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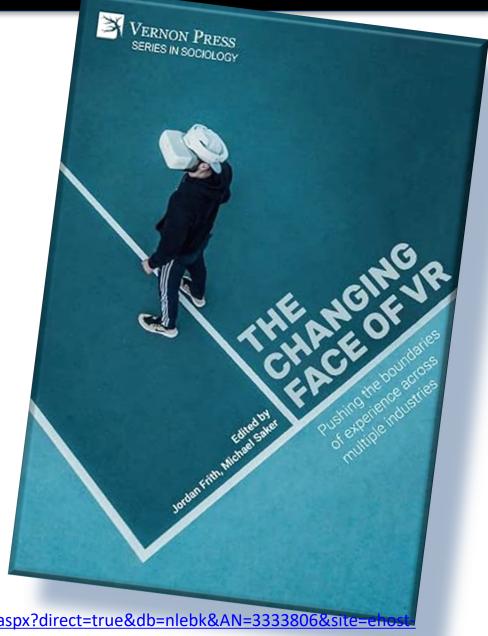
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Chapter in New VR Book

 Chapter 2: VR Storytelling for Social Justice and the Ethics of Playing Black Bodies.

Abstract: Using Augusto Boal's Theatre of the Oppressed role play principles of a "spectactor" and joker figure as a performative lens, I analyse VR storytelling experiences by artists of colour that confront social justice issues and educate on Civil Rights history using a variety of platforms from 360 video to room-scale VR installations. I argue that narrative framing to cast a spect-actor into the body illusion of a protagonist of colour can be done ethically, and role play with NPCs designed as joker figures representing the oppressed community can promote empathic understanding.



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Introduction

- This paper relates to my design work on the Mitchelville XR Tour and navigates how to collaborate on Black histories that have been actively suppressed.
- Seeks to answer the question: Why as a white man am I interested in creating educational media about Black history and culture, and can I design interactive media scenes with Black historical characters ethically?
- Begins to develop and apply XR design frameworks that draw from empathic theatre practices such as Augusto Boal's *Theatre of the Oppressed*.
- Analyzes related work by artists of color to find a best-practices for framing Black narratives and representing playable Black characters.
- Refutes critics of framing VR as an "empathy machine" on the technical and ethical issues.

Mitchelville Historical Tour Project

 NEH & Epic Games Megagrant Funded Project.

https://tophermaraffi.com/2020/06/08/mitchelville-ar-tour/

- Free augmented reality tour app for mobile phones, and other virtual-mixed reality headset experiences.
- Visualize Mitchelville scenes and related narratives of emancipation and Civil Rights in Beaufort County.
- Collaborate with Gullah community leaders, artists, and experts to develop an immersive experience that will be accessible and sustainable.











Suppressed Stories of the Reconstruction Era

"...I'd venture that few American historical periods are more relevant to understanding our contemporary racial politics than Reconstruction."

Dr Henry Louis Gates Jr., Stony the Road:
 Reconstruction, White Supremacy, and the Rise of
 Jim Crow

http://www.reconstruction360.org/

 How can we use VR to time-travel to historical places of emancipation and freedom, where travelers can meet heroes in the black community and experience their stories in their own words?

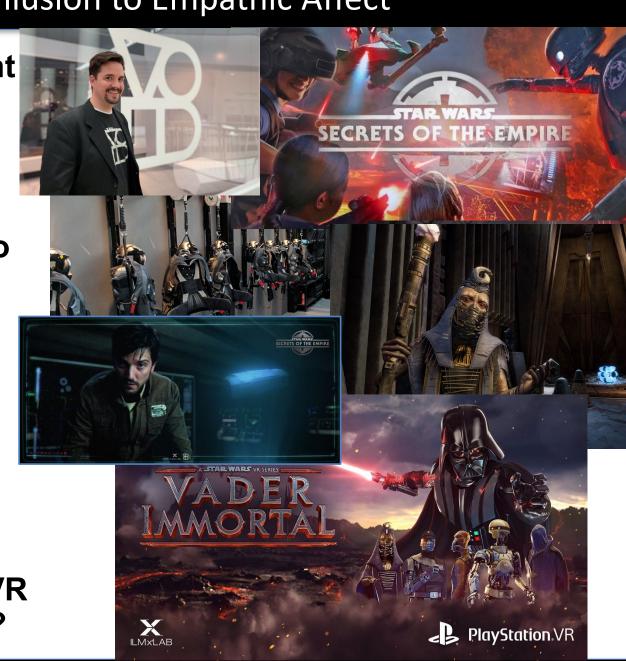


From VR as Perceptual Illusion to Empathic Affect

- The most impressive VR entertainment experiences can transport you to impossible storytelling worlds.
- The VOID VR theaters used participatory stage magic principles to create full-body perceptual illusions.

