Representation in video games:

Breaking the glass ceiling through

Universal Design

Cultural bias, stereotypes, and marginalization

Anthony CHON LANE

Universal Design DGMD E-41

Introduction

In the 21st century, gaming has become one of humanity's favorite entertainment mediums. There are now over 3 billion video game players worldwide (DFC Intelligence, 2020). Every day, people from all over the world play video games at home or on a mobile device. From popularizing new jargon to redefining lifestyles, the gaming industry is thriving in the context of a digitally connected world. In 2020 alone, analysts expect the industry to generate revenues of $159.3 billion despite the global pandemic (Newzoo, 2020). This pervasiveness highlights how much influence large video game publishers have gained and how the industry continues to shape popular culture.

While game developers enjoy ongoing commercial success, industry insiders and gamers from different backgrounds are raising their voices as many still struggle to feel included when playing games. From launching women's advocacy groups to supporting the *Black Lives Matter* movement, there has been a resurgence of open discussions and debates on inclusion and diversity within the industry.

However, the game development of today's blockbusters and AAA games remains concentrated within a small pool of industry veterans who are predominantly white men (International Game Developers Association, 2019). This imbalance of power is shaping a unique workplace culture leading to systematic misrepresentation.

The implications are profound. In the United States, 46% of the total players are female gamers (Statista, 2020). Yet, stereotypes portrayed in video games continue to reinforce cultural and gender bias through the conditioning of a vast audience, triggering psychological distress, and cyberbullying. Recently, the "Gamergate" exposed to the world the toxic culture

of gaming (New York Times, 2014). How can game creators be more aware of their own biases and limitations when developing new games? How to encourage the next generation of game developers to increase in-game representation and break the glass ceiling?

In this paper, I will discuss how Universal Design can guide game creators in designing more inclusive games to address the representation gap. I will propose recommendations based on the analysis and potential application of Universal Design principles. Finally, I will examine how designing more inclusive games can help unlock further value for the gaming industry, its ecosystem, and society at large.

Game Development: A disconnect from audiences

Unfair play for minorities

Misrepresentation has been prevalent in the video game industry. Video games have reinforced generalization and pre-conceived perceptions about certain groups through oversimplification and stereotypes (Mou & Peng, 2009).

With female representation, we often stereotype women in video games in pejorative roles such as sexual objects or the damsel in distress (Wikipedia). Some video games such as *Grand Theft Auto V* have been notorious for inciting violence against women in their gameplay to the point of being commercially banned (BBC, 2014). This is a telling sign of the ongoing disconnection between game developers and female, one of the fastest-growing consumer segments. For instance, the number of women represented in games showcased in events like E3, one of the largest gaming events in the industry, has remained low for years. Out of the 76 games featured at the event in 2019, only seven of them centered on female heroes (Wired, 2019).

Racial misrepresentation in video games has also been at the forefront of public discourse. Recent events such as the *Black Lives Matter* movement have prompted some large video game publishers to issue public statements to show their support to the cause. While we could perceive it as a positive action, it is not resolving the recurring patterns at the source (TechCrunch, 2020). Central characters in video games still lack the racial or color diversity of their players. Quartz reports that in less than 10 years, roughly 57% of video game players in the US between the ages of 6 and 29 will be people of color. (Quartz, 2018). Very few games have stories centered on characters that represent them. There is still a cultural

hegemony of the stereotyped West versus the Evil, in which it often depicts other races as being prone to violence or less intelligent. Popular game franchises like *Call of Duty* have perpetuated the media perception that all Muslims are terrorists (Newsweek, 2014).

A white male-dominated world

If we look at the gaming industry's current talent pool, it is easy to see why there has been a strong misrepresentation. Statistically, the average game developer living in the West is white, heterosexual, and male. According to the International Game Developers Association, 24% of game developers are women and only 2% identify as Black (International Game Developers Association, 2019). The lack of diversity in video game companies has created workplaces where being part of "the good old white boys' club" is an advantage. Women may face challenges to display their femininity while male players enjoy certain invisible privileges inside of gaming culture as a dominant group (Polygon, 2014). This imbalance has led to a lack of multicultural awareness and insensitive practices across the board. Recently, French game publisher Ubisoft had to apologize not only for workplace misconduct but also the usage of a raised black fist similar to the *Black Lives Matter* symbol with that of a terrorist organization in their latest release *Tom Clancy's Elite Squad* (NME, 2020).

