Building the Theme Park of Your Imagination

Virtualizing the Theme Park Experience in Digital Games

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Entry Through the Main Gate: A Virtual Trip to the Theme Park via Games

2020 has been a dark ride for the amusement park business and parkgoers all around the world. At the onset of the COVID-19 global pandemic, all Disney resorts closed down, and some remained so into 2021, like most other amusement parks and theme parks. With Disney Park aficionados orphaned and going into lockdown, it was inevitable that virtual experiences would spring up to bring back some of the magic. Prophetically, Gordon Grice has noted that "virtual experience will soon supplant actual experience and that our everyday environment will become so immersive that the few remaining non-immersive environments will be eagerly sought. At the very least, the words 'virtual' and 'immersive' will need to be periodically redefined or superseded."[1] As the pandemic raged on, virtual experiences did, in fact, become the norm, and soon everyone came to lament the loss of the physicality of socialization and memorable embodied experiences, like themed entertainment venues.

1. Gordon Grice interviewed (with Filippo Carlà, Florian Freitag and Scott A. Lukas) for "Research Dialogue: The Place of the Future," in Scott A. Lukas, ed. *A Reader in Themed and Immersive Spaces*, (Pittsburgh: ETC Press, 2016), 301–304.

One shining example of the yearning for the good old days of theme parks comes from the Disneyland-nostalgia YouTube channel Defunctland, dedicated to long-form video essays about the history of attractions that were decommissioned or demolished in the constant pursuit of plussing the Disney parks. Besides delivering videos, an offshoot of the project, *Defunctland VR*, vouched to create virtual reality versions of the rides of yore. The amateur project bore its first fruits with *Defunctland VR: 20,000 Leagues Under the Sea,*[2] a full reconstruction of the eponymous ride that opened in 1971 and shut down in 1994, that was released for the Oculus, Vive, and Index platforms, as well as a 3D YouTube video, featuring the original spiel and presentation of the ride.

Though a stunning achievement by any measure, buried amidst gushing YouTube comments about the fidelity of the video and reminiscing about the actual ride were users who were quick to note the differences between the original and its recreation: "I have vague memories of this ride being heavily crowded and the one escape from the heat so it was always busy in 1992. I was too young to really appreciate it and because of it being SO LOUD in that tin can, I never understood the voice over."[3] Another commenter advised: "For the true ride experience, moisten your chair before sitting down."[4] One even experienced something close to synaesthesia (with a dash of hyperbole): "I swear I could smell the diesel from the moment we arrived on the pier."[5] Exclamations such as these point to something that is inherently lost in migrating a beloved, built, breakdown-prone ride to the virtual realm. Wetness, fuel, heat, crowds . . . all elements that give riders just a touch of unpleasantness, but also an added level of sensory immersion that is lost in the recreation. As Priscilla Hobbs notes, "one of the most essential aspects of Disneyland is that it allows a person to fully embody and be submerged into [sic] fan-

2. Defunctland, "Defunctland VR: 20,000 Leagues Under the Sea," uploaded on January 7, 2021, YouTube video, https://www.youtube.com/watch?v=qQgLOzVkNVU.
3. Mark Machlay, YouTube comment on "Defunctland VR: 20,000 Leagues Under the Sea," https://www.youtube.com/watch?v=qQgLOzVkNVU&lc=UgzdgyKnA5RHlnHfKUR4AaABAg.
4. Jabronie212, YouTube comment on "Defunctland VR: 20,000 Leagues Under the Sea," https://www.youtube.com/watch?v=qQgLOzVkNVU&lc=Ugz7ceEgMyiTqnEd9sZ4AaABAg.
5. Zenon Stacy, YouTube comment on "Defunctland VR: 20,000 Leagues Under the Sea," https://www.youtube.com/watch?v=qQgLOzVkNVU&lc=Ugx0VUiNmMYmJZ_lCXh4AaABAg.

tasy fairy tale . . . This experience of embodiment is a missing element in modern American society."[6] And during lockdown, doubly so. World's fairs, those mighty forerunners of the theme parks, were already prided on giving a sense of being in another world, since at the time, "travel was difficult and expensive, making virtual travel a popular and exciting alternative."[7] Now, for many, it was the only option. Even so, the importance of physical themed entertainment is keenly felt today when we are deprived of both real travel and its next best substitute.

This chapter is devoted to making sense of the role of virtual theme parks and rides at a momentous point in the twenty-first century. Long decried as a site of fakeness and virtualization, the theme park is now challenged by the computer as the ultimate ersatz experience machine, with the oily, wet-seated, overcrowded ride as a stand-in for the authenticity of experience. Theme parks thus become sites of cultural memory that can be reclaimed by virtual recreation, which abstracts and idealises the physical realities of the park itself.

Another common criticism levelled at the theme park is the way it configures the human being to act. They conform to a script written by the designers to give uniform experiences that guests must absorb passively while it requires excessive emotional performances by its employees to bring the magic alive.[8] The question remains: who gets to decide what is an acceptable performance and who can make a meaningful impact on the site of the park? As theatre scholars opine, "the greatest tension in immersive Disney lies in the question of how much agency the tourist

6. Priscilla Hobbs, *Walt's Utopia: Disneyland and American Mythmaking* (Jefferson, North Carolina: McFarland & Company, Inc., 2015), 38.
7. Cher Krause Knight, *Power and Paradise in Walt Disney's World* (Gainesville, FL: University Press of Florida, 2019), 138.
8. Throughout the text, I frequently use the word "guest" to denote the holidaymaker, tourist, or parkgoer who attends theme parks. The use of "guest" was first instituted by the Disney theme parks but was soon adopted by the whole sector.

possesses."[9] Although touted as "an interactive space where the myths of the guest of the culture can come to life,"[10] theme park patrons seldom get to go wild and upend the orderly life at the park, let alone contribute to the design process.

