and television about virtual reality — has set people up for perpetual disappointment.

"I want it to be part of my life, and I always think it will be," Heffelfinger said. "But the dream always ends."

As Heffelfinger prepared for his game of laser tag in the Missoula community center, a group of teenagers were playing paintball one floor below. It was

largely the same game: goggles, faux guns and pursuit around a gym. But the teenagers remained in the real world.

When asked why he did not just sign up for a game of old-fashioned paintball, Heffelfinger said playing in a world of science fiction made all the difference. He enjoyed being taken away.

"I can enter the movie," he said.

He could even be a different person. As he and his friend, John Brownell, booted up the game, called Space Pirate Arena, Heffelfinger chose a big, beefy, ostentatiously masculine avatar dressed in camouflage.

Brownell chose one that looked a lot like actress Angelina Jolie. Heffelfinger imagined himself in a dystopian world.

Heffelfinger visited Egyptian pyramids. He watched Stanley Kubrick's "2001: A Space Odyssey" in virtual reality while suspended in a float tank. He took a local police detective through a virtual re-creation of Missoula, stitched together from high-definition photos, and they came to see the technology as a way of investigating a crime scene without being there. Sometimes, on cloudy Montana days, he would disappear into virtual reality just to see the sun.

"The nature of these fantasy worlds is that they feed dopamine into the reward pathways of our brains," said Anna Lembke, a Stanford University psychiatrist and the author of "Dopamine Nation," an exploration of addiction in the modern world. "They carry the potential for addiction."

But as with other addictions, tolerances are developed.

Reaching the dopamine high gets harder.

Heffelfinger grew tired of each new headset. The experiences were repetitive.

He could not move as freely as he would like. He could not really connect with other people. Virtual reality could not quite match the vitality of the real world, and sometimes it made him sick.

He turned one headset into a plant holder and another into a piece of neckwear he wore on walks through the Montana mountains.

"It turns out that a walk outside is much more fun," he said.

But he always bought another pair of goggles.

Sometimes, he spent hundreds of dollars on headsets for friends, hoping they would join him in virtual reality. When the coronavirus pandemic hit, he saw the technology as an ideal antidote to quarantine, and for a time, it was. He could mingle with friends and strangers in an ethereal gathering place called AltspaceVR.

He visited a virtual re-creation of Burning Man, the annual bohemian art festival, with a female friend. As they strolled through the desert campsites, among the art installations, sculptures and souped-up cars and trucks, Heffelfinger got the uneasy feeling that he, a married man, was on a date with someone who was not his wife.

"We'd hung out a million times in real life, and it never felt like a date," he

said.

"She makes herself much prettier in VR."

Later, he told his wife what had happened, and as a way of making amends, he bought her a headset and invited her into virtual reality.

As they walked into a virtual cocktail bar, he heard the voice of the woman he had taken to Burning Man, and she approached them from across the room.

"Can we not go anywhere without one of your females showing up?" his wife said, before her avatar retreated into the distance and went limp. She had taken off her headset.

It was a bizarre and unexpected mix of the real and the virtual. In the past, the three of them had spent time together in the real world.

He knew that would not happen again.

Heffelfinger soon put his headset away. His Oculus sat in a green bin on top of his sauna. But then, a few months later, he stumbled onto a video about Space Pirate Arena.

"I was disgusted with VR," he said. "But now I'm back."

He will probably get bored again. Like many people who use the technology, he believes many more years will pass before it becomes an unshakable part of everyday life. And he admits that no matter how good the technology gets, he is wary of spending too much time there.

"I like going into virtual reality," he said. "But I always want to come out."