Resurrecting Defunct Theme Park Attractions

Fan Preservation in Virtual Worlds

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"Saving" the Past in Polygons

On January 7, 2021, the popular YouTube channel Defunctland posted a project that had been in development for a few years: a virtual reality re-creation of the former Magic Kingdom attraction 20,000 Leagues Under the Sea (1971–1994) at Walt Disney World.[1] News of the high-profile project—available as an interactive 360° video and VR application—was enthusiastically circulated across social media and pop culture news websites. This effort—organized and publicized by one of the internet's most popular theme park outlets—is the most recent example of a long-established, though minimally publicized, form of fan preservation: attractions resurrected in 3D. Despite being thoroughly grounded in concrete and steel, theme park attractions are (on a long enough scale) ephemeral. Attractions may be remodeled or demolished with no guarantee that any of their pieces will be secured for posterity. And, because theme park attractions are mixes of architecture, cinema, theater, bodily sensation, and special effects, the only way to get close to replicating the original would be to duplicate them elsewhere (though they would still lack crucial context). "Fan preservationists" do significant work saving

1. Kevin Perjurer, "Defunctland VR: 20,000 Leagues Under the Sea," uploaded on January 7, 2021, YouTube video, https://www.youtube.com/watch?v=qQgLOzVkNVU.

and re-presenting popular culture that might otherwise get lost.[2] Fans of the parks without access to official archives have adopted the ethos that Andy Bennett refers to as "DIY (Do-it-yourself) Preservationism" which involves "the salvaging and re-mastering of recordings that are not readily accessible."[3] Bennett notes that groups of bootlegging music fans had a willingness "to apply their own conventions of taste and distinction."[4] They were curating, so to speak. And the same is true in the case of theme park preservationists: their sensibilities often involve expressions of nostalgia, appreciation of craftsmanship, and use of rhetoric about what these attractions represented in their time. Preservationists work both with and as "rogue archivists," a term coined by internet culture researcher Abigail De Kosnik to describe nonprofessional "amateurs, fans, hackers, pirates, and volunteers" who function as memory workers who collectively (though frequently disconnectedly) amass the snippets of the past.[5] Rogue archivists are joined by "fan-historians" who engage in productive labor that assembles and interprets the history of their subject of interest.[6] Fan and lay historians have archived photographs, home movies (including ride-through videos), ephemera, paratexts, and documentations of stories. Alongside these "traditional" forms of media archiving, *Minecraft* builders, *NoLimits 2* designers, and Autodesk Maya 3-D modelers have knowingly, and even unknowingly, joined an online community of practice dedicated to archiving the theme park. Using reference photos and videos, descriptions and anecdotes shared online, and often their own personal memories, fan preservationists have taken to software tools that offer a new way of remembering that realizes the "vir-

2. Melanie Swalwell, "Moving on From the Original Experience: Games History, Preservation and Presentation," in *Proceedings of DiGRA 2013: DeFragging Game Studies* (Digital Games Research Association, Atlanta, GA, 2013), http://www.digra.org/wp-content/uploads/digital-library/paper_454.pdf.
3. Andy Bennett, "'Heritage Rock': Rock Music, Representation and Heritage Discourse," *Poetics* 37, no. 5 (2009): 475, https://doi.org/10.1016/j.poetic.2009.09.006.
4. Bennett, "'Heritage Rock,'" 483.
5. Abigail De Kosnik, *Rogue Archives: Digital Cultural Memory and Media Fandom* (Cambridge, MA: The MIT Press, 2016), 2.
6. E. Charlotte Stevens and Nick Webber, "The Fan-Historian," *Transformative Works and Cultures* 37 (2022): 2.10, https://doi.org/10.3983/twc.2022.2125.

tual" realities of theme parks in virtual computer space.[7] These creators often choose tools based on convenience or familiarity rather than the most appropriate platform. And these re-creations are not perfect reconstructions but rather interpretations belonging to the rogue archives of Disney fans and historians.[8] Because of the integrated nature of first-person embodied points-of-view in both theme park and virtual spaces, 3D re-creations are primarily concerned with replicating the experience of being in a ride vehicle and moving through an attraction.[9] In my method of archeological digging to find examples of virtual re-creations, I relied heavily on YouTube captures of games both old and new, websites preserved by the *Wayback Machine*, loose threads of online discussions, and hands-on experiences with virtual rides. What has emerged is a library of examples of defunct/demolished/extinct attractions re-created with three-dimensional tools to reveal both the nature of DIY preservationists and the online networks of theme park archives. Though absent of darkly-painted walls, troughs of moving water, and tangles of animatronic wiring, these virtually preserved attractions direct their attention to an essential aspect of the theme park: the preservation of embodied experience.

Virtual ride re-creations in videogame tools allow the player to be situated within the space of the attraction and manipulate their point of view. Though it could be argued that a 360° POV ride video could accomplish the same, the proliferation of that capture method is relatively recent and cannot document attractions which have already been demolished or converted. The re-creations examined here are imperfect—and that is a part of their significance. Some projects were meticulously researched and brought to life in jaw-dropping Unreal Engine environments while

7. For extended discussions on the "virtual" qualities of real spaces see Celia Pearce, *The Interactive Book: A Guide to the Interactive Revolution* (Indianapolis, IN: Macmillan Technical Pub., 1997); Michael Heim, *Virtual Realism* (Oxford University Press, 2000); Marie-Laure Ryan, *Narrative as Virtual Reality: Immersion and Interactivity in Literature and Electronic Media* (Baltimore, MD: Johns Hopkins University Press, 2001); Michael J. Ostwald, "Identity Tourism, Virtuality and the Theme Park," in *Virtual Globalization: Virtual Spaces/Tourist Spaces*, ed. David Holmes (New York: Routledge, 2001), 192–204.
8. De Kosnik, *Rogue Archives*, 4.
9. Dave Gottwald, "From Image as Place to Image as Space: Pinocchio, Pirates, and the Spatial Philosophy of the Multiplane Camera," *The International Journal of the Image* 12, no. 1 (2021): 71–93, https://doi.org/10.18848/2154-8560/CGP/v12i01/71–93.

others are "good enough" approximations in *Roblox*. Fidelity, in the case of these rogue archives, is balanced with the heartfelt desire to share a sense of joy and wonder, and approachable videogame technologies enable this form of chronicling. *Minecraft*, for example, offers multiple richly detailed fan-operated Walt Disney World servers such as the Imagineers Club and Imagineering Fun and, in 2021, were joined by an official *Minecraft x Walt Disney Magic Kingdom* expansion. Players surely feel a sense of awe at the vast, intricate landscapes built of voxels. The immersive qualities may be different from the real counterpart, but it, too, encourages the "active creation of belief" integral to the sense of immersion. Virtual rides that place the player in the attraction also parallel the sense of embodiment within the theme park's tapestry of narrative space, asking players to perceive their surroundings while in motion.[10] These acts of engagement beg us to inquire about what it means to "experience" an attraction. Each member of the audience of Disneyland's Rocket/Flight to the Moon (1955–1975) perceived the show in their own body and their own time—their own "experience." Philosopher John Dewey's foundational *Art as Experience* (1934) advocated for an experiential interpretation of art (and by extension expressive media) that considered the artist and their work communing with the viewer who was actively engaged with the world around them. Forms of expression, as Dewey described, are "the art of making clear what is involved in the organization of space and time prefigured in every course of a developing life-experience."[11] The significance of the work shifts from the artifact to its dynamic effect on the living being, who is said to have had "an experience" when the "material experienced runs its course to fulfillment."[12] Virtual attraction creators compel us to consider what it means to preserve our experiences.

10. For a foundational explanation of being-in and moving-through media spaces, see Anne Friedberg, *Window Shopping: Cinema and the Postmodern* (University of California Press, 1993), http://hdl.handle.net/2027/heb.08213.
11. John Dewey, *Art as Experience* (Perigee Books, 1980), 24.
12. Dewey, *Art as Experience*, 36.

