## Facing Virtual Reality Considering Some Truths From Within the Illusion By Rev. Dr. Todd F. Eklof April 28, 2019

As many of you have heard me mention before, last year I discovered the wonder of virtual reality technology, which, for me, has been mind blowing. But recently I've begun realizing today's technology is just the latest upgrade in something that's been around for a very long time. When I was a kid, for example, a VR headset was called a View-Master, those handheld toys kids inserted a thin cardboard disk into containing three-dimensional stereoscopic photographs. While peering through its lenses, users were transported into naturally illuminated scenes. Each disc contained 14 images, which could be easily switched by pulling a trigger. The most popular View-Master discs were those that helped transport users to famous tourist attractions around the world, places most would otherwise never see.

VR technology has come a long way since the View-Master, which was introduced way back in 1939. But some would argue VR goes back much further than this. In his book, *Defying Reality*, David Ewalt talks about using the technology to see the 17-thousand-year-old paintings on the walls of the Lascaux Cave in Southern France. It's "a particularly fitting way to visit," he says, "because Lascaux may be the oldest example in human history of an attempt to create a virtual world." You might not notice this just looking at pictures of its paintings, but you definitely can from inside the cave. "Just like VR headsets block the real world from view," Ewalt says, "the caverns separate a visitor from the forest above. Instead of drawing with pixels on a screen, the cave artists used pigments on rock walls;

Lascaux's creators used the topography of the caverns to create immersion: a chamber decorated with sketches of wild horses isn't just a jumble of drawings, but a herd that surrounds the viewer. They used perspective tricks to make the illustration seem three-dimensional: the body of an ox is presented in profile, but its head is turned to face the viewer. And they used the shape of the rock to give their art depth and form; for example, a twist in a wall makes a deer appear to turn away as it dashes around the corner... Maybe the caves were immersive entertainment, an attempt to tell a story in the most realistic way possible, to convey the excitement of hunting without the risk of getting gored or trampled.<sup>2</sup>

Whether with ancient paintings on cave walls, or modern art hanging on gallery walls; from Shakespeare's plays to novels that excite the mind's-eye, or photographs, TV shows, movie theatres, and today's headsets, it has always been part of human nature to create virtual

<sup>&</sup>lt;sup>1</sup> Ewalt, David M., *Defying Reality: The Inside Story of the Virtual reality Revolution*, Blue Rider Press, New York, NY, 2018, p. 16.

<sup>&</sup>lt;sup>2</sup> Ibid., p. 16 & 17

realities, as least if Ewalt is correct in saying, "all art strives to create virtual reality, to transport an audience and immerse them in a subject or story."

This sounds a lot like what psychologist Robert Kegan is getting at when he call us, "meaning makers," explaining, "what a human organism organizes is meaning," and what Holocaust survivor, Victor Frankl famously meant when he said our "search for meaning is the primary motivation in [our] life." This is why sociologist Peter Berger says we all have an "innate need for meaning," and that we, "cannot accept meaninglessness." It's also why we find meaning in the constellations, or by considering the meaning of our dreams, or contemplating the images on Tarot Cards and inkblots, or see Virgin Mary in the clouds and Jesus on a slice of toast. Doing so can often lead us toward better saneness, which is what Frankl's *logotherapy* is meant to do by helping patients find meaning in their suffering and trauma, and why Freud analyzed their dreams, and Carl Jung used Tarot cards, Runestones, and the I Ching. Finding order within the chaos, creation within the static, sense out of senselessness, helps holds us steady, gives us purpose, reveals the hidden path before us.

We make meaning by creating virtual reality inasmuch as we interpret the few bits of data we experience in a certain way. We see the world through the bias of our beliefs, the whims of our emotions, and the limitations of our senses. For these reasons, what we believe about the world is always inadequate, at best. Our feelings are subjective interpretations of it, not absolute or objective. Even our physical senses allow us to see and hear but a small bandwidth within a much larger range of wavelengths, and, even then, only those within our immediate vicinity. No wonder we want technologies that help us see more than the little bit around us, or take us places we might otherwise never go, or show what things were like in the past, what they can be like in the future, and what they are like right now on Mars, or inside a blackhole, or in some other galaxy far far away.