Which begs the question: who gets to build a theme park and design rides—these most costly of cultural forms—and how would it change if the right tools were given to the hands of the ticket holders? Ironically enough, computer games might just provide a key piece to this puzzle. In 1994, Bullfrog's *Theme Park*[11] gave users the option to create virtual theme parks, but besides laying down paths and placing rides and tracks, these business simulations challenged players to make their parks financially viable, too.[12] Juggling loans and employee wages, purchasing stock for ice-cream vendors and hamburger stalls, setting ride prices and providing amenities such as restrooms and first aid stations, theme park construction and management games have given players the keys to both the kingdom and the boardroom at the same time. Although bilking guests for every last penny has its charms, staying in the black was never the most entertaining portion of these games—the big promise was that you got to design your own rides and scenery. In the most literal fashion, games like *Rollercoaster Tycoon* (*RCT*) (1994) [13] brought the theme park medium to its apotheosis, proving Scott A. Lukas right when he observed that "theme park architecture is no longer merely a form of representation, it is *you*—the most intimate of all cultural possibilities."[14] That is to say, theme park architecture taps into the affective ecology of patrons' ideological subconscious, activating perennial (and perennially

9. Jennifer A. Kokai and Tom Robson, "You're in the Parade! Disney as Immersive Theatre and the Tourist as Actor," in *Performance and the Disney Theme Park Experience: The Tourist as Actor*, ed. Jennifer A Kokai and Tom Robson, (Cham: Springer International Publishing, 2019), 15. https://doi.org/10.1007/978-3-030-29322-2_1.
10. Hobbs, *Walt's Utopia*, 4.
11. Bullfrog Productions, *Theme Park*, Bullfrog Productions, MS-DOS, 1994.
12. For an extended discussion on implementing the business logic of the theme park, see Makai Péter Kristóf, "Three Ways of Transmediating a Theme Park: Spatializing Storyworlds in Epic Mickey, the Monkey Island Series and Theme Park Management Simulators," in *Transmediations: Communication Across Media Borders* (New York: Taylor and Francis, 2019), 164–85. https://doi.org/10.4324/9780429282775-9.
13. Chris Sawyer, *Rollercoaster Tycoon*, Hasbro Interactive, Windows, 1999.
14. Scott. A. Lukas, *Theme Park* (London: Reaktion, 2008), 141, emphasis added.

exploitable) associations with childhood, neotenic shapes, imagined storybook worlds, and novelty architecture in a space that is easily readable and semiotically overdetermined by their association with popular cultural representations of the self-same story structures.

These are the possibilities that the rest of the chapter will explore in greater detail. I hope that, by the end, I can impress upon the reader that playable and designable theme parks create new expressions of the virtual interiorities of this "you," the theme park designers living in us. To do so, I shall begin by outlining what I take the theme park to mean in an intermedial perspective, focusing on our present understanding of "theme" as a unit of meaning that governs the logic of the park. I then proceed to lay down the methodological approach that I will use to make sense of the migration of the theme park from the realm of the physical to the realm of the virtual: an intermedial theory developed by Lars Elleström and his colleagues.[15] I then proceed to analyse *Kinect: Disneyland Adventures* (2011),[16] and how the innovative use of motion-sensing controls involves the player's body in the virtual world of Disneyland, circa 2011. Here, I note how the relatively faithfully recreated exterior landscapes and architecture of the park contrast with the wildly imaginative ludic spaces of the interiors of the rides to make the experience less like a *Defunctland VR* experience and more like an interactive game. Next, I take two modern renditions of the theme park building genre of games, *Parkitect* (2018),[17] and *Planet Coaster* (2016),[18] and first describe them as interactive challenges, then as tools of creativity. As games, I look at the business management aspects that are missing from the likes of *Disneyland Adventures* but are essential to scenario play, which is how most players encounter the software, and I examine the challenge structure and actual creations, which hint at how certain themes are encouraged by the developers to be constructed. Then I showcase how players

15. Lars Elleström, "The Modalities of Media II: An Expanded Model for Understanding Intermedial Relations," in *Beyond Media Borders, Volume 1 Intermedial Relations among Multimodal Media* (London, England: Palgrave Macmillan, 2021), 3–91. https://link.springer.com/chapter/10.1007/978-3-030-49679-1_1.
16. Frontier Developments, *Kinect: Disneyland Adventures*, Microsoft Studios, Xbox 360, 2011.
17. Texel Raptor, *Parkitect,* Texel Raptor, Windows, 2018.
18. Frontier Developments, *Planet Coaster*, Frontier Developments, Windows, 2016.

distill the essence of the theme park when they are given free rein and use the software as a design tool. I discuss how players recreate Disney theme parks—what they keep intact and what they excise—by making recourse to YouTube videos uploaded by players eager to show off their creations, sometimes years in the making. Finally, I tie it all together with a theoretical synthesis of how the intermedial adaptation of physical theme parks into game spaces abstract, customise, and thereby change our thinking of what themed spaces mean for us, in the hope that it will be a source of inspiration to all creators and creators-at-heart.

Themes are my Reality: Defining Themes and Parks Intermedially

The goal of this chapter is not to provide a thorough historical genealogy of the theme park and its antecedent forms, which has been meticulously researched by more capable scholars.[19] For the purposes of this study, I take theme parks to be in their mature forms today, constituting a cross-culturally recognised medium, or rather, an intermedial complex. Therefore, I employ a presentist perspective, investigating how the parks function today.

The theme park is first and foremost an architectural form,[20] using landscaping and the built environment to convey abstract, culturally encoded meanings that situate the guest in physical virtual spaces. Similarly, video game design entails the creation of digital virtual spaces through architectural means.[21] In fact, scholarly discourse on parks frequently uses terminology usually reserved for video games these days, such as

19. Lukas, *Theme Park;* Deborah Philips, *Fairground Attractions: A Genealogy of the Pleasure Ground* (London: Bloomsbury Academic, 2012); Terence Young and Robert B. Riley, *Theme Park Landscapes: Antecedents and Variations*, (Washington, DC: Dumbarton Oaks Research Library and Collection, 2002).
20. Karal Ann Marling, *Designing Disney's Theme Parks: The Architecture of Reassurance* (Paris: Flammarion, 1997).
21. Espen Aarseth, "Allegories of Space: The Question of Spatiality in Computer Game," in *Space Time Play: Computer Games, Architecture and Urbanism: The Next Level*, ed. Friedrich Von Borries, Steffen P. Walz, and Matthias Böttger (Berlin: Birkhäuser, 2007), 44–47; Christopher W. Totten, *An Architectural Approach to Level Design* (Boca Raton, FL: CRC P., 2019); Friedrich Von Borries, Steffen P. Walz, and Matthias Böttger, *Space Time Play: Computer Games, Architecture and Urbanism: The Next Level* (Berlin: Birkhäuser, 2007).