Game historian Melanie Swalwell has encouraged a mode of preservation that deprecates the importance of the "original experience" in favor of a "range of sources" that each contribute to the texture of an experience.[13] This is especially true of theme parks: because a parkgoer cannot have a commensurate experience of an attraction at home, they are left re-experiencing from memories and documentation. Attraction ride-through videos, as Kyle Meikle describes, serve "at the same time as an archive, a live performance, and a promotion of for some future performance" that positions viewers as "actors in the park's repertory."[14] In the comments sections of the videos Meikle examines, it's clear that even first-person videos have a transportive quality.[15] Theme park literacy allows us to engage with re-creations using our primary sense—"the supremacy of the visual"—while excusing that which we cannot directly sense in favor of imagining.[16] Thus, theme park re-creations are akin to our own imperfect memories of experience and preservation as an exercise in recollection. Though simulated movement reveals how "kinaesthetic presence converges with issues of image simulation,"[17] parkgoers who seek out this media are accustomed to the act of riding.[18] The players/viewers of virtual re-creations are able to situate themselves within the presentation in much the same ways parkgoers used their cinematic literacy to interpret attraction spaces.[19] In virtual ride re-creations, we can "see volatile attitudes about the proper relationship between perception and representation," and "'actual' experience and 'aesthetic' experience."[20] Performance scholar Michael Nitsche described how though a virtual ride "quotes the sensual spectacle of a real rollercoaster, it does so in the second instance

13. Melanie Swalwell, "Moving on from the Original Experience," in *Fans and Videogames: Histories, Fandom, Archives*, ed. Angela Ndalianis and Helen Stuckey (Taylor & Francis, 2017), 213–33.
14. Kyle Meikle, "Time for the Theme Park Ride-through Video," *Transformative Works and Cultures* 37 (2022): 1.5, https://doi.org/10.3983/twc.2022.2203.
15. Meikle, "Time for the Theme Park Ride-through Video,"3.2.
16. Gordon S. Grice, "Sensory Design in Immersive Environments," in *A Reader in Themed and Immersive Spaces* (ETC Press, 2016), 131–38.
17. Andrew Darley, *Visual Digital Culture: Surface Play and Spectacle in New Media Genres* (Routledge, 2002), 107.
18. Michael Nitsche, *Video Game Spaces: Image, Play, and Structure in 3D Game Worlds* (Cambridge, MA: The MIT Press, 2008), 13–14.
19. Gottwald, "From Image as Place to Image as Space," 77–79.
20. Brooke Belisle, "Immersion," in *Debugging Game History: A Critical Lexicon*, ed. Raiford Guins and Henry Lowood (Cambridge, MA: The MIT Press, 2016), 256.

through the eye of a virtual camera" which highlights the lack of physical sensation.[21] Immersion is a contested term, but here it is used to describe an embodied sense of being located within a space and given some amount of agency.

Media theorist Brooke Belisle advises that "the felt experience of immersion . . . expresses a temporary but powerful alignment between the technical conventions of a particular medium, the aesthetic form of a particular representation, the cultural logic of a particular historical moment, and the perceptual framework of a particular participant's embodied experience."[22] In his research-through-design practice of building a virtual dark ride by documenting existing attractions, Joel Zika typologized the common characteristics of dark rides throughout history: "an internal and external journey," "360-degree design," "triggered sound," "perspective and illusion," "mediated lighting," and "haptic feedback."[23] The majority of attraction re-creations studied here attempt to emulate at least the first five of these six characterizations. Zika's work is also unique because he uses gyroscopic sensors to measure acceleration, force, and bumps while documenting classic dark rides which might "allow for a full simulation of the experiences at a later date."[24] Though that sort of data is unavailable for rides that have already been demolished, it's not difficult to imagine the preservationists of today carrying a smartphone app that could record these sensations for posterity. Even still, it is apparent that significant parts of an attraction's construction can be virtualized using computer technology because of parallels between classically virtual (in the way Marie-Laure Ryan employs the term) and digital virtual spaces. As "spatial media," theme park and game design have converged with regards to "spatial narrative, experience design," "illusion of authenticity," and "immersion."[25] Scott Lukas

21. Nitsche, *Video Game Spaces*, 14.
22. Belisle, "Immersion," 256.
23. Joel Zika, "The Historic Dark Ride: Reimagined for Virtual Experience" (Dissertation by Artefact and Exegesis, Melbourne, Australia, Swinburne University, 2021), 49.
24. Zika, "The Historic Dark Ride," 25.
25. Celia Pearce, "Narrative Environments from Disneyland to World of Warcraft," in *Space, Time, Play: Computer Games, Architecture and Urbanism: The Next Level*, ed. Friedrich von Borries, Steffan P. Walz, and Matteas Bottger (Basel: Birkhauser, 2007), 201.

connects virtual reality and theme parks through David Lowenthal's notion that theme parks are already of "willful geographies of the mind."[26] And former Walt Disney Imagineering executive designer Joe Rohde practiced these very concepts. At the SIGGRAPH Computer Graphics conference in 2007, Rohde—who is best known for leading the creation of Disney's Animal Kingdom—described his team's work as "virtual placemaking."[27] The virtual space of videogames is the ideal medium for preserving the virtual space of the theme park.

Practices of Fan Preservation and Rogue Archivists

Theme park fandom researcher Rebecca Williams has written extensively about the "online memorialization" that occurs when fans gather to discuss a defunct or soon-to-close ride and how this discourse "canonizes" a particular iteration of that ride.[28] It can often be interpreted as a form of "fannish discontent" whereby theme park fans recognize the irreversibility of major changes.[29] Though Williams doesn't go quite as far as to connect memorialization to preservation, the collective efforts of these fans save the memories of attractions, events, and experiences. For example, when the pseudonymous Epcot fans "Hoot Gibson" and his friend "Chief" set out to document every detail of the soon-to-shutter attraction Horizons by breaking free from the confines of the ride vehicle to wander the sets to photograph and film, they were undertaking a preservationist campaign of unprecedented scale.[30] Hoot and Chief are prime examples of the unsanctioned work De Kosnik describes of the "rogue archivists"

26. David Lowenthal, "The Past as a Theme Park," in *Theme Park Landscapes: Antecedents and Variations*, Dumbarton Oaks Colloquium on the History of Landscape Architecture (Dumbarton Oaks, 2002), 12; Scott A Lukas, *The Themed Space: Locating Culture, Nation, And Self* (Lanham, MD: Lexington Books, 2007), 14.
27. Florian Freitag, "Theme Park Metatexts: An Aesthetics of Inclusion and Exclusion," *Journal of Foreign Languages and Cultures* 3, no. 1 (June 2019), 4.
28. Rebecca Williams, *Theme Park Fandom: Spatial Transmedia, Materiality and Participatory Cultures* (Amsterdam: Amsterdam University Press, 2020), 212–13.
29. Williams, *Theme Park Fandom*, 215.
30. Doug Jones, "The True Story of the Unauthorized, Daredevil Documentation of the Horizons Ride at Disney World," *DangerousMinds*, August 17, 2016, https://dangerousminds.net/comments/the_true_story_of_the_unauthorized_daredevil_documentation_of_the_horizons_.

in enthusiast communities.[31] Though not quite as roguish, the fans who started preserving attractions as three-dimensional, computer generated images beginning around the turn of the twenty-first century recognized that software could bring back to life defunct attractions.