https://www.youtube.com/watch?v=xcHmS48nN48

- As themed entertainment, they incorporated multimodal design principles from theatre, cinema, and games.
- Can we apply a similar design approach to more serious themes in VR to create empathy for social injustice?



Evolution of Mediated Empathy Machines

 White XR designer Chris Milk was criticized for claiming VR was the "ultimate empathy machine" (2015), and film critic Roger Ebert claimed the same title for movies ten years earlier, but I argue that the original empathy machine was theatre.

https://www.youtube.com/watch?v=iXHil1TPxvA

Since the 1970s, Theatre of the Oppressed founder Augusto Boal wrote extensively about empathy as a stage mechanism and designed improv role play games to move spectators into the center of a scene focused on confronting injustice.



Serious Play: The Mechanics of Empathic Theatre

 Boal's participatory theatre method cast community members into a protagonist "spect-actor" role to safely act out an improvised scene of oppression, while a "joker" that represented the community as a whole would narrate and contextualize the action.

(Boal 1992)

- Boal's theatre dynamics functioned like another 1970s improv game, *Dungeons & Dragons*, where players used LARP to act out fantasy scenes directed by a dungeon master.
- Game designer Gonzalo Frasca suggested that Boal's method could be used to develop a Games of the Oppressed (2004), but his ludological approach did not consider narrative player/NPC interaction as a viable application for the spect-actor and joker concepts.



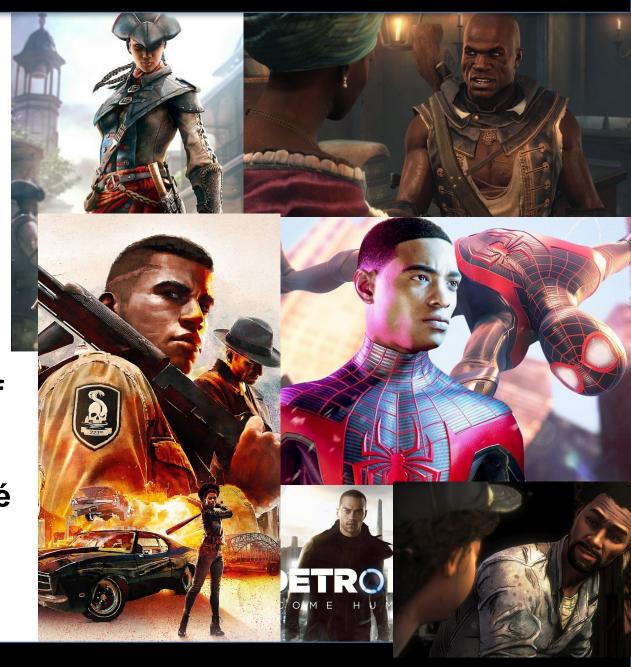
Playable Black Heroes in Video Games

- The video game industry still has a diversity problem in both content and production.
- But there are increasingly relevant playable Black characters... Miles Morales, Lee Everett, Clementine and Markus. (Spider Man: Miles Morales 2020) (Walking Dead 2012)

(Detroit Become Human 2018)

 Some games have confronted issues of historic and contemporary racism through playable Black characters... Assassin's Creed's Aveline de Grandpré and Adewale characters, and Lincoln Clay in Mafia 3 (2017)... but not without criticism.

