

Abstract

Most publications of emergent immersive VR technology cater to first-person shooter (FPS) experiences, which illustrates a Western obsession with gun-based aggressive fantasies in VR prototypes. In the realm of gaming, making FPS games in VR appears to be the natural next step in the gaming's evolution due to the popularity of the genre in current gaming culture. But for the realm of VR, this obsession could prove problematic, considering the potential of the technology for work outside of the genre. The mechanics behind gunplay are easily understood by most people in Western cultures, due to the predisposition of both adults and children to enjoy fantasies of fighting with guns. In Western cultures, people like living out these fantasies to feel more control over their own lives, which often stems from anxiety pertaining to the real world. This anxiety also coaxes people to find forms of escape and take out aggression in competitive games. In Eastern cultures, Japan specifically, there exists a different relationship between the people, technology, and violence, and coincidentally, FPS games show less prominence in Japanese gaming culture. By understanding this relationship exhibited in Eastern culture versus Western, content creators can begin to create compelling experiences in immersive VR.

Keywords: first person shooters, physical immersion, digital media, virtual reality, theater, mecha, anime, kaiju, cognitive science, neuroscience, accessibility

Intro

- *Address specific aspects of Western culture*
- *Address specific aspects of Eastern culture that counter western*
- *Address VR not as just the current tech, but the idea of "escape into virtual world"*
- *First person shooters in east versus west*
- *Introduce idea of investigating Kaiju films and giant robot shows*
- *Most FPS from Japan are mech combat games*
- *These two genres indicate themes and ideals held within the relationship Japanese people have with technology and violence.*
- *Aggression generated from anxiety in the modern world is natural, but finding outlets for that aggression can be done in a more graceful and satisfying way.*
- *By considering the eastern perspective towards technology, fantasy, and violence, as well as the western, immersive VR can move in a more holistically compelling direction.*

Significance of topic

- *Critics of VR do not hesitate to question leaving the "real" reality to play in a computer-rendered "fake" reality, especially when the most compelling examples shown so far have been limited to 360 degree journalism and games where you sit in a chair*

- *A lot of people don't like the "hype" of VR, that popular media is looking towards VR, and that VR takes people out of physical reality*
- *In US, there's an even split between gun advocates (47%) and anti-gun (50%), so media with gunplay is a very politically charged topic, despite its realm in entertainment media.*
- *Current state of VR involves staring at a glowing screen, just like normal video games. Attempts at making games more immersive and more active are dictated by the requirements of a fps game*
- *Also current state of VR is single player. For multiplayer experiences to happen, more attention should be paid towards games that are not just FPS*
 - *Though this is inherently a problem with multiplayer games in the first person perspective, because few if any non-shooter / non violent first-person competitive games exist (some first person sword combat games...)*
- *Unlocking what makes interactive VR more compelling outside of violent competition could open the door for really interesting VR game between human players.*
- *Also allow more focus into what physical peripherals should be engineered need to be made to facilitate compelling, immersive VR games.*
- *Within this topic also holds information about making VR more inviting to current nay-sayers. What can make VR more of a "legitimate" medium for outstanding work, and maybe something that can be a shared experience?*

Definitions and clarifications

- *For the course of this paper, these terms will carry the given meanings to avoid confusion.*
- *Virtual reality: any kind of artificially created fantasy that disconnects from the real world.*
 - *Not limited to VR headsets like Oculus or what have you. Can include traditional video games, theater, cinema, literature, day dreaming*
- *Immersion: the feeling a participant achieves in an experience when they feel like they are actually in the experience, that they are the avatar. As immersion increases, so does feeling of control over the avatar, and the divide between real and virtual begins to fade.*
- *Fantasy: a means of escape from real life that one finds entertaining or relieving.*
- *Experience: in this context, what the participant takes part in when inside VR, be it a game, art piece, cinema, etc and how it affects the participant emotionally, mentally and physically.*
- *Game: a set of mechanics given to a player meant to fulfill an objective, which should result in interesting dynamics that entices the player to keep trying to fulfill the objective.*