Fan-preservationists, fan-historians, and rogue archivists fill an essential role in rescuing information and artifacts otherwise lost to secrecy or indifference. Trade secrets at the Walt Disney Company, for example, are kept within the organization's walls for years to maintain a competitive advantage. In recent years, Imagineers on social media have become moderately more forthcoming with stories, concept sketches, and photos of old projects-in-progress, but previously signed "non-disclosure agreements" often swear them to corporate confidentiality. And the sheer scope of the company's endeavors (even just the portion that relates to theme parks) is too extensive to preserve. The Walt Disney Archives—led for decades by David R. Smith—attempts to save significant pieces of history, but enthusiasts are often interested in the insignificant (or, perhaps they find everything significant). The material objects of the parks, when preserved, find convenient homes when exhibited for Disney promotional events such as the D23 fan convention or the *Behind the Attractions* series on the Disney+ streaming service. And the company's Disney Editions book imprint regularly produces authorized "insider" attraction histories like Jason Surrell's *The Haunted Mansion: Imagineering a Disney Classic*[32] and Imagineer monographs such as John Hench and Peggy Van Pelt's *Designing Disney*.[33] But there are other archives as well on the spectrum of official to unofficial (or sanctioned to rogue). The Walt Disney Family Museum and the Harrison "Buzz" Price archive at the University of Central Florida are examples of professionally curated collections of primary source documents. Memoirs by Imagineers are common, and former Imagineers more openly share old stories and media from their personal collections. Moving beyond the company, the Enchanted Archives public history project that was developed by a trained historian can be categorized as professional but unsanctioned. Traveling again toward the

31. De Kosnik, *Rogue Archives,* 3.
32. Jason Surrell, *The Haunted Mansion: Imagineering a Disney Classic* (Disney Editions, 2015).
33. John Hench, *Designing Disney* (Disney Editions, 2009).

"rogue" end of the spectrum, the website *DIX* (Disney Resource Index) has cataloged (but does not host) publications, interviews, and internal documents more readily available to the public. YouTube has served as a tremendous storage pool of video documentation of old home movies and current-day walkaround and ride-through videos.[34]

Descriptions by Stevens and Webber of "fan-historians" and Swalwell of "fan-preservationists" serve well to describe a range of individuals or collectives who occupy a role outside of official channels and are engaged in productive labor. Ride re-creators are enthusiasts invested in maintaining the future well-being of their fandom by contributing resources and attention to their community of preservationists. They are supplemented by other fan-historians and archivists who share home movies and photos, re-circulate concept art and magazine scans, and sustain the mythology to produce archival momentum.[35] These collections have become "networked objects" shaped by the habits of users and their tools.[36] And, as José Van Dijck emphasizes, it is less that technology supports increasing fidelities of digital memory[37] and more that networks reveal the messy, ad-hoc nature of communities attempting to recollect. It's appropriate, then, that archives capture the tension between the "idealistic" experience and the metatexts that reveal the "backstage" and operational workings of the theme parks.[38] The documentation gathered by professionals and enthusiasts that comprises the crowd-sourced archive returns us to an important question: to what extent do these examples capture the totalizing experience of the theme park? The lived experience of wandering through a theme park or riding a ride is difficult to emulate because they are a "total-sensory-engaging environmental art form"[39] and, short of re-creating an attraction brick-by-brick in a sec-

34. For an extended discussion of YouTube ride videos, see Meikle, "Time for the Theme Park Ride-through Video."
35. Sophie G Einwächter, "Preserving the Marginal. Or: The Fan as Archivist," in *At the Borders of (Film) History: Temporality, Archaeology, Theories: FilmForum/2014: XXI Convegno Internazionale Di Studi Sul Cinema*, ed. Alberto Beltrame, Giuseppe Fidotta, and Andrea Mariani (Udine: Forum, 2015), 366.
36. José Van Dijck, *Mediated Memories in the Digital Age* (Stanford University Press, 2007), 48.
37. Van Dijck, *Mediated Memories in the Digital Age*, 50–52.
38. Freitag, "Theme Park Metatexts."
39. Margaret J. King, "The Theme Park: Aspects of Experience in a Four-Dimensional Landscape," *Material Culture* 34, no. 2 (2002): 3.

ond location, replicating actual experiences seems improbable. However, virtual ride re-creations have poised themselves rhetorically to address this issue. Surprisingly, most of the examples I found (primarily documented as YouTube playthroughs) replicated the boundaries of the actual park-going experience. This differentiates them from officially licensed theme park games such as *Universal Studios Theme Park Adventures* (2001) and *Kinect: Disneyland Adventures* (2011) that reproduce the layout and facades of the parks while inventing stand-ins for their rides and attractions. Games like these remediate the theme park experience by establishing new dynamics between the player and the park ecosystem and casting them as participants in the ride story.[40] Virtual tribute designers, on the other hand, attempt to simulate the original attraction's geometry and presentation, comprising the "*narrating architecture* that enforces a certain vision through the limitation of the spatial practice within it."[41] This is especially true of fans of re-creations of defunct rides and attractions. After their demolition, these seemingly-stable spatial practices that had previously provided what Anthony Giddens called "ontological security" for fan identity required a surrogate object that could reproduce the emotional bonds formed with the original experience.[42] Upon the closure of an attraction, the internet has provided fans with a place to congregate, share media and memories, and use nostalgia to reclaim their personal relationships to the places they hold dear.[43]

The fan preservationists discussed in this chapter range from incidental contributors who happened to build a ride in *Minecraft* to engaged community members who converse on social media or within YouTube comment threads. An illustration of this can be seen in the comments of DACS DACS's *Rollercoaster Tycoon 3* "Virtual Twister: Ride It Out" video in which another user inquires if their "real soundtrack" would be helpful in the production of the video, to which DACS DACS replies: "Do you have the Bill Pullmann [sic] Exit announcement without the music mixed

40. Bobby Schweizer, "Visiting the Videogame Theme Park," *Wide Screen* 6, Special Issue: Videogame Adaptation, no. 1 (2016), http://widescreenjournal.org/index.php/journal/article/view/99.
41. Nitsche, *Video Game Spaces*, 106.
42. Hoot Gibson, "(No Title)," *Mesa Verde Times* (blog), July 19, 2012, http://mesaverdetimes.blogspot.com/2012/07/there-were-lot-of-times-when-we-would.html.
43. Williams, *Theme Park Fandom*, 234.

in? I could integrate it in the model, so you could even hear it in the rct [*Rollercoaster Tycoon*] game when the attraction ends."[44] Ride builders like DACS DACS and X-S Bravo are part of a group of "rogue preservationists" who capture and disseminate information that often risks infringing on the intellectual properties of corporations who produce work they care about.[45] In the same YouTube comment, DACS DACS further exemplifies the impulses of the rogue archivist: "Sadly i don´t have a link or the name of the guy, but if you haven´t found it i could see, maybe i saved the original vid to one of my external hard drives."

The re-creations discussed here provide a new perspective that aligns theme park-going with digital affordances. For certain projects, it's easy to determine the designers' intentions. Defunctland's 20,000 Leagues Under the Sea and former Imagineer Don Carson and Daniel Singer's Alice in Wonderland[46] are publicized as strictly preservationist efforts. In other examples—like any number of *Jaws* attractions built in the *Planet Coaster*, *Minecraft*, or *Roblox* game environments—it is more difficult to discern the motivation for the time and effort. Are they spurred by a personal fondness? The convenient availability of models in the games' asset stores? The rewards of producing a popular YouTube playthrough of the ride? Regardless of intent, these game-based ride re-creations serve the important role of capturing both the landscape of the ride and the creator's interpretation of that experience. Their creators are prime examples of how "media users have seized hold of all of mass culture *as an archive*" to textually poach and remix into their own creations.[47]

44. DACS DACS, "VIRTUAL Twister - Ride It out Universal Orlando," uploaded on July 31, 2016, YouTube video, https://www.youtube.com/watch?v=nIGoOqRujCw.
45. Marvin Carlson, "Immersive Theatre and the Reception Process," *Forum Modernes Theater* 27, no. 1 (2012): 162, https://doi.org/10.1353/fmt.2012.0002; Scott Carlson, "Bootleg Compilations as Fan Preservation," in *Music Preservation and Archiving Today*, ed. Norie Guthrie and Scott Carlson (Rowman & Littlefield, 2018), 162.
46. Don Carson, "Recreating Disneyland's 1958 Version of the Alice in Wonderland Attraction - Intro Version," uploaded on August 9, 2020, YouTube video, https://www.youtube.com/watch?v=GGzoQLkOMWk.
47. De Kosnik, *Rogue Archives*, 4.