simulation[22] and virtual reality,[23] when talking about the power of the parks to immerse their guests and "transform the whole city into an immense robot."[24] Matthew Wilson Smith describes theme parks as "total works of art that seek to recapture a lost harmony with the natural world through the medium of virtual simulacra."[25] Likewise, critics recognize the centrality of architecture to make such experiences possible, claiming that "architects and urban planners were among the first to celebrate Disney's simulations for their substance instead of surface value."[26] Cher Krause Knight even highlights that the designers of Disney theme parks, the Imagineers, "describe their work as 'an extreme example of immersive entertainment' blending virtual reality and fantasy."[27]

With all this discussion, readers would be forgiven for thinking that the "theme" in "theme park" means the medium's capacity to immerse their patrons in recreations of other worlds. Yet, this notion is only tenable in the short run. As Lukas observes, the use of themes to organize space originates from world's fairs, distinguishing them from other landscaped mass entertainment venues.[28] Today, in themed entertainment, "a central idea or theme is used to create associations between the space and the guest. . . . It can also be seen as a form of storytelling that takes place in a three-dimensional world, [where] the designer acts as a storyteller and creates settings, characters, action"[29] for giving guests a unique narrative

22. Jean Baudrillard, *Simulacra and Simulation,* trans. Sheila Faria Glaser (Ann Arbor: University of Michigan Press, 1994).
23. Marie-Laure Ryan, *Narrative as Virtual Reality* (Baltimore: Johns Hopkins University Press, 2001), 288–290.
24. Umberto Eco, *Travels in Hyperreality: Essays*, (San Diego and London: Harcourt Brace Jovanovich, 1986), 47.
25. Matthew Wilson Smith, *The Total Work of Art: From Bayreuth to Cyberspace* (New York: Routledge, 2007), 186.
26. Knight, *Power and Paradise,* 22.
27. Ibid., 100.
28. Lukas, *Theme Park, 34.*
29. Scott A. Lukas, *The Immersive Worlds Handbook: Designing Theme Parks and Consumer Spaces* (New York: Focal Press, 2012), 68.

experience. When Henry Jenkins discusses game design as a form of narrative architecture, he specifically refers to theme park ride design as an important analogy for their facility of creating evocative spaces for stories.[30]

No matter how theorists approach it, theming is always multisensory and intermedial, operating "through multiple architectural, cognitive, cultural, performative and aesthetic levels"[31] to produce "a sort of three-dimensional, moving, multi-sensory cabinet of curiosities."[32] And every cabinet of curiosity has an interior, at least figuratively. Among theorists of urban space, the notion of "public interiority" has gained acceptance as a way of discussing even open-air spaces as having some sense of virtual interiority. Teston claims that it is possible "to have a place that feels like an interior, without the constraints of architectural form. Or an interior-feeling place that is primarily delineated by atmospheres, and merely supported by architectural form."[33] The latter, to my mind, is as good a definition of a theme park as any. In Teston's thinking, these interior-feeling places are separated by invisible planes, and we could easily associate themed "lands" with these virtual interiors, whose imaginary boundaries form "a membrane between interiority and exteriority only understood through the haptic senses,"[34] for example, by passing through the walkways separating Adventureland from Frontierland. The dual nature of inside and outside is also touched upon by J. P. Telotte. In his exploration of Walt Disney's contribution to the 1964–65 New York World's Fair, he remarks that Francesco Casetti names the "immersive gaze that gives the impression of being inside the seen world, but which at the same time maintains the sense of distance" as a lasting legacy of 20th century modernity.[35] Such a liminal conception of living cinema

30. Henry Jenkins, "Game Design as Narrative Architecture," in *First Person: New Media as Story, Performance, and Game*, ed. Noah Wardrip-Fruin and Pat Harrigan, (Cambridge, MA: The MIT Press, 2004), 123–124.
31. Lukas, *Theme Park,* 70.
32. Lukas, *Theme Park,* 73.
33. Liz Teston, "On the Nature of Public Interiority," *Interiority,* no. 3 (January 2020), 62.
34. Teston, "Public Interiority," 75.
35. J. P. Telotte, "Disney and 'This World's Fair Thing,'" in *Meet Me at the Fair: A World's Fair Reader,* eds. Laura Hollengreen, Celia Pearce, Rebecca Rouse, and Bobby Schweizer (Pittsburgh, PA: ETC Press, 2014), 421. https://doi.org/10.1184/R1/6686831.v1.

is a part of theme parks' mission statements: to create a spect-actorial space where guests can marvel at the virtual interiors of the various lands—inside the park, among 3D film sets, but out in the fresh air and at its rides—inside a building which often gives the impression of the outside world, but where the guests maintain a safe distance from the illusion of the designed world. This is what Lukas calls the "amusement park world picture," a representational regime of juxtaposition of otherwise incongruous elements, made possible by the medial affordances of the park, in which "an order of synaesthetic potential was created" through "movement and architectural performance."[36]

Themes are therefore intermedial assemblages that use different modalities of media—as interpreted by guests—to foster participation in an ever-evolving, but oftentimes heavily scripted, performance of guests and employees, with cues taken from exotic places, popular cultural genres, and intellectual property franchises, to construct environmentally embedded stories, which guests desire to experience. In this definition, I rely on Lars Elleström's updated model of intermediality[37] with which we can describe the theme park as a qualified medium. They are historically situated, spatially expansive, commercial built environments for the purposes of entertainment, segmented as architecturally distinct lands. Temporally, they are designed for visits lasting from days to a week, usually, with individual rides optimized for 10 to 30-minute shows. Materially, they utilize every known medium to create three-dimensional environments through landscaping and architecture that is more coherent at the local level but more incongruous on the park level. Sensorially, they deliver audiovisually and kinaesthetically cued storytelling with appropriate olfactory, gustatory, and haptic stimuli which congeal into a semiotic unity—the theme—activating guests' prior experiences and expectations with the semiotic field being communicated to give a framework for the reception of the themed environment.