(Freedom Cry 2013)

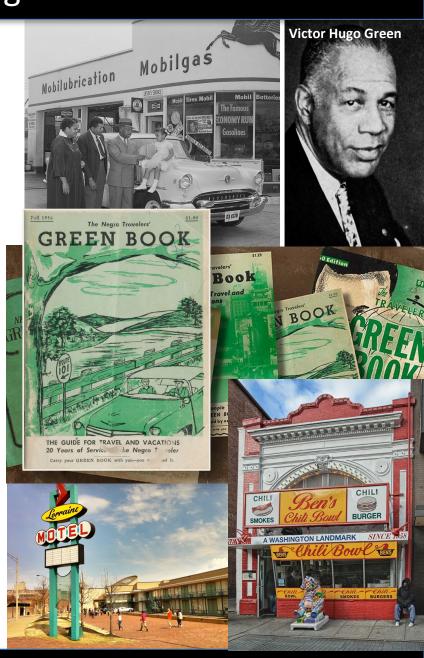


Virtual Green Book: VR Time Travel to Civil Rights Landmarks

• The Green Book (published by Victor H. Green Co.,1936-1967) guide to safe travel in the black community during the Jim Crow era.

• VR moves our perspective to the center of an increasingly realistic simulation, which has been shown to be perceptually immersive through body swap illusions and perspective-taking. (Thériault et al. 2021)

 Impossible experiences like traveling back in time to key moments in Civil Rights history are starting to be explored.



Travelling While Black VR Film (2019)

"I think we all know America hasn't really dealt with the issues around racism, and slavery, and the legacy of slavery," Williams states. "I think that we have to have, in

a way, 'conversation starters,' and I hope that this VI piece, Traveling While Black, is just that." — Roger Ross

Williams

https://www.youtube.com/watch?v=aOBwXOgIIb8

- Cinematic 360 video scenes of historical recreations and contemporary documentary interviews of the owner and patrons of Ben's Chili Bowl in DC, and their experiences of segregation and discrimination.
- Visuals and narration create strong storytelling from the point of view of the 360 camera, but lacks any ability to explore the space or break the 4th wall to interact with the community it portrays.





I Am A Man VR (2018)

Narrative VR can "tap into the emotions" of the user and "tell a much richer story" than an artifact behind glass in a museum, Ham explains. Facts and photos come alive in VR with the help of music, lighting, and other intricately planned details, creating an "intense" experience that encourages empathy and connection.— Derek Ham (Klocke 2018)

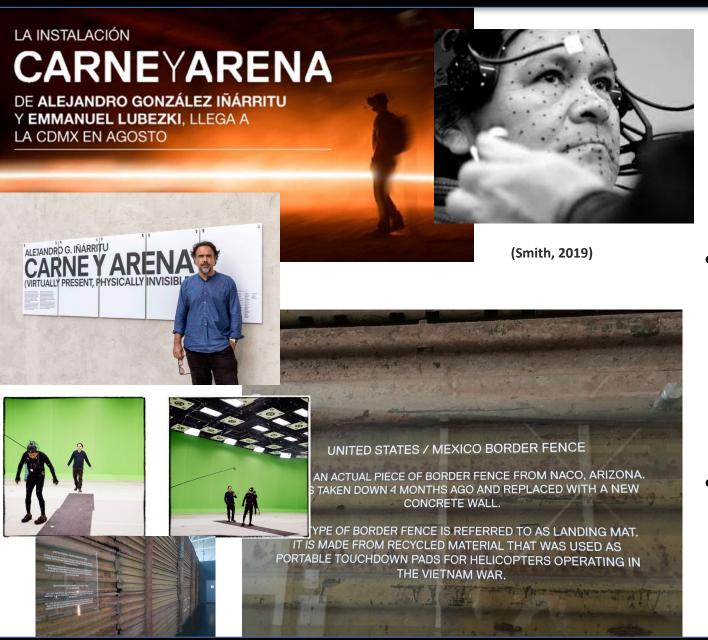
https://www.youtube.com/watch?v=FkXHPgQ0ftc

 Interactive 3D scenes of 1968 Memphis sanitation labor strike with "I Am a Man" march, TV news on Civil Rights struggles of the time, and the Lorraine Motel where Dr. King was assassinated.

Avatar affords the role of a black sanitation worker and has agency to explore and pick up some objects, but full interaction is still limited.