Discuss fields and domains of topic and why I chose them

- *Why pick on FPS genre?*

- *Very prevalent in Western popular culture*
- *Is and has been the definitive “video game”*
- *Because of its significant placement in culture, it will likely affect the next steps in VR development.*
- *VR is “first person.” Whenever VR becomes “multiplayer,” people will want competition, and the current example of first-person competitive games are predominantly FPSs*
- *Figuring out why FPS is successful in some places and not in others can indicate the pleasant and unpleasant elements of the genre and how they can be applied to something even more compelling, exciting, and immersive.*
- *Why talk about games?*
 - *Immersive VR is inherently interactive digital media from first person perspective.*
 - *The only current analog for interactive digital media is video games, with the exception of limited number of art-house demos.*
 - *Knowing why video games are compelling can lead to knowing how to make any interactive VR experiences compelling. What does the viewer do in the virtual world? What brings them back?*
 - *Eventually people will want to experience immersive VR with other people at the same time, so one must know what do people do in the VR world together.*
 - *The typical reason for wanting to take part in entertaining is escape.*
- *Why talk about film and literature?*
 - *VR invokes fantasy, and fantasy is often dictated by film.*
 - *Film and literature have had a huge impact on why we like the things we do. When asking someone “why they play an FPS,” a reply such as “because they’re awesome” is not an acceptable answer; there must be something else. This something else is cultural influence, likely from books or movies.*
- *Why talk specifically about kaiju films and mecha anime?*
 - *The end goal is finding what makes certain fantasies compelling, especially non gun-related fantasies.*
 - *Non-gun related aggressive fantasies typically come from an eastern perspective, but to have some holistic findings, we need something that is accessible to both the east and west.*
 - *Godzilla is definitively Japanese, but it’s also an internationally recognized character in the modern zeitgeist. Truly one of the first pieces of media to bridge the national gap, and only a decade after WWII.*
 - *Godzilla also encapsulates the qualities of aggressive, violent fantasies, but without celebrating warfare or gunplay, and even condemning it.*
 - *Several mecha anime follow the same suit. Super popular internationally, and actively condemns warfare and senseless killing by guns. And still manages to satisfy aggressive fantasies.*

- *The subject matter of Kaiju and mecha culture also presents a challenging endeavor in immersive VR that would combat real-world anxiety with an over-the-top experience without gunplay, if done correctly.*
- *Why talk about cognitive neuroscience?*
 - *Aside from cultural influences on aggressive fantasies, there are some biological reasons for our behavior.*
 - *Knowing what goes on in the brain during gameplay can indicate what should be included to make VR more immersive in the most intelligent way.*
 - *Cultural analysis will indicate the aesthetic and dynamic qualities of compelling immersive VR, but the neuroscience will indicate the best mechanics.*
- *Why talk about the differences in western and eastern perspective regarding aggressive fantasies, and why look at only America and Japan?*
 - *Even though Japan has westernized significantly over the past century, there is still a drastic cultural divide between the US and Japan.*
 - *Because this an investigation of culture in search of a holistic approach, both perspectives must be considered.*
 - *This balancing act is critical because of the amount of focus the investigation puts on anime and kaiju films, predominantly Japanese genres.*
 - *Because FPS is popular in US and not Japan, knowing specifically the reasons for the disparity will show how gamers in each country deal with aggressive fantasies, which will indicate the good and bad of FPS as a genre and why it's not the best route for the evolution of immersive VR.*
 - *I look at America and Japan as analogs of West and East for the sake of efficient investigation, and because they are the primary players in creating technology and media that falls within the realm of VR.*

Case studies of current applications in immersive VR

- **The Void**
 - kind of like laser tag, but the environment is virtual reality projected onto reality through VR headsets.
 - Clearly FPS inspired
 - Support multiple people
 - “Mixed reality”
- **HTC Vive demos**
 - Allow player to walk around in real space and use hands to manipulate objects by using a controller
 - Single-player
 - Most demos not shooter-based, very mundane activities
- **Birdly**
 - Example of VR “experience” that’s immersive and doesn’t involve violence

- Not really a game, definitely not competitive, and doesn't address aggressive fantasies.
- Possibility of VR as potential for great game experiences
- Project Morpheus

Discuss Western (American) gun culture and relationship with violence/aggressive media

- *FPS originated in America. Why?*
- *History*
 - *History of guns tied to history of America*
 - *Romanticized ideals of "wild west," frontiers*
 - *Enlightenment -> individuality, more respect for the person than the group*
 - *Manifest Destiny, frontiers, and "Wild West"*
 - *The American man must be self sufficient and able to defend themselves and their cause.*
 - *Industrial revolution diminished the value of the individual, which was one of the core values of American liberty*
 - *The gun seen as the tool to aid in self-sufficiency and self defense and turn the everyman into a hero*
 - *Pro-war*
 - *Post-WWII America new military world power; military prowess seen as product of 2nd amendment and gun culture*
 - *Men in less "intense" societal roles (desk jobs etc), feel less in control of their destiny, more dependent on the group.*
 - *Recent events in gun violence has caused divide in gun advocacy, but playing FPS games does not imply gun advocacy or vice versa*
 - *Also no connection between FPS games and gun violence*
- *Film:*
 - *Westerns enforce romantic tradition of the cowboy, the drifter, the gunslinger*
 - *WWII movies maintain ideals of war heroics and the courage and risk the individual goes through in combat.*
 - *Escapism -> leave mundane world behind for a moment to witness heroics, excitement, drama not available in real life.*
 - *Fascination with destruction, further destruction thwarted by the heroics of a man with a gun*
 - *Disasters result of evil agents, and the evil agents are apprehended by a hero with a gun*
- *Video games:*
 - *Video games restore some sense of control to individual lives*
 - *First person perspective makes the player the character, and the character's actions are the player's actions (immersion in a virtual world), and the gun restored to its role as a tool to make the everyman into a hero.*
 - *Gun is a tool that can be discarded for a better one.*