36. Lukas, *Theme Park,* 54.
37. Elleström, *Modalities and Media II.*

Note that, due to the fact that the intermedial model is most capable of working with qualified media that depend on a clear delineation between creator and audience, one aspect that is curiously undertheorized is the performative or agential aspect of media reception, or co-creation. However, the agency of the interactor is central to games of various guises, which prompted theorist Ida Kathrine Jørgensen to further develop the intermedial model by including an agential modality, described as "the way in which the game (and all its modalities) is experienced, interpreted and performed by an agent (the player, the spectators, etc.)," which enables her to highlight "the set of actual actions that the player performs during the game."[38] This will be essential when we begin our discussion of how the potentialities of video games are being utilized by players to rehearse and reconfigure received notions of what constitutes a theme park. However, she is quick to stress that all media objects are operated somehow, and that the agential aspect is complemented by embodied and mental aspects of interaction.[39] This is all the more important, even for physical parks, because "in the modern theme park the corporeal machines . . . are minimized. The effects of amusements on the body [. . .] are lessened in favour of effects on the mind."[40] Clearly, this extends to the video game theme park, which does not offer the same kinaesthetic thrills as an actual roller coaster, nor the splash of the water waiting at the bottom of a drop on a dark ride or the smell of gasoline on a fake submarine. Even so, I claim that the computer game's theme park allows a unique opportunity for players to embody a virtual avatar in the gameworld and see the theme park from below or to take up the mantle of the Imagineer and design it from above. By these modes of engagement, players experience and reenact themes as narratives, as playable architecture,

38. Ida Kathrine Hammeleff Jørgensen, "Games as Representational Artifacts: A Media-Centered Analytical Approach to Representation in Games" (PhD thesis, IT-Universitetet i København, 2020), 178. https://pure.itu.dk/portal/en/publications/games-as-representational-artifacts(046bb469-1582-404b-8f3c-62de5836d3f5).html.
39. Jørgensen, "Games as Representational Artifacts," 180.
40. Lukas, *Theme Park,* 133.

and at the same time, as an idealized space of entertainment where the friction of the real world is assumed to be nil. It is with these nuances in mind that I now turn to the vexed question of passivity and agency in theme park criticism.

VRing off the Script? From Total Passivity to Algorithmic Agency

Architecture is not the only thing that performs at theme parks, although clever mechanical manipulation of the built environment does make inanimate objects appear to perform, as do life-like hydraulic and pneumatic robots. In fact, the classic postmodern criticism of Disney is that it is "a place of total passivity. Its visitors must agree to behave like its robots."[41] Partly due to health and safety regulations, the cultivation of middle-class civility, the desire for ensuring maximum throughput of rides, and the sheer volume of visitors that must be entertained in a theme park, standard codes of conduct and a high degree of formalisation of behaviour is essential to run a park smoothly. This choreographic algorithmization of behavior reaches its pinnacle within theme park video games.

In these games, simulated guests run on rather simple scripts, functioning essentially as tiny robots of consumption within the virtual world. A notable example of this is pathfinding behaviour. In *RCT 2*, when guests reach an intersection, they choose their path randomly. As YouTuber Marcel Vos illustrates, this results in the guests' mind-boggling ineptitude to reach the ends of a simple ten-tile maze, provided that they are given a simple left-hand, dead-end turn at every tile possible, due to the quirks of the pathfinding algorithm.[42] These virtual guests are rather stupid: a thousand might queue up for one ride at a time;[43] they will

41. Eco, *Travels in Hyperreality*, 48.
42. Marcel Vos, "RollerCoaster Tycoon 2 - The Impossible Maze," uploaded on July 31, 2020, YouTube video, https://www.youtube.com/watch?v=KVgoy_a_gWI.
43. Marcel Vos, "1000 Guests, 1 Queue Line," uploaded on June 17, 2021, YouTube video, https://www.youtube.com/watch?v=xwd48VEnptI.

eagerly hop on a ride that goes on for twelve in-game years;[44] they don't notice the deaths of fellow patrons; and board rides with exits leading to nowhere.[45] Of course, animated robots serve a different function on dark rides in real-life parks, acting as pseudo-protagonists, but Cornfeld's suggestion that "perhaps the pleasure of encountering Audio-Animatronic actors stems from the sense of a cinematic experience rendered as a three-dimensional environment on its own terms, unburdened by any semblance of personal control"[46] also applies to video game guests. The virtual guests have an autonomous AI, and pleasing their simple, code-driven hearts is the only true way to beat game scenarios. They are nonetheless passive in the sense that they are utterly inflexible in how they execute their program; while Audio-Animatronic robots on rides "perform perfection,"[47] in-game guests in theme park management simulators can only be said to be perfect performers in the sense that they adhere to their scripts to their literal deaths.

However, recent scholarship also highlights that the deterministic vision of the theme park as a machine of rote conformism does not stand up to scrutiny when investigated through the lens of the actual guests. Commentators note that there has been an increasing demand for agency in the parks, and patrons want to "indulge in fantasies in the parks and affect the space by playing in the staged/themed environments."[48] Agency is always negotiated by patrons, operators, and management, however. Unlike earlier forms of total artworks, "at Disneyland the active involve-

