Everything Everywhere All at Once: Card Game universe

From Spider-Man escaping the Prowler through multiple dimensional rifts to Chinese immigrants "verse-jumping" to fight the omniversal villain Jobu Tupaki, the concept of the multiverse has made its way from quantum mechanics labs into the chatrooms of pop culture. While a Larval Universe where all Marvel characters are anthropomorphic animals might be unrealistic to some, there is some scientific credibility behind this, namely the inflationary theory of cosmology or the many-worlds theory of quantum mechanics. The popularization of the concept of the multiverse has been driven by filmmakers, authors, and even card game designers like myself who push the limits and imagine the infinite possibilities that come with the multiverse through the lens of creative medium. From using extraterrestrial navigation skills to rescue a group of scientists trapped in a subterranean lab in “X-verse,” to bypassing high-security zones to conduct a heist in “Orwellian verse” with cybersecurity skills, the game has brought forth many interdisciplinary discussions around how will multiversal awareness impact our world if it becomes a reality. It is our human nature to ponder these "what ifs," and the idea of multiverses gives us a way to imagine different choices and their outcomes. Yet, we can’t travel between these worlds even if they theoretically exist. All we can do is face the outcomes of our actions in the past and make decisions that lead us to a future that we desire.

To comprehend the multiverse, we must first understand the two fundamental pillars of modern physics that support the multiverse theory from wildly different perspectives: the inflationary theory of cosmology and the many-world interpretation of quantum mechanics. In cosmology, the inflationary theory states that the universe underwent a rapid expansion after the Big Bang. According to physicist Max Tegmark (2003), this leads to a never-ending chain

reaction that creates countless "bubbles" of space-time, which develop into other universes that continue to grow independently of each other (p. 6). Some of these bubbles are similar to ours, with supporting structures like galaxies, stars, and even life forms. In others, the rules could be radically different, with different fundamental particles, forces, or even laws of physics. In essence, the cosmological interpretation of the multiverse involves large-scale spatial and temporal processes after the Big Bang.

The quantum mechanical many-worlds interpretation, on the other hand, involves the idea of the universe constantly "splitting" into different versions when faced with quantum decisions. According to astrophysicist John Gribbin (2020), the concept of multiple universes dates back to the well-known thought experiment Schrödinger's cat, which states that if you put a cat in a box with a lethal device, the cat is simultaneously dead and alive before the box is opened. This illustrates quantum superposition and, in the context of the many-worlds interpretation, suggests that each outcome occurs in a separate parallel universe. Building on this, Bryce DeWitt further popularized the many-worlds interpretation by elaborating how every quantum event leads to a branching of the universe, thereby creating a multitude of realities where every possible outcome is realized in its own distinct universe. In DeWitt’s words (1970), "every quantum transition taking place on every star, in every galaxy, in every remote corner of the universe is splitting our local world on Earth into myriad copies of itself" (p. 155). This implies that at every fork in the road, your world splits into multiple parallel realities, each representing a different branching outcome.

Over the years, many comic books and movies have explored the ideas of multiple universes, primarily through the many-world interpretation. Marvel introduced the idea of alternate realities as early as the '60s, where in Strange Tales #103 (1962), Johnny Storm, as part of the Fantastic Four, is sent to the Fifth Dimension through teleportation. It wasn't until recently that Marvel Studios began adapting the "Marvel Multiverse" in films such as "Spider-Man: Across the Spider-Verse," which explores the collision of alternate realities. By adopting the multiverse model at its core, Marvel has been able to sustain its decade-long franchise with countless potential storylines, introduce inter-company crossovers, and experiment with extreme "what ifs," such as Marvel Zombies, without modifying the main setting.

With the multiverse being predominantly adapted into superhero films, the Oscar-winning movie 'Everything Everywhere All at Once' offers a refreshing and more relatable take on the concept by grounding it in the ordinary lives of a family. The film centers around Evelyn Wang, a middle-aged Chinese-American woman, who gets dragged into an adventure across multiple universes after a visit to the IRS with her husband, Waymond. As she juggles tax audits and family disputes, Evelyn goes on a multiversal journey to confront the destroyer of universes, Jobu Tupaki, who turns out to be a variant of her daughter Joy. Evelyn discovers her ability to 'verse jump' and temporarily acquire skills from alternate versions of herself from different universes, including worlds where she's a martial arts superstar and one where she is a renowned Hibachi chef. To gain a skill, she needs to perform a weird action to connect to the mind of her alternate self. Evelyn's exploration of her alternate life paths in the multiverse and her encounter with Jobu, who tries to instill a nihilistic crisis in her, forces her to confront deep

personal issues and make transformative choices that affect her family and the fate of the universes.

Inspired by the movie, I designed a card game that explores the limitless possibilities of the multiverse. With the concept of the many-worlds interpretation at its core, this game invites players to imagine themselves being thrown into an alternate universe and having to "survive" in such circumstances, possibly acquiring special abilities from alternate versions of themselves in different universes to help them do so. By combining creativity, storytelling, and a stroke of luck, the game offers an entertaining and light-hearted way for players to explore the intricacies and limitlessness of multiverse theory.

From designing the card game from scratch to inviting my friends to play it, many conversations involving divergent thinking and interdisciplinarity were sparked. First of all, brainstorming these scenarios required me to reimagine the world in every possible way. From the "Nuniverse," where Catholicism dominates the world, to the "Orwellian verse," where dictatorship and surveillance loom over every country, I redesigned our status quo in ways including religion, culture, technology, social structure, economics, and politics. Secondly, while some cards referenced movies, such as the quirk card "Mood skin" from Inside Out and the task card "Conduct a heist" from Money Heist, envisioning the crossover between these formerly "stand-alone" universes sparks divergent thinking. Finally, seeing my friends justify that their hot dog fingers help them win in a culinary showdown was amusing, but it also proves how highly adaptable and versatile humans are, and how we could build our own version of civilization even if the universe operates completely differently.

While exploring these universes and reflecting on our roles within them, we also find ourselves reassessing our values and beliefs. For example, the "Trillionaire" card was initially viewed as the "ace of spades," as we, in a capitalist society, often associate money with status, power, and the closest thing to omnipotence. However, this perspective shifts completely as the universe changes. In a zombie apocalypse, for instance, money becomes useless, and survivalists with their outdoor skills become invaluable. Similarly, in the "Barterverse," where currency holds no value, an artisan who can produce and trade handcrafted goods fares much better. Even in the "Orwellian verse," money can be forfeited at any time by Big Brother. These scenarios confront our conventional views on power and force us to think differently about what truly holds value in different contexts.

In conclusion, the exploration of the multiverse concept through creative mediums such as film, literature, and interactive card games not only illustrates our fascination with the limitless and divergent nature of our universe but also our collective desire to understand complex theoretical physics concepts in more tangible and relatable ways. Believe in the multiverse or not, we already use the concept as a psychological tool in our daily lives, from “Zillow porn” (the act of ogling houses on Zillow) to immersing ourselves in the world of virtual reality. It is normal for us to imagine different ways our lives could have turned out. While we might not be able to “verse-jump” or time travel anytime soon, by contemplating these different possibilities in the past, present, and future, we can put things in perspective and motivate ourselves to work toward a future that we desire.

Work cited

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