But sometimes our natural ability to make meaning also gets us into trouble by interpreting reality in ways that are baseless and misguided. This can lead us to embrace paranoid conspiracy theories, or cling to old patterns of belief that have been disproven and are harming us, others, and our world. The virtual realities we construct for ourselves, like race, nationality, and gender, can be delusional; delusions we often attempt to force upon others, forbidding the expression of their own realities just so we can feel more secure about ours. For this reason, Fox News is virtual reality. So is MSNBC. Rush Limbaugh is a professional dillusionist. But, in a sense, almost all news media is delusional, not because it's all false, but because it's too narrow. It has become habituated to tuning in only a small bandwidth of reality that all of us too easily mistake as the whole of reality; and a partial truth can be as misleading as an outright life. In general, the media focuses on negative news, the worst

<sup>&</sup>lt;sup>3</sup> Ibid., p. 19.

<sup>&</sup>lt;sup>4</sup> Scott, Mark S. M., *Journey Back to God: Origen on the Problem of Evil*, American Academy of Religion (AAR) and Oxford University Press, Inc., New York, NY, 2012, (Kindle Version), loc. 392.

<sup>&</sup>lt;sup>5</sup> Ibid., loc. 411.

things happening, the most frightening and troubling stories going on. As I said to someone earlier this week, the U.S. news media is like our national amygdala because it's always looking out for what's wrong. And when we mistake its narrow channel of negativity and fear, through which all its information flows, as the whole of reality, it's easy to believe we are living in a frightening and dangerous world. So fear becomes our matrix too, the viewmaster, the headset, through which we see the world, a virtual reality that leaves us blind to all the goodness and good people also in the world.

Every now and then I hear someone express concern that soon we'll all be spending more time in virtual reality than in reality. What I'm suggesting here is that we are all already spending all or time in virtual reality. For reality, as I often say, is at once the most abundant resource in the Universe and its rarest gem. Indeed, it is the only resources in the Universe. For whatever is, must be real. But reality is also impossible for us to fully comprehend. At best, like Moses tucked within the cleft of the rock to catch but a glimpse of Yahweh's backside, we use science and reason to infer what's real from the evidence it leaves behind. We can't physically observe quantum particles, but we can use accelerators to smash them together then examine the damage they etch into small plates. We don't live long enough to observe major geological epochs, but we can observe the different sedimentary layers time presses into rocks and cliffs. We can't watch animals evolve into new species, but we can learn how they came to be by looking at fossils. So, if we're genuinely eager to learn the truth, to face reality, we might be catch glimpses of it, but never in its entirety.

So the problem is not that we will soon be spending too much time in VR, but that we already are and most of us don't realize it. The real issue is that we think Virtual Reality is something new when it's all our species has ever known. The wish to impose one's own reality upon others, because it's mistaken as the whole of reality, has led to many of history's worst injustices for a very long time. This is what the Crusades, Inquisitions, heresy trials, witch burnings, McCarthyism, and the Cold War were all about, one VR program trying to overwrite another. It's what today's culture wars are all about; Liberals and Conservatives each trying to control the narrative of others so they can control the stories we tell ourselves about what is and isn't real. And I won't even go into the psychological issues our species has with cognitive dissonance; our inability, that is, to cope with conflicting ideas so. Suffice it to say, as science writer Jonah Lehrer puts it, "We all silence the cognitive dissonance through self-imposed ignorance." In short, we ignore all other possibilities in favor of our own reality.