44. Marcel Vos, "[Former record] RCT2 - 12 Years Of Suffering - Longest roller coaster ever created," uploaded on December 18, 2018, YouTube video, https://www.youtube.com/watch?v=CFVm5R_dxoo.
45. Marcel Vos, "RCT2 - How to kill your guests without losing park rating," uploaded on September 6, 2019, YouTube video, https://www.youtube.com/watch?v=faMFM3QervQ.
46. Li Cornfeld, "'Have to See It, Yet Boring': Disney's Robot Dramas Revisited," in *Performance and the Disney Theme Park Experience: The Tourist as Actor*, eds. Jennifer A. Kokai and Tom Robson (Cham: Springer International Publishing, 2019), 167, https://doi.org/10.1007/978-3-030-29322-2_8.
47. Joseph R. D'Ambrosi, "The Search for a Great, Big, Beautiful Tomorrow: Performing Utopia with Non-Human Bodies in the Hall of Presidents," in *Performance and the Disney Theme Park Experience: The Tourist as Actor*, eds. Jennifer A. Kokai and Tom Robson (Cham: Springer International Publishing, 2019), 179, https://doi.org/10.1007/978-3-030-29322-2_9.
48. Victoria Pettersen Lantz, "What's Missing in Frontierland? American Indian Culture and Indexical Absence at Walt Disney World," in *Performance and the Disney Theme Park Experience: The Tourist as Actor*, eds. Jennifer A. Kokai and Tom Robson (Cham: Springer International Publishing, 2019), 45, https://doi.org/10.1007/978-3-030-29322-2_3.

ment of the audience in the interior of the theatre is greatly increased. . . . The journeys between the lands within Disneyland became active spatial stories, and the spectators essentially actors in the spectacle itself."[49] However, acting is not the same as agency. Acting is the action of performing, of engaging in make believe; agency in digital environments implies "the satisfying power to make meaningful choices and see the results of our actions and decisions."[50] Within a theme park space, however, "guests may join in the story if that interaction falls within the performance boundaries. People are encouraged to perform the role of park guest but must adhere to the scripts and boundaries of that role."[51] More substantially, guests cannot design rides themselves (although fans may lobby for or against changes),[52] nor can they change park operations to better suit their needs on a whim. This power is left to be enjoyed in virtual theme parks, designed for a single player rather than a million guests.

The rides are also castigated by postmodern cultural critics for their ersatz nature and illusory qualities. Even so, "Disney's simulations are not just illusions—they are physical environments that we can enter, touch, and move around in, designed to be as fully interactive as possible,"[53] within the means of health and safety regulations. And guests can often take a peek behind the scenes when rides break down and they are evacuated, seeing the ride as a walkthrough attraction without all the trappings of carefully controlled viewpoints.[54] By using night vision cam-

49. Wilson Smith, *The Total Work of Art*, 126.
50. Janet Horowitz Murray, *Hamlet on the Holodeck: The Future of Narrative in Cyberspace* (Cambridge, MA: The MIT Press, 2017), 123.
51. Maria Patrice Amon, "The Royal Theatre Presents: Echoes of Melodrama in the Magic Kingdom," in *Performance and the Disney Theme Park Experience: The Tourist as Actor,* eds. Jennifer A Kokai and Tom Robson (Cham: Springer International Publishing, 2019), 207, https://doi.org/10.1007/978-3-030-29322-2_3.
52. Notable studies of the power of fans to change the parks include Rebecca Williams, *Theme Park Fandom: Spatial Transmedia, Materiality and Participatory Cultures* (Amsterdam: Amsterdam University Press, 2020) and Priscilla Hobbs, ed., *Interpreting and Experiencing Disney: Mediating the Mouse* (Bristol, Intellect Ltd: 2022).
53. Knight, *Power and Paradise*, 99.
54. Innovention Media, "Lights On Evacuation Walkthrough Haunted Mansion | Walt Disney World 2019," uploaded on July 13, 2019, YouTube video, https://www.youtube.com/watch?v=kN4FD1035aw.

eras to highlight the technology behind the magic,[55] guests thereby discover the differences between its actual and virtual interiorities. It is not incidental that scholars emphasize that "through new technologies, the whole of the park going experience is being slowly transformed into a 'theme park for one,'" a trend culminating in the theme park video game, which has "remediated the theme park's experience into a world centred around [guests'] individual agency."[56]

In a game like *Kinect: Disneyland Adventures* or *Epic Mickey* (2010),[57] players do not just move about the parks, but actively engage with the virtual environment, destroying and creating elements of the rides. In park management simulators, they design the layout of the parks, the rides, hire the employees, tend to marketing and custodial costs, as well as manage guest expectations. And yet, even the more freeform games promote a particular logic of play through procedural rhetoric[58] and they often guide the player through the experience in a design principle known as "scripting the interactor."[59] Furthermore, because of the non-trivial, often repetitive effort required to progress through the game, gameplay might actually feel suspiciously similar to work, or what you might call "playbour."[60] Theme park management sims, after all, put you in the place of someone with an actual job (or rather, several, including ride designer, HR manager, landscaper, chief financial officer, and more). You could make the case that game design is just cleverer at hiding the invisible walls that delimit an agent's performance.

55. Ithemepark, "Space Mountain Front Row Nightvision HD Magic Kingdom Walt Disney World," uploaded on March 21, 2013, YouTube video, https://www.youtube.com/watch?v=4N0otrMuh7E.
56. Bobby Schweizer, "Visiting the Videogame Theme Park," *Wide Screen* 6, no. 1 (2016), 27, http://widescreenjournal.org/index.php/journal/article/view/99/132.
57. Junction Point Studios, *Epic Mickey,* Disney Interactive Studios, Wii, 2010.
58. Ian Bogost, *Persuasive Games: The Expressive Power of Videogames*, (Cambridge, MA: MIT Press, 2007), 1–64.
59. Josephine Anstey and Dave Pape, "Scripting the Interactor: An Approach to VR Drama," in *Creativity and Cognition: Proceedings of the 4th Conference on Creativity & Cognition* (2002), 150–56. https://doi.org/10.1145/581710.581733.
60. Julian Kücklich, "Precarious Playbour: Modders and the Digital Games Industry," *Fibreculture Journal* 5, (2005), https://five.fibreculturejournal.org/fcj-025-precarious-playbour-modders-and-the-digital-games-industry.