Early Work in 3D Re-creation

The proto-example of a virtual ride re-creation emerged out of the 1997 "Save Mr. Toad" online campaign that formed when Disney announced the closure of Mr. Toad's Wild Ride (1972–1997) at the Magic Kingdom and its replacement, The Many Adventures of Winnie the Pooh (1999–). Mr. Toad—a duplicate of one of Disneyland's opening day attractions—had become a fan favorite. Notably it was also one of the first attractions to close in an era when online fan communities had become more ubiquitous and connected through message boards. In the case of this attraction, the campaign found a home at savetoad.com.[48] Fan Spencer Cook is responsible for the first well-publicized 3D modeled ride project, *Virtual Toad*.[49] Cook reported on his website that even before the fan campaign he had thought of re-building the ride in physical miniatures and guiding a "tiny video camera" through it. This practice would have mimicked earlier design practices of WED and reminds us of the intertwined histories of theme park attractions and "filmic grammar."[50] Admitting this might prove beyond his capabilities, Cook turned to 3D animation technology, thinking that it might have preservationist potentials ("like reconstructing an ancient temple by computer!").[51] Parts of the project were released in the now-defunct QuickTime VR format, enabling viewers to drag the mouse to look around while the virtual camera navigated the space of the ride. Cook continued to work on the project intermittently for a decade, and though he never completed it, his custodial intentions were clear. "When it's all finished, whether it be on DVD or installed in some 'virtual reality' setting, people will once again be able to experience a small slice of 'dark ride' heaven."[52]

48. The website has been preserved at https://www.math.miami.edu/~jam/toad/.
49. Spencer Cook, "Welcome to Virtual Toad!," *Virtual Toad,* accessed August 30, 2021, http://virtual-toad.com/.
50. Gottwald, "From Image as Place to Image as Space."
51. Spencer Cook, "A Computer-Animated Reconstruction of Mr. Toad's Wild Ride." *Wayback Machine,* 2003, https://web.archive.org/web/20060913202241/http://www.virtual-toad.com/history.html.
52. Cook, "A Computer-Animated Reconstruction."

During this same period, other fans were experimenting with 3D modeling. These projects include Jason Bartel's Horizons/Epcot project,[53] Michael Flint's interpretation of If You Had Wings (1972–1989),[54] and Steve Wesson's Adventure Thru Inner Space (1967–1985) "Virtual Ride-Thru."[55] Bartel was focused primarily on 3D models to put together a rendered landscape rather than a particular output. Flint published screenshots and released short video clips online to show his work-in-progress. However, he ultimately ended the project and conceded that, "The reasons are many, but the fact that there are some acceptable videos of the ride available and my unwillingness to learn 3D animation beyond the basics are why I've chosen to stop." The reference to "acceptable videos" emerging around 2005 hints at the new methods of sharing video files on the internet (and, in fact, notable preservationist Martins Videos would release a "tribute" only a year later). Cook also encountered a dead-end and was unable to complete the project. In some ways, *Virtual Toad* benefited from the original ride's extensive use of "flats" (painted 2-dimensional surfaces) that reduced the number of full 3D models that needed to be created. Yet, working alone with 3D modeling and animation software that was—especially for home users—still in a nascent period proved difficult.

Wesson, who found success with his Adventure Thru Inner Space Virtual Ride-Thru, left a diary of his progress online. He updated website visitors with the tribulations of the rendering woes faced by home creators: "My old machine rendering scene heavy projects (like the lobby) at 700 x 486 pixel took about 1 hour 30 minutes to render . . . PER FRAME!!! That means ONE SECOND of animation took well over 60 HOURS."[56] Wesson worked on the project for years and was ultimately able to produce and distribute a DVD (and later a set of video files) to sell his work, containing

53. Jason Bartel, "Progress During 2001 | Deep Water Studios," *Deep Water Studios,* February 18, 2004, http://www.deepwaterstudios.com/projects/epcot-center-project/epcot2001/.
54. Michael Flint, "Dizneyworld's If You Had Wings Project," *Wayback Machine*, March 20, 2005, https://web.archive.org/web/20071220062206/http://dizneyworld.net:80/iyhw.html.
55. Steve Wesson, "CGI 3D ATIS Project Re-creation Ride Thru," *Wayback Machine*, November 25, 2004, https://web.archive.org/web/20050308211912/http://www.atommobiles.com/cgi-project.htm.
56. Steve Wesson, "Update (WITH SOUND) 06-30-03," *Wayback Machine*, June 30, 2003, https://web.archive.org/web/20031002050709/http://www.atommobiles.com:80/cgi-project.htm.

two perspectives of the attraction: a rider's first-person perspective from one of the Omnimover vehicles and another with fixed cameras mounted in the virtual building for a "cinematic" presentation of its layout. In the same way that the "flats" of Mr. Toad meant having to model fewer complex character shapes, Adventure Thru Inner Space favored projected video effects over complex figures, making it slightly simpler to build in polygons. Wesson's project was well received by Disney fans. Praise for the work came from Spencer Cook (designer of *Virtual Toad)*, who thought Wesson should be known as the "'founding father' of the virtual theme park ride-through." Even former Senior Vice President of Concept Design, Walt Disney Imagineering Eddie Sotto, quipped, "The Oscar goes to Steve, for finding new ways to arrange pixels for our comfort and convenience!"[57]

In these early examples, we can see how the promise of 3D software inspired park fans to reclaim the ride experience virtually and the major hurdles of the realities of technological limitations. This small group of creators linked to one another's projects on their home pages, shared works-in-progress, and formed an early niche community whose works were discussed on message boards. Only Wesson's Adventure Thru Inner Space re-creation has survived the digital decay of the Internet. Only screenshots remain from Flint's animation tests as saved by archive.org's *Wayback Machine.* And Cook's Mr. Toad lives as screenshots and QuickTime VR files that can only be opened on older Apple computers. These lost resources serve as reminders that media intended to preserve also needs to be maintained.

Remembering with Videogame Technology: Sims, Sandboxes, and Game Engines

Before the availability of game engines, ride re-creators used 3D modeling software like Blender, Maya, and Bryce 3D designed to output rendered video, like a computer-animated movie. Videogame tools, on the other hand, offer something other 3D rendering software does not: the

57. Steve Wesson, "Adventure Thru Inner Space DVD," *The Mighty Microscope,* 2010, http://www.themightymicroscope.com/dvd_puchase.htm.

ability to reproduce the visual and aural environments in a way that is both responsive and navigable using in-game point-of-view cameras. Virtual ride re-creations based on game tools can be divided into three categories: those built using theme park sim and ride-design tools like *Planet Coaster*, those using built-in sandbox tools like *Roblox*, and those using built-in game engines like Unreal. The re-creations built using platforms take on existing characteristics of that game: the visual style of existing assets and construction blocks makes a marked difference in the visual composition of *Minecraft*; game mechanics, world attributes like movement speed, and controller and camera implementations determine how it feels to interact in the space; and multiplayer spaces like *Roblox* add a social dynamic that replicates the communal nature of theme park-going. Video game engines like Unity and Unreal are tools that handle significant parts of the development process: graphics, virtual cameras, assets, implementing mechanics and interactions through programming, and deploying game executables for distribution. In fact, these engines have transcended the games industry and have become a significant tool of architectural design because they allow for navigation and interaction.[58] Unlike the games designed as either theme park sim and ride-design games or as creative sandboxes, game engines open vast possibilities of creation. Game engines are intended to be distributed as interactive and playable, though the prevalence of virtual ride-through videos on YouTube complicates expectations about agency.