So, at this point, I don't think VR headsets are going to cause us to be any more out of touch with reality than we already are. On the contrary, I suspect in the next few years VR is going to finally succeed in accomplishing something we've been striving for since the underground theatre of Lascaux was designed 17,000 years ago—truly transporting us to places beyond the limitations of our local realities. VR will soon make philosophers out of all of us by forcing

<sup>&</sup>lt;sup>6</sup> Lehrer, Jonah, *How We Decide*, Mariner Books edition, New York, NY, 2010, p. 207.

us to question the very nature of reality, and free us from the small world's we've fashioned for ourselves or that others have fashioned for us.

This probably sounds scary to some, and if the conservatives catch wind of it, they'll probably give up fighting illicit drugs and start a new War on Headsets. Dominators don't like having their paradigms questioned, especially by alternate realities that help better unify the world. Yes, losing our grip on reality, or, at least, what we have accepted as reality, isn't always fun, but, whether we are prepared for it or not, our reality is about to be disrupted in unprecedented ways. The status quo is about to become the static quo.

So, what I'm getting at here has more to do with epistemology, the study of knowing, and metaphysics, the study of reality, than Virtual Reality technology. But I will explain just a little about where the technology is right now, were its expected to be within the next two to five years, and the positive repercussions I suspect it will have for our species. The VR headsets you see today, that already allow us to scuba dive, fly jet airplanes, relax by campfire beneath the Northern Lights, watch sports from the floor or field of a live game, go bowling, travel the solar system, roam about the surface of Mars, or fight to survive the zombie apocalypse right in the comfort of our own home, has been available and affordable to consumers just 4 years. More amazing to me is that it also already allows us to meet and form friendships with real people from around the world, and to hang out with them in virtual spaces. There's even a Real Estate company based in Bellingham, WA that has over 600 employees and no physical buildings. It has virtual offices in a virtual town, and even has parks and a virtual soccer field for employees to use for recreation.

Augmented reality isn't as far along as VR yet, nor as affordable, but it soon will be, and when it is, it may be more revolutionary than Virtual Reality. Augmented reality blends with the reality in we're in now, allowing us to have access to people and things that appear to be with us, but materially are not. Instead of calling someone on our physical phone, for example, we look at our hand and a virtual phone appears. When calling someone, they can appear right in front of us. Coupled with the new 5G internet speed, the VR and AR graphic quality will appear to be as sharp as normal reality, and the Virtual environments we create can be enormous, allowing us to move about in them for hours. Imagine a wall of your home turning into a window to anywhere in the world. You can look out over New York City in real time; or observe a tropical beech on another continent, while experiencing the same photons there hitting your retinas here.

If wearing headsets or glasses seems cumbersome, there are also companies around today, like OTOY, that has already successfully developed 2 x 2 square-foot holographic panels that can cover a wall, creating a virtual window to the world, or cover an entire room, floor to ceiling, to create a grid that looks just like the holodeck on *Star Trek* that you can walk about in without wearing anything. Currently this technology is priced out of sight for most people,

but it does exist, and it's only a matter of time before the price drops and it becomes commonplace.

What excites me about all of this, though it probably terrifies some others, is what we experience in VR and AR will expand our understanding of reality. To grasp what I mean, it's necessary to understand there's a difference between the world as we perceive it and the world as it is. Our human senses are, again, like a radio tuner that allows us to perceive a very narrow range of a much larger spectrum. This is why Descartes famously wondered if the world outside our heads might not even exist, if it isn't a dream, or the trick of some evil demon, which led him to conclude the only thing he could be sure of was his own existence, cogito ergo sum, "I think, therefore, I am." Philosopher Bertrand Russell felt more certain there is a world that exists beyond ourselves, but also understood we are unable to truly perceive it. What we perceive, rather, is what he called, "sense data," something we come in to contact with that our minds then interpret into images we can comprehend. X-ray machines, MRIs, ultrasounds, infrared and ultraviolet lights, radar detectors, metal detectors, microscopes, and telescopes, are just a few of the technologies we have that remind us there is much more to the world than meets the eye.