Nowhere is the clash between environmental storytelling and agency more strongly felt than in the dark ride. As Sorkin recognizes, Disneyland and its dark rides offer "a space in which narrative depends on motion, and in which one is placed in a position of spectatorship of one's own spectatorship."[61] In this view, dark rides are immersive, but not interactive—they convey a set of virtual interiors to riders without the opportunity to step out of their spectatorial position, but they continually address patrons *qua* patrons ("Welcome, foolish mortals!", "Ye come seekin' adventure and salty old pirates, eh?"). It is not for nothing that more deterministic theme park criticism focuses on the individual rides while its authors argue for the passivity of the patron and opt for contextual and historical readings when they discuss lands, since guests enjoy a greater degree of freedom when exploring on foot.[62]

But the dark ride is notable for being the purest example of virtual interiority, as it "achieves the otherworldly by locking people inside another world and by detailing this world through special effects and interior design."[63] Despite their apparent lack of interactivity, ride designers attribute metaphorical agency to the riders, and discuss the guest's position in explicitly ludic terms. In John Hench's words, "we offer adventures in which you survive a kind of personal challenge . . . But in every case, we *let you win.*"[64] This liminal and ludic position is picked up on by game scholars, too, who note that rides like Jurassic Park are "essentially a giant computer-driven machine for telling an immersive story, and the boat is the fourth wall,"[65] or perhaps better put: the interface which connects riders and the immersive world.

61. Michael Sorkin, *Variations on a Theme Park: The New American City and the End of Public Space* (New York: Hill and Wang, 1992), 217.
62. Three classic examples of this are found in Jean Baudrillard's *Simulacra and Simulation* (Michigan: Ann Arbor - University of Michigan Press, 1994), Umberto Eco's *Travels in Hyperreality: Essays* (San Diego; London: Harcourt Brace Jovanovich, 1986), and Stephen Fjellman's *Vinyl Leaves: Walt Disney World and America* (Boulder: Westview Press, 1992).
63. Lukas, *Theme Park,* 124.
64. Charlie Haas, "Disneyland is Good for You," *New West Magazine*, December 4, 1978, https://www.dix-project.net/item/1633/new-west-magazine-disneyland-is-good-for-you.
65. Janet Horowitz Murray, *Hamlet on the Holodeck: The Future of Narrative in Cyberspace* (Cambridge, MA: The MIT Press, 1998), 107.

Today, rides and lands are often imaginative, essentialized, and stylized recreations of iconic buildings and culture, which are cognitively remapped through design to evoke particular associations. As antecedents, world's fairs often experimented and tested rides and themes before they found their places in the parks. Thus, a form of "entertainment intertextuality"[66] emerged, and this tradition continues with the remediation of physical rides and lands in the virtual world of computer games. This cuts both ways: if the recent opening of Super Nintendo World in Universal Studios Japan, and World Joyland in Changzhou are any measure, video game-themed parks are also capitalising on such intertextuality.

So, what happens when actual theme parks are recreated in a digital format? To answer that question, I use the remainder of this chapter to critically analyse several games. I investigate *Kinect: Disneyland Adventures* for how it recreates the guest's experience and remodels the physical rides to become more interactive. Then I move on to discussing two contemporary theme park management simulators, *Parkitect* and *Planet Coaster*. First, I describe them in terms of game mechanics (i.e., what a player can do in them) and its models of simulating the park as a business. Then I examine them as architectural design tools for the creation of replica parks, whereby players strategically include and omit particular elements of theme park design to realize their vision of what the essence of the park is.

Before we begin, I want to indicate that the analysis of theme park games provides a great example of what Golding has termed "spatial analysis from below [and above],"[67] a concept he uses to name the two vantage points of how players and theorists look at a game. In his discussion of first-person and isometric birds-eye-view games, he compares the players to the city walker of Michel de Certeau, and insists that "theory which instead finds itself at the perspective of the bureaucrat, looking down

66. Lukas, *Theme Park,* 33.

67. Daniel Golding, "Putting the Player Back in Their Place: Spatial Analysis from Below," *Journal of Gaming and Virtual Worlds* 5, no. 2 (2013): 117–30, https://doi.org/10.1386/jgvw.5.2.117_1.

on the videogame 'from above', can never fully account for this point."[68] Players see the theme parks they build in *Planet Coaster* and *Parkitect* from above, where "the city starts to look a little bit more like a map" and where "we can encounter the city as a concept. . . . It is the vision empowered by a dispassionate critical distance; it is to see patterns and flows,"[69] which is indeed necessary to construct rides, lay down paths, and to provide homogenized fun for little computer people. Spatial analysis from above focuses on the conceptual analysis of video game spaces, whereas analysis from below investigates these spaces from the perspective of its users. Notably, players explore *Disneyland Adventures* from below—the eye height of the parkgoer. Likewise, spatial analysis from below begins with approaching the game from the toolkit of the player and what is available for her to do. This also implies that "if you alter the toolset available to the player, you also alter the space itself."[70]

To illustrate with just a couple of quick examples, without a way to height-map various game objects, a rollercoaster could not be constructed in a gameworld. Similarly, when the player avatar is a parkgoer, you can interact with characters in a gameworld on a more personal, meaningful level, whereas in a top-down, god's eye view, distance forbids such personal engagements. Some games will allow you to place new objects in the gameworld; others will only allow you to navigate around existing objects. Some building games bid you to manage your shops' stock and sales prices, while others only allow you to fiddle with ride and gate prices—this changes how you approach making money in the game. And finally, earlier games would only let you design the exterior structures and spatial arrangements of buildings, while newer games, like *Planet Coaster*, enable you to create elaborate dark rides with interior design. In fact, this is what I endeavour to show: that by looking at an open-world, arcade-style game like *Disneyland Adventures* and a business

68. Ibid., 119.
69. Ibid., 119–121.
70. Ibid., 125.

management-style game such as *Parkitect*, the theme park itself changes what it means and how it enables the construction of the virtual interiors of the park. It is with this thought in mind that I turn to the joys of virtual tourism in *Disneyland Adventures*.

See Everything, Ride Everything, Collect Everything—The Theme Park in Motion in Kinect: Disneyland Adventures

The Kinect was meant to be a revolutionary platform to rival the achievements of the Nintendo Wii and the PlayStation Move for the PS3, designed to bring full-body motion control to games. Essentially, a Kinect device detects the player's posture and body movements and maps them onto an in-game avatar, which performs them in the virtual world. If a person jumps in the living room, the avatar jumps in the game. This amounts to many of the Kinect games utilising corporeal motions like slashing, jumping, swinging, posing, crouching for their main game mechanics. Sports and fitness games and action-adventure titles dominate the motion-control game market, but many game studios have used the platform more innovatively.