Theme park sim and ride-design games such as *Rollercoaster Tycoon 3*, *Planet Coaster,* and *NoLimits 2: Roller Coaster Simulator* are popular because they allow players to construct rides with tools designed for that specific purpose. Ride-designers contrast with the "sandbox" games below that have been co-opted for theme park attractions. As their titles imply, these games are ostensibly for building rollercoasters—a type of ride the Disney and Universal parks have had fewer of than other types of attractions, but are more prevalent at Six Flags, Cedar Fair, and SeaWorld/Busch Gardens parks. Enthusiasts have taken to the coaster-spe-

58. Dave Gottwald and Gregory Turner-Rahman, "The End of Architecture: Theme Parks, Video Games, and the Built Environment in Cinematic Mode," *The International Journal of the Constructed Environment* 10, no. 2 (2019): 41–60, https://doi.org/10.18848/2154-8587/CGP/v10i02/41-60.

cific tools of *NoLimits 2* (*NL2*) for a specific branch of preservation. In one example, an "homage" to the Dragon Challenge (formerly Dueling Dragons) (1999–2017) at Universal Islands of Adventure in Florida was interpreted as the "Lost Lands Dragons" coaster.[59] Its track layout remained the same, but neither the Wizarding World of Harry Potter nor the original Lost Continent context were preserved. Though most Disney Park coasters are still in operation, creator Giftaddict replicated the "From the Earth to the Moon" rendition of Space Mountain that was a part of Disneyland Paris between 1995 and 2005.[60] Because of the limitations of *NL2*, Joseph Pojunis instead paid tribute to the "spirit" of the original Twilight Zone Tower of Terror (2004–2017) at Disney California Adventure with a wholly new interpretation that converted the "drop ride" hotel into a subway train coaster. In Pojunis's interpretation, "Terror Tracks is an homage . . . created as a form of carrying on the legacy of the popular attraction" and the project highlights the subjective experience so many of these creators are trying to convey.[61] User Martymum creatively implemented slow-moving ride vehicles in *NL2* for Epcot's Test Track and Universal Studios' Kongfrontation.[62] *Rollercoaster Tycoon 3* contained a feature to allow creators to import "custom scenery" made in software like SketchUp to deploy architecture and models not available in the base game, which allowed them to represent a greater variety of attractions and demonstrates how creators are always looking to push the limitations of software.

Planet Coaster, on the other hand, is more broadly suitable for preservation because it features a variety of ride systems including boats, dark ride vehicles, and raft rides. User NOICE preserved the first version of Epcot's Test Track (1999–2012) in both layout and by providing an audio

59. Deanrell, "NoLimits 2: Lost Lands Dragons (Dueling Inverted B&M)," uploaded on January 19, 2018, YouTube video, https://www.youtube.com/watch?v=NhGbbvWW5c4.
60. Giftaddict, "[NoLimits Coaster 2] Space Mountain - From the Earth to the Moon | Full Onride," uploaded on November 1, 2015, YouTube video, https://www.youtube.com/watch?v=2PDD7Giair0.
61. Joseph Pojunis, "[NL2] The Twilight Zone: Terror Tracks," uploaded on December 21, 2016, YouTube video, https://www.youtube.com/watch?v=Zo-_Wy1fV4s.
62. Martymum, "Original Test Track (Disney's Epcot) – No Limits Coaster 2 - Recreation," uploaded on June 11, 2017, YouTube video, https://www.youtube.com/watch?v=mSTdgOE6IwQ.

soundtrack to map it to the original.[63] User Theme Park Worldwide used the Studios Park expansion pack to construct JAWS: The Ride (1990–2012) and recorded their own narration of the boat captain delivering the ride's script.[64] Although these games were not created to handle all types of attractions one might find at a theme park, such as a stage show or simulator ride, builders have found clever workarounds. Notably, creators using these tools will often produce their own edited videos for YouTube in which they employ machinima techniques to capture the queues and vistas from different angles, splice in virtual b-roll, stitch together separate scenes, and capture a point-of-view ride as the central featurette. Not only does this aid in preserving the context of the rides, it also can be used to overcome the limitations of ride-designer games whose boundaries are being pushed. YouTube has proved invaluable for disseminating these labors of love: often, constructed attractions are too complex to share between game players. Combing through this distributed archive, it is evident in the comments of ride-builders and the response by both players and YouTube audience members that these recreations fall into the shared nostalgia of Williams' "online memorialization."

"Sandbox games" are designed as creation tools that DIY preservationists have adapted to meet the needs of ride design. Key to these are scriptable, "rideable" objects like the cart in *Minecraft,* or programmable events in MediaMolecule's *Dreams* for the PlayStation 4 and PSVR. Sandboxes are all-purpose building tools and, as a result, it's possible to find entire parks such as the aforementioned Imagineers' *Minecraft* server or the amalgam of attractions both current and defunct in "Universal Studios Roblox Theme Park." One lesser-known example of a sandbox is *Project Spark*—a short-lived game creation tool created by Microsoft for Windows and the Xbox One (2014 and 2016). Serving as a successor to Kodu Game Lab, *Project Spark* was a sandbox design tool that enabled creators to terraform and establish biomes, build environments, and script objects.

63. SwiftSnakeProduction, "Test Track - Epcot - Walt Disney World - Planet Coaster," uploaded on July 31, 2018, YouTube video, https://www.youtube.com/watch?v=2JdCgTOJsBw.
64. Theme Park Worldwide, "Let's Play Planet Coaster - Studios Park - Episode 8 - JAWS: The Ride," uploaded on July 2, 2018, YouTube video, https://www.youtube.com/watch?v=JhKHMIT_eQQ.

Project Spark provides textures and meshes and allowed creators to combine objects into a new single object, but it did not include a modeling tool. YouTube user Rich Costall utilized *Project Spark* for a "loving re-creation of closed and existing Disney and Universal Studios theme park attractions" that cleverly adapted the "fantasy" aesthetic of the tool's buildings and props. The defunct attractions on Costall's channel include Kongfrontation (1990–2002)[65] and JAWS: The Ride (1990–2012)[66] from Universal Studios, Florida. From Walt Disney World, there is Epcot's Maelstrom (1988–2014) and Hollywood Studios' The Great Movie Ride (1989–2019), which was shuttered five years after Costall's re-creation efforts. His rides are constructed out of objects provided by *Project Spark*, including character models, repurposed building parts, props, limited animated figures, and the soundtracks from the rides. Costall's Kongfrontation begins outside of the show building, and his YouTube walkthrough guides the character through the queue and onto the ride vehicle. Universal's Kongfrontation vehicles were modeled after the gondolas of New York City's Roosevelt Island Tramway, and the game's gondolas resemble wooden interpretations of the original (complete with in-tram overhead television monitors). The tram winds its way through the disaster area while a giant gorilla model terrorizes the passenger and the level uses visual effects built into the tool such as explosions, fog, and sparks to mimic the special effects details of Universal Studios' opening day attraction.