Flesh & Sand VR Installation (2017)



"...it's part theater, part documentary, and it's partphysical installation, it's a virtual installation — it's many different arts combined. For me that was fascinating, and the decision to work with real immigrants, to take from them their true experience that they share." - Alejandro Iñárritu, https://www.youtube.com/watch?v=zF-focK30WE

- Inarritu interviewed immigrant refugees on their experiences, and invited them to perform the virtual characters in the VR scenes.
- Room-scale VR experience that was collaboration between Inarritu, ILMxLab, and the undocumented community.

Time's The March VR Installation (2020)

"When you watch these stories, they're more powerful, because you're actually experiencing them instead of reading about them."

- Alton Glass, Co-creator of Time's The March VR Experience https://time.com/5784009/martin-luther-king-jr-virtual-reality/
- Room-scale immersive VR installation with a hyper-real Dr. King at the DC Civil Rights march that culminated in his "I have a Dream" speech.

https://www.youtube.com/watch?v=L5VHE0hGV6Y

Time magazine, Alton Glass, and Viola Davis collaborated with film visual effects company Digital Domain (Titanic, Avatar, etc) to simulate virtual travel to a specific time and place in Civil Rights history.



Towards an Ethical Best Practices for White Collaborators

- Gender and facial features are very easy to change with emerging AI character creator tools, so avoid avatar stereotypes that could imply a 21st century minstrelsy or digital blackface.
- Stick to historical source material and provide character affordances that lead to believable and deep character representations.
- Advocate for artists, performers, and voice actors of color in the virtual production process.
- Collaborate closely with members of the represented community and provide educational programs for how to become content producers.

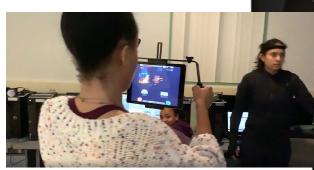










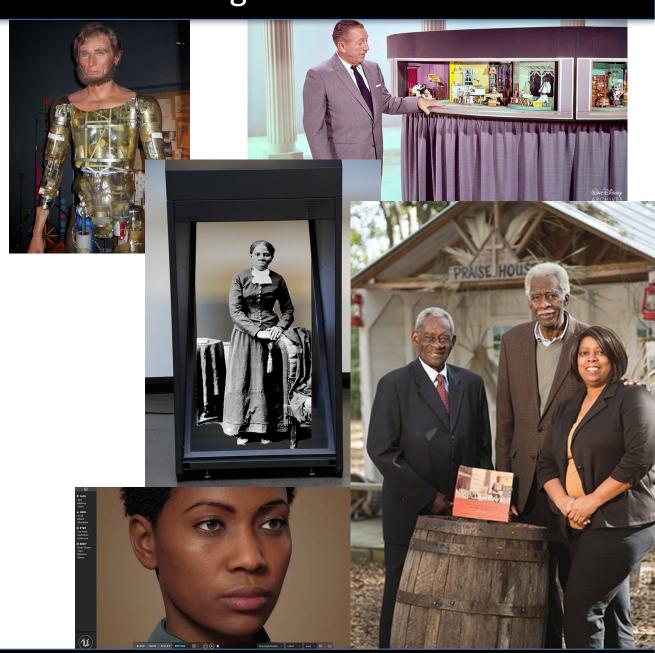


Addressing Criticism of VR as and Empathy Machine

- Nakamura criticized framing VR as an empathy machine because it is visceral not cognitive, and "virtuous VR" is identity tourism and not people of color speaking their own truth. Eitzen criticized VR as a medium for empathy compared to traditional cinema, citing a lack of framing and cinematography to direct the viewers attention, which transfers spectator attention away from others to their own experience. (Nakamura 2020) (Eitzen 2021)
- The examples in this paper show that serious VR storytelling is being adopted by black artists to tell their histories and truths, in collaboration with white designers and technologists. The most immersive VR experiences are not just perceptual 360 videos, but multimodal installations that are performative and cognitive through role play with joker guides that represent the community.

Going Forward: Critical XR Design

- Taking themed entertainment experiences into XR design frameworks that have a critical focus.
- What would a Disney's Hall of Presidents be like as an AR experience with Black heroes like Harriet Tubman? What would a Carousel of Progress show be like with Metahuman Gullah-Geechee figures, language, and culture?
- Using photogrammetry, performance capture, virtual production and XR to preserve and share the stories of living Gullah-Geechee elders.



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