Among them is *Kinect: Disneyland Adventures* (*KDA*), published in 2011 and ported to Windows in 2017 as *Disneyland Adventures*, marries the motion-control mechanics with a life-sized recreation of the first Disney park. The player is put in the role of an average park-loving girl or boy who gets to explore Disneyland without adult supervision, meet forty-three beloved characters and ride nineteen iconic rides, as well as collect autographs, postcards, and pins. The external layout of the park is largely faithful to how the park stood at the time, minus the intellectual properties Disney did not control then (which they have since acquired). However, the virtual rides differ substantially from the original attractions, essentially functioning as minigames with different stages that rework the tableaux and characters of their sources. The player is actively involved in the minigames, and the levels "reposition them as a special actor who is a participant (not just observer) in the story of the ride."[71]

71. Schweizer, "Visiting the Videogame Theme Park," 22.

Besides copyright issues, one of the key reasons why the digital recreation differs from the physical parks is that the lack of materiality and the single-player experience removes crucial elements from the dark side of the theme park experience. For example, there is no need for a "lost parents" or "lost and found" section, because the player cannot be lost in the virtual park or separated from loved ones and personal belongings (your inventory is always safely with you). And since nothing biological is simulated in *KDA* either, there is no need to model things like toilets, first aid stations. Even rubbish bins and manhole covers are only included to exude free coins (even if both the guest's biological needs and their rubbish are simulated in other games like *Rollercoaster Tycoon*). Thus, we can see a quite literal sanitization of the theme park here. In the remediated rides, we have good examples of the difference between what Daniel Punday calls "primary spaces," the spaces the player accesses and acts upon, and "orienting spaces," those that are more abstract parts of the game world, serving as backdrops and context for action.[72] A major trend in transmediating rides for digital games is the expansion of these orienting spaces. For example, the physical Space Mountain in Disneyland is nothing more than a wild mouse roller coaster that players ride entirely in the dark. In contrast, the *KDA* version splits the attraction into two levels with a massive orienting space—"Journey through Space"—which has you ride a hovercraft through a psychedelically-coloured representation of space, collecting coins, meeting aliens, passing by an asteroid field, red giants, a black hole, and a Space Junkyard, in which you weave your way through a space station filled with robots. Granted, the main challenge lies in navigating along a fixed path. The primary space has a limited degree of freedom (which is still greater than the narrow confines of a physical ride), just enough to avoid obstacles that hurt and slow down the player as they progress inexorably towards the end of the run. The physical ride has very little voice-over, whereas the game version gives you an AI companion, who comments upon the tasks you need to do and provides more sci-fi ambience.

72. Daniel Punday, *Playing at Narratology: Digital Media as Narrative Theory* (Columbus, OH: Ohio State University Press, 2019), 54.

On Disneyland's it's a small world, riders sit in a boat as they listen to children of the world sing the theme song. In *KDA*, it's a small world is more involved: you need to make rotating motions to row your boat gently down the stream and meet characters, which then perform a little dance you must imitate—not unlike the gamified mimicry of *Guitar Hero* (2005) or the famous electronic sight and sound game, *Simon* (1978). Foregoing the physical, spatial journey of a flume ride, the game version still features its original 1964–65 New York World's Fair cardboard-cutout aesthetic, as exotic backgrounds dip in and out of frame, realising a world tour that is even more virtual than the Disneyland ride. The primary space is still very confined here, barely enough for the player to perform dance moves, but more importantly, the orienting space is completely flattened, merely hinting at spatial relations, but using the semiotic channel to signal various cultures reductively but effectively.

By way of a final example, Big Thunder Mountain Railroad is a runaway mine train roller coaster featuring an elaborate queue area that tells a tale of the wild west and the gold rush and prepares the riders for a mad dash through a canyon and a frontier outpost. The ride features no characters and little narrative, whereas in *KDA*, the attraction queue is replaced by a cutscene with a ghost miner who serves as the narrator of the minigame. Unlike the ride, the game's version allows players to switch tracks and thereby find secret Mickeys as well as set off explosions, and the whole minigame is woven around the story of the player rescuing a runaway train by riding and pumping a handcar and jumping onto a train to reach the locomotive. The two segments can be played in fifteen minutes, which, while shorter than the original ride, is in close vicinity to several other rides in the parks, particularly the seventeen-minute-long Pirates of the Caribbean ride. However, the space that the handcar and the train travel far surpass that of the Disney roller coaster—a feat only possible because of the virtuality of the game. These three examples might be enough to highlight the greater, but still circumscribed, degree of agency the player gets on the digital version of the dark rides while also showcasing the greatest strengths of these environments, i.e., that they do not have to obey the law of physics and materiality to construct worlds of the imagination.

When we consider Golding's spatial analysis from below, we must recognize the utter centrality of the player to the virtual interiority of the park, since the game, like many others of their ilk, "sells the ultimate dream of entertainment personalization: no lines, immediate access, and a place that magically revolves around the visitor."[73] Exploring the park and navigating its obstacles becomes the primary joy of play, and it is evident that the main privilege of playing the game is being in the park as the centre of action. There is a cybernetic feedback loop of navigation and discovery, as "this world is designed to be seen but the actions that cause particular parts of the world to be revealed are those of the player."[74]

Curiously, Lukas discusses the theme park as a "narrative machine," with lands that make patrons "take on a new relationship to architecture and landscape."[75] That relationship is one of expected give and take: it is an interaction that yields to the desires of the player and the parkgoer, who is enticed to buy, photograph, and collect the experience, and to *KDA*'s credit, the game faithfully adopts these very literal aspects of virtual tourism to remind the visitors of the intended use of the Disney parks. You can take photographs with the characters, collect their autographs, and buy merchandise with the virtual money you earn by riding the rides.