In Costall's video walkthroughs, he expressly discusses using other videos as references for his interpretations. His first effort preserves the original El Rio Del Tiempo version (1982–2007) of Epcot's "Mexico Boat Ride" attraction rather than the Gran Fiesta Tour Starring the Three Caballeros (2007–) update. Naturally, this necessitated having vintage photos and footage to draw from.[67] Costall's Norway Pavilion includes the exterior area of the Epcot territory as well as the Maelstrom boat ride that is

65. Rich Costall, "Kongfrontation: Universal Studios Florida (Project Spark)," uploaded on August 16, 2015, YouTube video, https://www.youtube.com/watch?v=pTDzEvpDbxE.
66. Rich Costall, "JAWS - Universal Studios Orlando in Project Spark," uploaded on April 13, 2014, YouTube video, https://www.youtube.com/watch?v=IdfxFvmb-rs.
67. Rich Costall, "Project Spark - EPCOT - Mexico Pavilion," uploaded on March 15, 2014, YouTube video, https://www.youtube.com/watch?v=bvqRLMRnftQ.

scripted to navigate itself through a river track once the player steps aboard. The boat then winds its way through an imperfect interpretation that draws attention to the significance of indexical references expected by riders.[68] In the video overview, Costall admits to certain concessions made in this reconstruction: the ride is not to the scale of the original, he found it difficult to script the boat's reverse movement, and he had to make do with an "arctic fox [3D] model" instead of a polar bear because of the assets that were available. There is also an error in the ride layout where the final drop occurs on the opposite side. Though the ride is not a perfect re-creation, it even includes details such as the FastPass ticketing kiosks outside the ride building and the theater room that played a Norway tourism video for parkgoers exiting the attraction. It doesn't capture verisimilitude, but it certainly captures the spirit of Norway's cult favorite ride. Notably, Costall published (and presumably finished) his Norway level six months before Disney announced that Maelstrom would be closing and re-themed to Frozen: Ever After (2016–).[69]

TheArmyofDos (YouTube user Hakke) has been working to recreate major attractions in Disneyland and Disney California Adventure, including the original version of the Twilight Zone Tower of Terror before it was replaced by Guardians of the Galaxy: Mission Breakout in 2017.[70] Notably, *Dreams* can be used with PlayStation VR that adds a whole new dimension of embodiment within the virtual world. *Dreams* also enables its users to draw from user-generated content while assigning credit, which means that Hakke's creations are collaborative endeavors. Similarly, *Planet Coaster*'s creators can acquire everything from individual models to full park areas using the Steam Workshop or Frontier Workshop. Collaboration through user-generated content marketplaces has become a crucial part of these efforts because of the sheer amount of time it takes

68. Rich Costall, "Epcot Norway and Mexico Pavilions - Project Spark," uploaded on May 8, 2014, YouTube video, https://www.youtube.com/watch?v=0LlfkvfQnR4&list=PL6Dq-p9_8N7yY5JjvVsy8Yrl1szJTpois&index=7.
69. Rebecca Williams, "Replacing Maelstrom: Theme Park Fandom, Place, and the Disney Brand," in *Everybody Hurts: Transitions, Endings, and Resurrections in Fan Cultures*, ed. Rebecca Williams (University of Iowa Press, 2018), 167–80.
70. Hakke, "DreamsTM Disney California Adventure The Twilight Zone Tower of Terror | VR," uploaded on July 24, 2020, YouTube video, https://www.youtube.com/watch?v=3CBI2wvjkb8.

to build in 3D. Sandbox tools like *Minecraft* and *Roblox* are extremely popular on their own, so it is no surprise to see a glut of ride re-creations: they are designed to run on a range of computer hardware specifications or home consoles and provide an approachable platform for learning how to build, assemble, and script virtual worlds.

A game engine "encompasses the fundamental software components of a computer game [including] program code that defines a game's essential 'core' functions, such as graphics rendering, audio, physics, and artificial intelligence."[71] Game engines may handle core programmatic functions, but from the nothingness of a blank project file, games designers become "world-builders that must consider the technological control of every aspect of the game including the scripted actions of automated characters."[72] Game designers are not unlike theme park designers in producing a particular kind of experience. And though the undertaking is daunting, 3D re-creations using game engines offer unparalleled verisimilitude. In 2010, an Epcot fan named Chris Wallace began a project called "Horizons: Resurrected" in the Unity game engine. The goal—like the 3D animated progenitors that came before—was to create a spatially accurate re-creation of an Epcot ride that had a cult following. Horizons (1993–1999) was demolished to make way for a thrill ride and has been lamented by fans ever since for how accurately they feel it represented the original vision for EPCOT Center as an "Experimental Prototype Community of Tomorrow." "Horizons is no longer not just there anymore—it is completely destroyed . . . it's almost symbolic of all the things we miss about the parks because it is so utterly absent," Wallace noted. This prime example of Giddens' "ontological security" formed its own fandom that includes tribute websites and numerous projects to preserve its memory. In an interview with *MiceChat*'s Communicore Weekly show, Wallace described the impetus of the project emerging from the lack of high-quality archival material: "I can watch ride-through videos, but so much of it is dark. It's all from VHS taped in the 80s. So the video quality is terrible. So, I watched ride video after ride video and I feel like I didn't

71. Henry Lowood, "Game Engine," in *Debugging Game History: A Critical Lexicon*, ed. Raiford Guins and Henry Lowood (Cambridge, MA: The MIT Press, 2016), 247–58.
72. Gottwald and Turner-Rahman, "The End of Architecture," 56.

have a sense for what it was like."[73] Wallace expanded on this, explaining how "a big part of the project is the archeological side" in which he sourced material from across the Internet to aid in its design. Of particular use were the rogue archivist methods of Hoot and Chief—the theme park explorers who carefully documented every inch of Horizons. Wallace even commented on the *Mesa Verde Times* blog where Hoot posted their photos and video: "DO YOU REALIZE HOW HELPFUL THIS IS TO ME?! More than ANY other ride through video Ive seen. You captured so much of the stuff guests ARENT supposed to have looked at – which is exactly where the 'blind spots' in my reference have been."[74] The Unity game engine enabled Wallace to construct an elaborate environment in polygons, import models and textures, re-create lighting conditions, and incorporate the ride's soundtrack. When Wallace had the opportunity to demo "Horizons: Resurrected" at an unofficial 30th birthday celebration for Epcot, he projected the ride onto a large, curved screen and gave participants a head-tracking device so they could naturally navigate the visual environment by turning and looking.

At the moment, the barrier to entry for game engines is significantly higher than ride-design or sandbox games. Developers frequently do their own intricate 3D modeling and texturing work, write C# scripts and Unreal Blueprints, fixate on lighting, and manage software builds and deployment. The "DisneylandParis VR/Desktop Experiences" YouTube channel, for example, documents their work-in-progress building Disneyland's Tower of Terror—including the queue and pre-show—in Unreal Engine 4.[75] The video diaries of incremental improvements reveal the extensive labor required to make even single-attraction projects a reality. This becomes even more complicated when they set their ambitions on preserving park lands or even the entire park itself. Across the game tools I examined, it was clear that there is a temptation to reconstruct whole parks (or, at least, versions of parks). Aspiring themed entertainment

73. MiceChat, "In The Hot Seat with Communicore Weekly - Horizons: Resurrected's Chris Wallace," uploaded on October 18, 2012, YouTube video, https://www.youtube.com/watch?v=U3mw96rGlBw.
74. Gibson, "(No Title)."
75. DisneylandParis VR/Desktop Experiences, "Tower Of Terror - UNREAL ENGINE VR EXPERIENCE WIP#10 (PRESHOW ENGLISH.Ver)," uploaded on July 17, 2019, YouTube video, https://www.youtube.com/watch?v=FKLg3IWyROI.

designer Daniel Childs practiced at Unreal Engine by creating a detailed model of Universal Resort in Orlando, Florida, that includes both Universal Studios and the adjacent CityWalk retail district. He describes the saga of his elaborate reconstruction of CityWalk as "an ever-expanding and updating personal project in the hopes of gaining myself my dream job."[76] For Childs, it may be a portfolio piece, but he is also the keeper of a detailed, navigable record. "(Your World) Tomorrowland 1979" is an attempt to portray the Magic Kingdom's Tomorrowland as it stood at the end of the park's first decade of operation. Like *Roblox*, the system it is built upon has networked multiplayer, and fans can join to explore the virtual place. However, its operators must enable a server instance through the "Your World" platform and thus it is not readily open to visitors. Another massive preservational work-in-progress that has garnered fan attention is Sean Patrick Holland's "Futureport '82" project that takes a distinct rhetorical approach to re-creating an idealized version of EPCOT as it was "intended" to be on opening day.[77] *MiceChat*'s Scott Attula wrote,