- *Multiplayer satisfies the individual need to be better than other individuals inherent in aggressive competition. The virtual violence in these competitive environments evokes the ideals of self defense against others, that the individual is more capable of keeping themselves alive than the others against him.*
- *In all games, players make decisions, a type of control. In FPS, the decisions must be made quickly and frequently.*
- *Strive to make the games look as real as possible. War games want to be gritty and visceral. Immersion is attributed to how real the game experience is.*
- ...

Discuss Eastern perspective on violent conflict

- *Why does Japan not make FPS, and why are American FPS games not popular?*
- *History*
 - *Ancient warrior society focused on strengthening the body and, most importantly, the spirit (Shinto and Buddhism)*
 - *Strong village/community dynamic, the group of greater importance than the individual*
 - *Simply, Japan much older than America, and predates the gun. America's upbringing and identity tied so closely to the gun whereas in Japan the gun is less important. Instead, focus is on the sword.*
 - *As an analog to the gun, sword is less of a tool but actually an extension of the self. Not disposable weapon, but an instrument to transmit skill and personal energy.*
 - *Ancient forms of theater and inventions aim to perfectly mimic nature, to harmonize and pay homage to nature, not to dominate it.*
 - *19th century, Western powers began imperialist engagements with Asian entities. American vessels used force to open up trade with Japan. As result, Japan underwent massive changes in its military and economy to prevent Western domination.*
 - *By forming a strong, modern military, they soon had the capability to force colonies on neighboring countries, becoming imperialist themselves.*
 - *World War II happens...*
 - *US much more technologically advanced, lose war because of it.*
 - *Massive destruction due to violent pursuits and advanced technology affects Japanese culture for the rest of 20th century.*
 - *Seek to always be technologically advanced, but in civilian tech*
 - *Anti-war, anti nuclear proliferation*
- *Film*
 - *Seven Samurai*
 - *Godzilla franchise*
 - *Science and technology as something to respect, but not cherish*

- *Double edged sword: science can protect humanity, but at terrible cost*
- *Anime*
 - *Mecha genre-- Gundam, Evangelion, Gurren Lagann*
 - *Dragonball*
 - *Bleach*
 - *Emphasis on spiritual power and focus, training*
 - *Weapons as extensions of the self, or the self is the weapon*
- *Video games*
 - *JRPG genre*
 - *Fighting games*
 - *Same common themes as anime*
 - *Focus on story rather than gameplay (JRPG)*
 - *Does not focus on making realistic depictions of reality, but instead makes stylistic renderings and over-the-top super powered abilities and visuals.*
 - *Immersion comes from storytelling, character development, world-building, and collectibles.*
 - *Rarely is the player character the player. The player instead controls an avatar that is not supposed to be the player. The player is the puppet master instead of the puppet itself.*

Kaiju Culture

- Godzilla franchise inspired by Japan's history with nuclear weapons, which reflected older ideals of man cooperating with nature, not dominating nature.
- Godzilla movies were produced using techniques borrowed from kabuki, noh, and bunraku, honoring traditional plot structure and visual performance.
- Godzilla remains popular in the current zeitgeist despite its age and quality of production.
- Godzilla directly influenced by American monster film *The Beast from 20,000 Fathoms*, a movie that preceded it.
- Because Godzilla had such a chilling message, while being particularly entertaining, and satisfies aggressive fantasy.
- These films were successful in regards to special effects because there wasn't a disconnect between the acting agent, the man in the rubber suit, and the environment. It felt more believable, and more comfortable to audiences,

Immersion in VR

- Inherently a first person experience. Whether a game or not, the viewer feels personally involved in the experience and beings to feel physically embodied in the media.
- There is a sense of presence, that the figures in the world exist in the same world as the viewer.

- This presence in a VR environment can create a somewhat uncomfortable disconnection, because the entity is there in virtual space, but cannot truly be felt physically.
- Further compounded by motion. There's a disconnect when the viewer moves in virtual space, but is stationary in physical space, causing nausea in many participants.
- FPS solves many of these problems. To complete the goal of a shooter, you do not have to physically contact the opponent. You also do not have to travel to the opponent to complete the task.
- The gun also connects the viewer to a tangible tool. This is what physically connects the viewer to the virtual world, helping eliminate an uncomfortable disconnection. It grounds the viewer.
- HTC Vive makes the tool more general. The viewer still comes in contact with physical tools that translate to tools in the virtual world, or simply hands.
- The controllers form resembles the grip of a gun, complete with trigger.