What we do perceive, again, is but an interpretation of sense data we cannot fully comprehend. There's a company called Openwater, for example, that's developing wearable technology to replace multi-million-dollar MRI scanners, which currently puts the technology out of reach for most us and isn't usually covered by insurance until it's already too late. Dr. Mary Lou Jepson, the company's founder and CEO says it will be 1000 times cheaper, a million times smaller, and have a billion times better resolution. Combining the technologies of infrared light, holography, and ultrasound, it will allow us to wear clothes that interface with our computers to constantly monitor what's going on in our bodies and catch the first signs of something going awry before it becomes a big deal. For our purposes, its resolution is so high that, combined with AI, it can also be used to recreate the images in our heads, not only those we see with our eyes, but also those we dream about or simply imagine, because they all occur in the same part of the brain. In other words, as far as our brains are concerned there's no distinction between what we see with our eyes and what we imagine. Our brains are interpreting the sense data to create a virtual reality we can comprehend, though the real world is so much more.

So, in some sense, it seems fair to say all of us are sitting in Plato's cave watching shadows on the walls that we believe are all there is to the world. It's not much different than the virtual bubbles today's VR software create for us. They can provide the illusion of looking down at the entire Earth while space walking on the ISS, but, in reality, are too small to hold enough information to allow much mobility. To move about very far in VR, you have to enter into a different bubble. Yet some of us can become extremely agitated and threatened when someone enters the cave and starts questioning the reality painted on its ancient walls.

Fearing they might burst our bubble, some call them "insane" and others consider them "dangerous."

Philosophers and mystics have understood the evasive nature of reality and truth for centuries. As Taoism says, "Looked for, it can be seen; listened for, it can't be heard; reached for, it can't be grasped." Philosophers and mystics have also often been treated like quacks, at best, and silenced, banished, or executed, at worst. Today's VR technology is about to change this because, again, it will cause all of us to question the meaning of reality and the nature of truth. When we can no longer discern the difference between what is right in front of us and what only appears to be right in front of us, and understand both images are interpreted by the same regions of the brain, and that both consist of quantum particles, it will become as difficult to accept either are real as it will be to deny both aren't real.

When this happens, my hope is we will all, as a species, stop being so rigid about our beliefs, and stop forcing them on others, and that those who do will no longer have power over any of us. I hope the propaganda machines erected to control the narrative and minds of others, like Fox News, Political Correctness, and social media, or charismatic authoritarians who influence the imaginations of millions with images of fear and hate, all become meaningless to us because they no longer make sense, because we see them for what they are, small bubbles of concocted realities too small to be true.

But we don't have to own a VR headset for this to happen. As I said, our own brains have been fashioning virtual realities for thousands of years. It's what we do. All we need is to realize our creative, imaginative minds are always at play with the world. This isn't to say reality isn't objective, that it's whatever we want it to be. That kind of thinking creates another set of problems. It only means that our interpretation of reality is subjective, and we should, therefore, remain humble about what we think we know, and respectful of those who see things differently. Like most everything else in our lives, virtual reality is evolving exponentially, which means we're getting far better at it than ever before, but it's still nothing new. It's human. It's what we do. It is my hope that as we come to live in a world of dematerialized stuff and gain the power to easily transcend the restrictions of being stuck in one location, we'll use this technology the way our ancestors in the caves of Lascaux intended, to transcend the confines of our own bubbles, to realize there's a world we never imagined possible, to transport ourselves to places just as special as our own, and to make friends in places as far away as Australia, or Afghanistan, or Southeast Asia, or the Sudan, and feel about them as we do next door neighbors, because our bubble of reality has become big enough to embrace the entire world.

<sup>&</sup>lt;sup>7</sup> Mitchell, Stephen, *Tao Te Ching*, Harper & Row Publishers, New York, NY, 1988, #14.