> for those of us who visited later in its lifespan, the park may feel a bit otherworldly. That's why I invited my dad to watch. He worked for MAPO (the manufacturing arm of WED/Imagineering) in the early 80s and during his time working in Orlando completed projects in just about every EPCOT pavilion. This jogged his memory of what it was like. I think that's what this sort of recreation is all about. Reminiscing over fond memories for those who got to experience Future World in 1982 and an educational opportunity for those like myself who didn't get the chance (I wasn't even born yet).[78]

Holland's undertaking has recently upgraded from Unreal Engine 4 to 5, which has notably improved the quality of the lighting that is key to our visual experience of space. But, with this switch comes higher processing and graphical demands—both on the part of Holland and of the audiences who need capable computers to view it. "Futureport '82" has mitigated

76. Daniel Childs, "Universal Work In Progress - 30/03/19," uploaded on March 30, 2019, YouTube video, https://www.youtube.com/watch?v=xlWQVOZQXpA.
77. Sean Patrick Holland, "Futureport '82," *Futureport '82*, accessed August 28, 2021, https://www.futureport82.com/.
78. Scott Attula, "Step Back to Epcot's Opening Day with Futureport '82," *MiceChat* (blog), April 17, 2021, https://www.micechat.com/287002-step-back-to-epcots-opening-day-with-futureport-82/.

this concern by making the previous iteration available as a navigable 3D space in a web browser (like Google Street View). Holland's work is also in dialogue with park-scale projects such as "Disney MGM '89." Ambitions of verisimilitude are justifiable; we cannot help but be transported by the thoroughness of detailed models, texture, and lighting and marvel at their creators' efforts. It is no surprise, then, that fans anxiously anticipate Defunctland's promised expansion of its 20,000 Leagues Under the Sea VR experience into a whole virtual park amalgam of attractions that no longer exist. However, though the navigable worlds suggest greater objectivity because game engine worlds resemble their real-world counterparts, what they can offer are places for visitors to re-examine the subjective theme park experience.

Re-Experiencing

Whereas this chapter focused specifically on re-creations preserving "defunct" rides, the number of currently operating rides that players and fans have created using game tools is astounding. At the time of this writing, a *Roblox* player can jump into dozens of worlds that have interpreted theme parks and their attractions to varying degrees of accuracy. With the aid of social media, fan-preservationists converse, share reference material, and encourage one another to bring attractions and parks to life. Though there are cases when it is worthwhile to preserve "original experiences," opportunities for subjective experience deserve a role in making sense of the past.[79] DIY preservationists relay the subjectivity of theme park experiences and capture en masse that which otherwise may be forgotten. And theme park fans may be encroaching upon a new threshold: though there is plenty of work to be done preserving the past, enthusiasts are dutifully saving the present. Their hard work offers the rest of us the opportunity to revisit not just the past we have missed but our own experiences as well. If that is the case, what happens to John Dewey's notion that "an experience" can be bounded when "the material experienced runs its course to fulfillment"? What happens when we revisit art? Or any expressive work? What happens when we

79. Melanie Swalwell, "Moving on from the Original Experience," in *Fans and Videogames: Histories, Fandom, Archives*, ed. Angela Ndalianis and Helen Stuckey (Taylor & Francis, 2017), 213–14.

revisit Space Mountain fifteen years after our first Disneyland vacation? It seems likely that if, in the meantime, the ride was only an increasingly distant memory, the second visit is a new experience. But how about an annual passholder who can ride it at least once a month? Surely those experiences begin to blend. The subjective, imperfect nature of ride-through videos and soundtrack recordings and *Rollercoaster Tycoon* interpretations may very well un-bound the discrete experience in a way that constantly refreshes our perspective and engages the intellectual experience. And, when a 3D recreation in a videogame level is the only way to glimpse a long-demolished attraction, *Planet Coaster* players and VR headset owners will be well-versed to visit the past.

Bibliography

Attula, Scott. "Step Back to Epcot's Opening Day with Futureport '82." *MiceChat* (blog), April 17, 2021. https://www.micechat.com/287002-step-back-to-epcots-opening-day-with-futureport-82/.

Bartel, Jason. "Progress During 2001 | Deep Water Studios." *Deep Water Studios,* February 18, 2004. http://www.deepwaterstudios.com/projects/epcot-center-project/epcot2001/.

Belisle, Brooke. "Immersion." In *Debugging Game History: A Critical Lexicon*, edited by Raiford Guins and Henry Lowood, 247–58. Cambridge, MA: The MIT Press, 2016.

Bennett, Andy. "'Heritage Rock': Rock Music, Representation and Heritage Discourse." *Poetics* 37, no. 5 (2009): 474–89. https://doi.org/10.1016/j.poetic.2009.09.006.

Carlson, Marvin. "Immersive Theatre and the Reception Process." *Forum Modernes Theater* 27, no. 1 (2012): 17–25. https://doi.org/10.1353/fmt.2012.0002.

Carlson, Scott. "Bootleg Compilations as Fan Preservation." In *Music Preservation and Archiving Today*, edited by Norie Guthrie and Scott Carlson. Rowman & Littlefield, 2018.

Carson, Don. "Recreating Disneyland's 1958 Version of the Alice in Wonderland Attraction – Intro Version." Uploaded on August 9, 2020. YouTube video. https://www.youtube.com/watch?v=GGzoQLkOMWk.

Childs, Daniel. "Universal Work In Progress – 30/03/19." Uploaded on March 30, 2019. YouTube video. https://www.youtube.com/watch?v=xlWQVOZQXpA.

Cook, Spencer. "A Computer-Animated Reconstruction of Mr. Toad's Wild Ride." *Wayback Machine,* 2003. https://web.archive.org/web/20060913202241/http://www.virtual-toad.com/history.html.

———. "Welcome to Virtual Toad!" *Virtual Toad,* accessed August 30, 2021.

http://virtual-toad.com/.

Costall, Rich. "Epcot Norway and Mexico Pavilions – Project Spark." Uploaded on May 8, 2014. YouTube video. https://www.youtube.com/watch?v=0LlfkvfQnR4&list=PL6Dq-p9_8N7yY5JjvVsy8Yrl1szJTpois&index=7.

———. "JAWS – Universal Studios Orlando in Project Spark." Uploaded on April 13, 2014. YouTube video. https://www.youtube.com/watch?v=IdfxFvmb-rs.

———. "Kongfrontation: Universal Studios Florida (Project Spark)." Uploaded on August 16, 2015. YouTube video. https://www.youtube.com/watch?v=pTDzEvpDbxE.

———. "Project Spark – EPCOT – Mexico Pavilion." Uploaded on March 15, 2014. YouTube video. https://www.youtube.com/watch?v=bvqRLMRnftQ.

DACS DACS. "VIRTUAL Twister – Ride It out Universal Orlando." Uploaded on July 31, 2016. YouTube video. https://www.youtube.com/watch?v=nIGoOqRujCw.

Darley, Andrew. *Visual Digital Culture: Surface Play and Spectacle in New Media Genres*. Routledge, 2002.

De Kosnik, Abigail. *Rogue Archives: Digital Cultural Memory and Media Fandom*. Cambridge, MA: The MIT Press, 2016.

Deanrell. "NoLimits 2: Lost Lands Dragons (Dueling Inverted B&M)." Uploaded on January 19, 2018. YouTube video. https://www.youtube.com/watch?v=NhGbbvWW5c4.

Dewey, John. *Art as Experience*. Perigee Books, 1980.

DisneylandParis VR/Desktop Experiences. "Tower Of Terror – UNREAL ENGINE VR EXPERIENCE WIP#10 (PRESHOW ENGLISH.Ver)." Uploaded on July 17, 2019. YouTube video. https://www.youtube.com/watch?v=FKLg3IWyROI.