Under-representation represents a vicious circle across the entire industry. There are still too few gaming industry opportunities for women and people of different backgrounds. And if this population is less familiar and represented in the sector, they are less likely to apply for jobs. To break the cycle, video game companies need to challenge the dominant culture by attracting more young female talents and people of color. They should play an active role in giving more exposure at school age to increase the diversity of graduates entering the industry workforce.

A distorted vision for game creators

From a Game Development aspect, the case for better cultural and gender representation remains challenging, especially when everyone shares a similar background. The gaming industry has spent years catering to a demographic of young male players who indulge in threatening and abusive behaviors via social media and gaming forums. From a position of privilege, the same players are now game developers who often assume that their experience is universal and put their creative attention on making well-written and fun to play games. This does not prevent unintentional bias from being ingrained in games.

Besides, video game companies seek to be profitable. Game creators dismiss the case for more representation early on, to focus on young men as their best bet. It is more comfortable to make what they know by opting for white male protagonists as "the default" choice. The industry has never really moved away from that.

Games themselves are also gendered. Some game genres such as shooting games are traditionally more masculine than other types of games (Eden, Bowman, & Maloney, 2009). Core games, which are more complex and competitive, suffer from a lack of inclusion from the players themselves. The more complex the game is, the higher the chance of misrepresentation there is.

Creating games everyone enjoys

Embracing complexity in Game Development

With the advancement of digital tools and technology, it has never been easier to create games. Yet, making high-quality video games is complex with the interplay of technology, creativity, and design. Game artists and designers must deliver a high level of detail to meet today's players' expectations in terms of graphics. It could take over a hundred people to develop a single video game with thousands of hours of crunching to fix bugs and release it on time. The different layers of complexity in Game Development also explain why making inclusive games has never been an immediate priority for video game creators.

From pre-production to production, Universal Design can address the unique challenges of Game Development. By incorporating appropriate features and providing a wider range of options for all players through the lens of Universal Design. For example, British game developer Lionhead could have made *Fable 3* a more delightful experience if their development team adopted an inclusive design approach. Lionhead catered to new players instead of high-skilled players by limiting functionality and making it a less personalized experience (GamesBeat, 2010). While there has been a significant topic of interest in the research of accessibility, Universal Design can guide game creators in designing better games that are not only more welcoming but also representative of their audiences.

Bridging the gap with Universal Design

Ideally, video game companies should design games that appeal to people from all walks of life. The National Disability Authority defines Universal Design as "the design and composition of an environment so that it can be accessed, understood and used to the greatest extent possible by all people regardless of their age, size, ability or disability" (Centre for Excellence in Universal Design, 2005). If game creators put more attention to the practice of Universal Design over just designing for simple accessibility, they would avoid designing games solely to please one audience (GamesBeat, 2010).

Making inclusive games implies giving any players the ability to join in and be more visible on the screen. There are several areas in which Universal Design principles can help game developers address the representation gap. Adding a cast of diverse characters is not how to develop an inclusive game; it includes mechanics, messaging, and user experience designed from the ground up to make it universally accessible (Filament Games, 2019). Game producers, developers, and other stakeholders must collaborate throughout the game development process to bring an intentional user-centered design to the core (Mack, 2020). From character design to environment design to level design, a Game Development team must consider all aspects of gameplay and where to include better representation, and define specific inclusive design goals to minimize visceral violence, hyper-sexualization, and wholesale stereotypes (Gamasutra, 2013). Game developers should intentionally give players from diverse backgrounds a way to express themselves. By empowering different player groups to have a voice, minorities such as female or black gamers can feel less marginalized and oppressed. This includes making sure they design content compatible with different cultural values. Seeing a symbol, person, or gesture that is inadequate can knock out the experience of having fun and being immersed. Finally, game developers should also

incorporate mechanisms that promote collaborative play without harming others, and not just competitive play that removes the fun from less dominant groups. Promoting friendly gameplay without removing the fun aspect of game difficulty is a delicate balance that will enrich the overall user experience.

Towards Inclusive Game Design

While there is a limited understanding of the value of Universal Design versus just making a game accessible, some video games have received excellent reviews because every user has found something for them. In recent years, diversity has been a hot topic and more companies are taking risks to appear more inclusive when developing games. For example, Naughty Dog's *Uncharted: The Lost Legacy,* which features a strong female lead, received praise for telling a female story extremely well in a traditionally male-dominated genre (Mashable, 2017). Developers like Culture Shock Games made sure they took into account different demographics as part of their creative process with *We Are Chicago* (Mashable, 2018). Respawn Entertainment successfully gave more representation to characters rarely portrayed in a positive light with its interstellar blockbuster *Apex Legends* (Evening Standard, 2020). And BioWare's *Dragon Age: Inquisition* illustrates one of the first transgender representations in AAA video games when it introduced the character *Krem*.

