Zine Submission - Technology: The Evolution of Play

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The greatest exceptionality of video games lies in its shape shifting as a medium both as a reaction to the evolution of technologies as well as a motive driving their advancements. The gaming medium distinguishes itself from other forms of narrative and media through what Gonzilla Frasca describes as the video games element of “stimulation,” or choice (Frasca, 2014). The most “wow” factor that commits gamers to their journey and investment in the game is that the gamer has agency and power within the game. A gamer’s agency is possible only because of the technology the realm of video games enjoy and with the technological evolution of these virtual worlds gamers are becoming more and more attached. As these technologies develop into what Nell Bushnell, founder of Atari, would have considered science fiction only decades ago, the gamer’s’ relationship between the virtual world and real world is becoming perhaps dangerously blurred.

**Blast from the past:**

In order to understand the blurring line phenomenon, it is essential to understand the trajectory of video games evolution from its roots in the 1970s. But, why? Tracing the evolution of video games and their technology is the best method to trace the relationship between gamers and video games or the virtual world and how this relationship has progressed.

The history of gaming can be traced back to 3500 B.C or to an amusement park with Bushell. Both are accurate answers; both give a glimpse into the evolution of play and its technology. Speaking in technicalities, the strict development of video games and their consoles can be divided into eight generations beginning in the first generation of 1967-1975 encompasses *Magnavox Odyssey* and *Pong* system and ending in the most recent 2020 generation of *CyberPunk 2077*. When comparing the *Pong*, the first commercially successful video game, in the arcade setting with the gaming industry’s massive releases today, it becomes apparent video game development has transformed and with it has the relationship between gamer and game.

Over the development of play and then the more specific subsection of play “video games”, it can be irrefutably discerned that gamers or players have gained more and more momentum and agency within the game. It can even be said that while board games and chess once dictated the player, now the player or gamer dictates the game and its output like in games like *Unit Dawn*, a 2015 interactive drama horror video game. Gonzalo Frasca illustrates this in more depth in “Videogames of the Oppressed” as he explains that videogames “unlike narrative, which is constituted by a fixed series of actions and descriptions, video games need the active content” (Frasca, 2014). In turn, a video game’s advancement in the course of technological evolutions can be measured by how well of a job the developers and game design team does at making the games interactive. The latest games are those that offer space in a game allowing the gamer to move and control the virtual world. The ultimate goal of game and tech is to create a stimulation that appears effortless and allows the gamer to take hold of his/her avatar, their actions, choices and so on. In an interview earlier this April with a gamer and current employee of the industry in Lebanon, Mira Chami, she exclaimed, “the best games are the ones that make you feel like **you** are in the game.”

**The Avatar:Technology Fusing the Real & the Virtual:**

The billion dollar gaming industry is gaining more and more hype with these developments. Yet, there remains an aspect of this development that mediates the gamer and the game validating the virtual world not as a mere entertainment dimension of the real world but as a universe parallel to it.

Gamer interactivity technologies have allowed developers to more or less transcend space through avatars. Many games today focus on the “avatar as the mediating device between real and virtual spaces” (Apperley and Clemens, 2017). The avatar technologies allow the gamer to connect with the game at a deeper level as his/her spaces of virtual realities vs real world realities becomes blurred on both the levels of space and identity. In games such as *Pokemon GO*, which writer JV Chamary describes as one of the “most successful mobile games of all time,” the AR technology that allows for the avatar’s immersion in real life spaces breaks the boundary that was traditionally held between the gamer’s real life and his/her virtual life. This goes to feed into how technology has redefined the gamer’s relationship with the spaces of the game.

As for the other aspect of identity, the technologies of avatars have allowed for the gamer to be more fully present in the game. It is almost as if the only thing missing is for the gamer to feel the physical emotions of his/her avatar. A new technology introduced earlier this year allows for facial recognition and 3D scanning systems to recreate a gamer’s likeness in the virtual world. This form of technology helps integrate so many forms of identity into the virtual world that was once monopolized by the avatar of the white heterosexual protagonist. Simultaneously, the Intel RealSense are working on allowing game developers to make video games that can read a gamer’s emotions by scanning over 70 different points on an individual’s face. Not to sound too cheesy, but this is just the tip of the iceberg of gaming technologies.

The avatar technologies are revolutionizing what it means to game; the gamer now has an identity that can penetrate through spaces of virtual and real world. Gamers today have agency and abilities to represent themselves and their identities to connect to different spaces and even to emotionally communicate with a game in real time. In this sense, “reality is broken. Game designers can fix it” (McGonigal, 2010). The relationship between gamer and game has come a long way from *Pac Man*  and so has the reality in the real world. The advancements are beautiful but also frightening because if the gamer’s relationship with the game has changed, then what does that mean for his/her relationship with the real world.

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