Einwächter, Sophie G. "Preserving the Marginal. Or: The Fan as Archivist." In *At the Borders of (Film) History: Temporality, Archaeology, Theories: FilmForum/2014: XXI Convegno Internazionale Di Studi Sul Cinema*, edited by Alberto Beltrame, Giuseppe Fidotta, and Andrea Mariani, 359–69. Udine: Forum, 2015.

Flint, Michael. "Dizneyworld's If You Had Wings Project." *Wayback Machine,* March 20, 2005. https://web.archive.org/web/20071220062206/http://dizneyworld.net:80/iyhw.html.

Freitag, Florian. "Theme Park Metatexts: An Aesthetics of Inclusion and Exclusion." *Journal of Foreign Languages and Cultures* 3, no. 1 (June 2019): 1–10.

Friedberg, Anne. *Window Shopping: Cinema and the Postmodern*. University of California Press, 1993.

Gibson, Hoot. "(No Title)." *Mesa Verde Times* (blog), July 19, 2012. http://mesaverdetimes.blogspot.com/2012/07/there-were-lot-of-times-when-we-would.html.

Giftaddict. "[NoLimits Coaster 2] Space Mountain – From the Earth to the Moon | Full Onride." Uploaded on November 1, 2015. YouTube video. https://www.youtube.com/watch?v=2PDD7Giair0.

Gottwald, Dave. "From Image as Place to Image as Space: Pinocchio, Pirates, and the Spatial Philosophy of the Multiplane Camera." *The International Journal of the Image* 12, no. 1 (2021): 71–93. https://doi.org/10.18848/2154-8560/CGP/v12i01/71-93.

Gottwald, Dave, and Gregory Turner-Rahman. "The End of Architecture: Theme Parks, Video Games, and the Built Environment in Cinematic Mode." *The International Journal of the Constructed Environment* 10, no. 2 (2019): 41–60. https://doi.org/10.18848/2154-8587/CGP/v10i02/41-60.

Grice, Gordon S. "Sensory Design in Immersive Environments." In *A Reader in Themed and Immersive Spaces*, 131–38. ETC Press, 2016.

Hakke. "DreamsTM Disney California Adventure The Twilight Zone Tower of Terror | VR." Uploaded on July 24, 2020. YouTube video. https://www.youtube.com/watch?v=3CBI2wvjkb8.

Heim, Michael. *Virtual Realism*. Oxford University Press, 2000.

Hench, John. *Designing Disney*. Disney Editions, 2009.

Holland, Sean Patrick. "Futureport '82." *Futureport '82,* accessed August 28, 2021. https://www.futureport82.com/.

Jones, Doug. "The True Story of the Unauthorized, Daredevil Documentation of the Horizons Ride at Disney World." *DangerousMinds*, August 17, 2016. https://dangerousminds.net/comments/the_true_story_of_the_unauthorized_daredevil_documentation_of_the_horizons_.

King, Margaret J. "The Theme Park: Aspects of Experience in a Four-Dimensional Landscape." *Material Culture* 34, no. 2 (2002): 1–15.

Lowenthal, David. "The Past as a Theme Park." In *Theme Park Landscapes: Antecedents and Variations*, 11–24. Dumbarton Oaks Colloquium on the History of Landscape Architecture, Dumbarton Oaks, 2002.

Lukas, Scott A. *The Themed Space: Locating Culture, Nation, And Self*. Lanham, MD: Lexington Books, 2007.

Martymum. "Original Test Track (Disney's Epcot) – No Limits Coaster 2 – Recreation." Uploaded on June 11, 2017. YouTube video. https://www.youtube.com/watch?v=mSTdgOE6IwQ.

Meikle, Kyle. "Time for the Theme Park Ride-through Video." *Transformative Works and Cultures* 37 (2022). https://doi.org/10.3983/twc.2022.2203.

MiceChat. "In The Hot Seat with Communicore Weekly – Horizons: Resurrected's Chris Wallace." Uploaded on October 18, 2012. YouTube video. https://www.youtube.com/watch?v=U3mw96rGlBw.

Nitsche, Michael. *Video Game Spaces: Image, Play, and Structure in 3D Game Worlds*. Cambridge, MA: The MIT Press, 2008.

Ostwald, Michael J. "Identity Tourism, Virtuality and the Theme Park." In *Virtual Globalization: Virtual Spaces/Tourist Spaces*, edited by David Holmes, 192–204. New York: Routledge, 2001.

Pearce, Celia. *The Interactive Book: A Guide to the Interactive Revolution*. Indianapolis, IN: Macmillan Technical Pub., 1997.

———. "Narrative Environments from Disneyland to World of Warcraft." In *Space, Time, Play: Computer Games, Architecture and Urbanism: The Next Level*, edited by Friedrich von Borries, Steffan P. Walz, and Matteas Bottger. Basel: Birkhauser, 2007.

Perjurer, Kevin. "Defunctland VR: 20,000 Leagues Under the Sea." Uploaded on January 7, 2021. YouTube video. https://www.youtube.com/watch?v=qQgLOzVkNVU.

Pojunis, Joseph. "[NL2] The Twilight Zone: Terror Tracks." Uploaded on December 21, 2016. YouTube video. https://www.youtube.com/watch?v=Zo-_Wy1fV4s.

Ryan, Marie-Laure. *Narrative as Virtual Reality: Immersion and Interactivity in Literature and Electronic Media*. Baltimore, MD: Johns Hopkins University Press, 2001.

Schweizer, Bobby. "Visiting the Videogame Theme Park." *Wide Screen* 6, Special Issue: Videogame Adaptation, no. 1 (2016). http://widescreenjournal.org/index.php/journal/article/view/99.

Stevens, E. Charlotte, and Nick Webber. "The Fan-Historian." *Transformative Works and Cultures* 37 (2022). https://doi.org/10.3983/twc.2022.2125.

Surrell, Jason. *The Haunted Mansion: Imagineering a Disney Classic*. Disney Editions, 2015.

Swalwell, Melanie. "Moving on From the Original Experience: Games History, Preservation and Presentation." In *Proceedings of DiGRA 2013: DeFragging Game Studies*. Atlanta, GA, 2013.

———. "Moving on from the Original Experience." In *Fans and Videogames: Histories, Fandom, Archives*, edited by Angela Ndalianis and Helen Stuckey, 213–33. Taylor & Francis, 2017.

SwiftSnakeProduction. "Test Track – Epcot – Walt Disney World – Planet Coaster." Uploaded on July 31, 2018. YouTube video. https://www.youtube.com/watch?v=2JdCgTOJsBw.

Theme Park Worldwide. "Let's Play Planet Coaster – Studios Park – Episode 8 – JAWS: The

Ride." Uploaded on July 2, 2018. YouTube video. https://www.youtube.com/watch?v=JhKHMIT_eQQ.

Van Dijck, José. *Mediated Memories in the Digital Age*. Stanford University Press, 2007.

Wesson, Steve. "Adventure Thru Inner Space DVD." *The Mighty Microscope,* 2010. http://www.themightymicroscope.com/dvd_puchase.htm.

———. "CGI 3D ATIS Project Recreation Ride Thru." *Wayback Machine,* November 25, 2004. https://web.archive.org/web/20050308211912/http://www.atommobiles.com/cgi-project.htm.

———. "Update (WITH SOUND) 06-30-03." *Wayback Machine,* June 30, 2003. https://web.archive.org/web/20031002050709/http://www.atommobiles.com:80/cgi-project.htm.

Williams, Rebecca. "Replacing Maelstrom: Theme Park Fandom, Place, and the Disney Brand." In *Everybody Hurts: Transitions, Endings, and Resurrections in Fan Cultures*, edited by Rebecca Williams, 167–80. University of Iowa Press, 2018.

———. *Theme Park Fandom: Spatial Transmedia, Materiality and Participatory Cultures.* Amsterdam: Amsterdam University Press, 2020.

Zika, Joel. "The Historic Dark Ride: Reimagined for Virtual Experience." Dissertation by Artefact and Exegesis, Swinburne University, 2021.