With the adoption of inclusive game design, video game developers can elevate the quality of their game art production and character features from a greater range of skin tones to more expressive gender-agnostic clothing. Universal Design offers the video game industry an opportunity to deepen the content while adopting a long-term perspective, thereby enhancing game longevity.

Developing responsibly: An imperative for game creators

A collective consciousness for Game Development

As video games are getting more ingrained in the digital economy and closer to reality, it is important to address how they have an empowering and emotional influence on the lives of players. Like movies and literature, video games are a powerful medium that can shape perceptions including the established sociocultural narratives within our society (Mack, 2020). In a digitally connected world, developers can easily get their games in the hands of players through online platforms and have become a part of everyone's childhood and teenage life. From this stance, the lack of representation in Game Development can pose serious issues for young players. Plenty of games can isolate people with different backgrounds if they feel excluded or not considered in the culture they belong to.

Today, major video game companies have the means to take responsibility for developing inclusive games more consciously. Profitability remains a significant factor, and video game creators and leaders are often hesitant to take cultural risks by designing games that deviate from the perceived mainstream. Game developers explore new concepts from their lens– primarily for the sake of releasing games that can sell. This mindset has to change for the next generation of players to have a healthy future. Universal Design is one way to address the root cause and have deeper empathy for the players who take cultural cues and influences from games. With the resurgence of open discussions on inclusion and diversity, the commercial success of video game publishers also depends on how game creators can adapt their content to other cultures and make sure nothing in it is going to be problematic.

Paving the way for the next generation of gamers

Video games play an important role in helping us form a sense of ourselves because they are pervasive and powerful (Guardian, 2017). People play games to connect with others and to explore a part of themselves. Whether it is identity, sexuality, or gender, they provide a place for escapism where people can have an intimate and connection between them and the cultural worlds they explore. For this reason, implicit bias and stereotypes can have serious effects on how parents, educators, and peers support or discourage women and other minorities from pursuing a career in gaming.

Several grass-roots initiatives are challenging the status quo and pushing further the boundaries of Game Development in the industry. For instance, non-profit organizations like *Girls Who Code* empower young girls by teaching how to code and potentially inspire them to seek jobs as programmers (Sammet & Kekelis, 2016). Similarly, Microsoft Xbox is sponsoring *Girls Make Games*, a three-week summer camp dedicated to teaching young women how to create video games. *Black Girl Gamers* is an online community that rallies black female gamers for better representation (TechRadar, 2020). Communities like Smash Sisters hosts *Super Smash Bros* tournaments for women around the country, encouraging women to compete in an otherwise male-dominated space. Recently, the Association for UK Interactive Entertainment launched *Raise the Game*, an initiative that invites 200 video game companies to take the pledge on increasing gender diversity (gamesindustry.biz, 2020).

While inclusion in the gaming industry landscape is improving, more work needs to be done to empower video game creators and stakeholders to develop games more consciously to address misrepresentations at large and create positive experiences for everyone.

Conclusion

In this paper, I explored the state of misrepresentation in video games and advocated for the application of Universal Design principles for game developers to bridge the representation gap and approach the end-to-end game development process more inclusively and responsibly.

Although there is good momentum on the topic of inclusion and diversity within the video game industry, there is still a lack of impetus to change the prevailing mindset of powerful industry veterans and truly impart a sense of emergency. With the continuous advancement of technology, the question of inclusive game design will remain as video game companies are increasingly leveraging Artificial Intelligence. If we do not equip game developers with the right tools and mindset to overcome their own bias, the same misrepresentation mistakes from the past will repeat as they will embed the same bias in technology (New York Times, 2019).

This brings a broader set of questions. How can video game creators develop inclusive games both sustainably and profitably? How could they break the cycle of under-representation to have broader access to diverse and unique perspectives?

The video game industry does not have to always suffer from the bad image portrayed in the mainstream media news. Universal Design can provide an answer to addressing this gap in a more systematic way. For instance, industry practitioners could benefit from a universal framework; a set of guidelines to ensure positive and fair representations are captured throughout the entire game development process. In a nutshell, adopting Universal Design principles means ensuring game creators' vision is accessible to as many people in the world as possible.

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