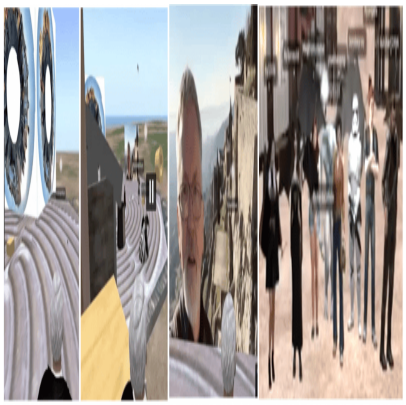


Parallel worlds

Description

default watermark

Heâ??s making few public appearances but â??the pixels of his Twitter feed continued to live in a world of alternative reality,â?• echoed the Washington Post this week about Trump. Meanwhile, *His Dark Materials* that also taps into a multiverse of realities is back on the BBC.

A helpful entry in Wikipedia under *multiverse* lists several related concepts: *parallel universes, alternate universes, quantum universes, interpenetrating dimensions, parallel dimensions, parallel worlds, parallel realities, quantum realities, alternate realities, alternate timelines, alternate dimensions* and *dimensional planes*. I would add some further variants: *planes of existence* and *hidden dimensions*.



A multitude of multiverses

There are *multiple multiverses*. In the previous post I alluded to the so-called â??hidden,â?• phenomenological â??dimensionsâ?• of our world. Hereâ??s my attempt to tease out some further distinctions.

1. Framing: Criticisms about the trump multiverse points to a plurality of points of view, different interpretations, framings, lenses, through which we each see the world according to our own preconceptions, biases and expectations. (See posts tagged interpretation.) The way I see and experience a particular situation may be different to the way you see it. A *naive* â??*multiversalityâ?•* is one in which we think anyoneâ??s view of reality is as valid as any other. Itâ??s also a relativism by which the world view of those with the most power dominate.

2. Metaphysics: The physical and the spiritual, the material and the ideal, earth and heaven, waking and dreaming, conscious and unconscious, real and imaginary â?? each constitute expressions of long standing alternative realities. Here, â??alternativeâ?• is the correct term to use, as these are alternating, binary distinctions and realms. Iâ??m enough of a structuralist to recognise the complex priorities involved in the formulation of such binaries.

The Neoplatonists articulated hierarchical orders of reality. Some states, worlds, conditions, are more real, virtuous, wise or enlightened than others. I would also group fantasy and science fiction parallel universes into the â??metaphysicalâ?• category.

3. Cosmology: This is the major scientific and philosophical discourse that promotes the idea of the *multiverse* to explain the nature and origins of the universe. One of its proponents Alexander Vilenkin writes

> â??This picture of the universe, or *multiverse*, as it is called, explains the long-standing mystery of why the constants of nature appear to be fine-tuned for the emergence of life. The reason is that intelligent observers exist only in those rare bubbles in which, by pure chance, the constants happen to be just right for life to evolve. The rest of the multiverse remains barren, but no one is there to complain about that.â?•

default watermark

Concepts of an infinite array of different universes with slightly differing laws of physics, constants, constraints and circumstances helps explain the unlikely existence of a universe, our particular universe, able to generate sentient organic life forms, especially humans.

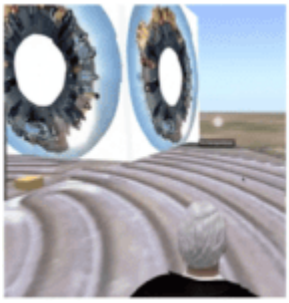
Thereâ??s a spectrum of discourses here, that range from the multiverse as an interesting thought experiment to mathematical models such as those provided by â??string theory.â?• Debates against the multiverse theory include its lack of falsifiability. How could you ever know if other universes exist, especially as these varied universes are beyond our â??cosmic horizonâ?•?

4. Geometry: This interests me the most, not least as it implicates space and representations of space in computer systems: e.g. virtual reality, mappings, transformations, projections, complexity, non-Euclidean models, video gaming, and weird immersive experiences. The *Flatland* story by Edwin Abbott provides a fascinating amalgam of geometry and story-telling.

Parallel worlds here are also spaces for which someone has to design the means of access: the HMD and other physical paraphernalia that give us entry as well as the virtual in-game portals. The challenge of parallel worlds is not just their representation but how we transition from one to the other, or how one world transforms into another, and how it involves creative computer modelling, code and the inventive use of geometry.

VR field trip

Here are some slides from a lockdown field-trip in Second Life this week. Nine of us transitioned into Second Life. We built, ran, posed for photographs and flew, while 50 others looked on.






Bibliography

- Abbott, Edwin A. 1885. *Flatland: A Romance of Many Dimensions*. Boston: Roberts Brothers
- Abbott, Edwin A., and Ladd Ehlinger. 2007. Flatland â?? the film. *YouTube*, 3 April 2012. Available online: https://www.youtube.com/watch?v=Mfglluny8Z0 (accessed 14 November 2020).
- Kessler, Glenn. 2020. Trumpâ??s day on Twitter: Living in an immaterial world. *Washington Post: Fact Checker*, 17 November. Available online: https://www.washingtonpost.com/politics/2020/11/17/trumps-day-twitter-living-an-immaterial-world/ (accessed 21 November 2020).
- Tegmark, Max. 2008. The mathematical universe. *Foundations of Physics*, (38)101-150.
- Vilenkin, Alexander, and Max Tegmark. 2011. The case for parallel universes: Why the multiverse, crazy as it sounds, is a solid scientific idea. *Scientific American*, 9 July. Available online: https://www.scientificamerican.com/article/multiverse-the-case-for-parallel-universe/ (accessed 20 November 2020).

default watermark

Category

1. Architecture

Tags

1. multiverse
2. virtual reality

Date Created
November 21, 2020
Author
rcoyne99