Both in the physical and the digital park, architecture and landscape serve and delight the customer by co-opting their agency for furthering the narrative logic of the theme park, that of adventure, extraordinary stimuli, and carefree spending in an environment that takes them elsewhere. Although the "outside" land vs. "inside" rides distinction exists in both, whether built by bricks or bits, Disneyland is a virtual interior that is controlled by the designer to let the player roam freely—within boundaries. In fact, the only time that the virtual exteriority (understood here as a space or moment in time when the carefully constructed image of virtual interiority breaks down) rears its ugly head is when the programming of the game goes awry: glitches and bugs sometimes result in animated characters not speaking their dialogue lines, buildings blinking in

73. Schweizer, "Visiting the Videogame Theme Park," 22.
74. Punday, *Playing at Narratology*, 108.
75. Lukas, *Theme Park,* 105.

and out of existence due to Z-fighting, textures not loading, and players falling through supposedly solid floors. Hopefully, these are only minor inconveniences most of the time, but they do lay bare the artificiality of the simulation, and the player's avatar may even end up being literally outside of the simulated space.

Lowering the Visual (Safety) Bar to Protect the Magic: ImagineFun's Recreation of Disneyland

Few video games have burst onto the scene quite as spectacularly as Swedish independent developers Markus Persson and Jen Bergensten's *Minecraft*.[76] As of early 2022, it is the best-selling video game of all time, with over 230 million copies sold, and it sparked a movement that empowered creators to play around with what is essentially a digital version of LEGO®. Created in extremely low-resolution voxels, *Minecraft* is (originally) a survival and building game that is so versatile as to be almost Protean in its applications: the game has the capability to represent biospheres; its architecture can be built with the use of Redstone ore; and its simulation of circuit boards enable young people to experiment with electrical engineering and even build their own computer within *Minecraft*.

More importantly for our purposes, *Minecraft* even allows the creation of full-fledged theme parks, including the ImagineFun company's recreation of Disneyland on a dedicated *Minecraft* server.[77] A stunning achievement by any measure, the meticulous modelling is recommendable especially for its efforts to strike a balance between the hyperrealistic artistry of the original Imagineers, and the decidedly austere visuality afforded by the voxel-based graphics of *Minecraft*. Like the parks themselves, the server is constantly being "plussed," i.e., updated to reflect development, with new rides being announced in places like the ImagineFun YouTube channel that also hosts 360° videos of some of the most famous attractions as teasers for the real thing. Another aspect in which ImagineFun's creation mimics the original parks is the service: since the

76. Markus Persson and Jen Bergensten, *Minecraft*, Mojang Studios, Windows, 2011.
77. ImagineFun, Minecraft Server, mc.imaginefun.net, 2018–present.

ImagineFun server is open to all comers, the company has "employed" four Imagineers, three managers, seven developers, two builders, four park operators, seven park coordinators, twenty-six cast members, and ten tour guides. These volunteers are responsible for the services rendered to ordinary parkgoers and are required to spend at least twenty-five hours per weeks in the park to aid patrons and help develop new rides for the park. And as of writing, there are twenty-seven attractions that may be boarded and eight attractions to be sampled by the distinguishing guest, including several fireworks shows.

Although the level of dedication to verisimilitude would warrant a full ethnographic account of daily life on the server, we need to satisfy ourselves with a more modest goal of surveying some key characteristics of the virtual park. In ImagineFun, the tightly constrained visual language of *Minecraft* is exploited to provide a jury-rigged, but fully immersive, recreation of park regions and rides. Although not all attractions are in place yet, the ones that do exist are located in close correspondence to their place in the real park. Likewise, custom resource and audio packs ensure that park-related visual imagery and soundscapes are in place for the full experience.

We begin our tour by noting that, unlike the real parks that require the purchasing of tickets, players who already own *Minecraft* can join the server for free, and they even earn in-server currency (penny arcade tokens, Flynn Arcade tokens, and Golden Castle tokens) for riding rides which they may spend on items on the server. Because it is player-run, the recreation is qualitatively different in nature from the more stable and fixed economies within video games: new items, such as pins, are introduced regularly and the pins vary in rarity and condition, yet another form of artificial scarcity created for the health of the in-game economy.

Let us hop onto a ride central to the Disney image, and let's try to tease apart what makes the ImagineFun version special! The ImagineFun version of The Pirates of the Caribbean ride will have to suffice for this survey. The queue area is a simplified version of the Disneyland pre-show area, and as people board, the first thing to note here is that the safety procedures are recreated in as much detail as possible: the bateaux fea-

ture security warning stickers that remind the players to keep their stubby arms inside the vehicle, and the original ride spiel is played in the background in both English and Spanish. As we proceed through the bayou scene, we begin to notice the diminished opportunities to provide dramatic lighting, but we still hear and see the banjo player before we dip beneath a non-animated skull warning us that "dead men tell no tales." Sadly, many of the atmospheric tableaux are missing, and those that are there must survive on the original attraction soundtrack to fuel our imaginations. Indeed, the ride banks on our familiarity of the original to make the experience compelling, reminding players of the tight constraints imposed upon the ride designers by *Minecraft*. As we move to the ship battle scene, fireworks are substituted for the sound of cannon fire splashing into the waves, and we see Captain Barbossa issuing the command to capture Jack Sparrow. The burning town scene is the most fully realized one so far, with many pirates (and even some chickens) animated (but not, alas, the mayor dunked in the well). The burning fort scene has fire that is arguably more convincing than the rest of the ride, but the jail scene has woefully inadequate security to keep the blocky pirates in place. Finally, as we sail past a credible Jack Sparrow surrogate, we return to the loading area.

Albeit the limitations of the visual language of *Minecraft* are easily apprehensible, many of the spatial features are preserved like when riders plunge down the waterfall and ride one up on the way back. The scenes are laid out in accordance with the recent refurbishment that pays homage to the film pentalogy inspired by the ride. Any pretensions to illusionistic scene or set design, of course, must be tempered by the geometrical determinism of *Minecraft*, but lighting effects, at least, are there to soften the harsh contours of the blocky graphics. However, the one thing that is taken wholesale from the ride is the soundtrack, which plays in its entirety. Granted, one cannot hear the fellow riders' mutterings, the splashing of the water, or indeed, the audio spill from one scene onto the next, but these all testify to the ideological image of the theme park as a purveyor of pure experience, liberated from the messiness of materiality. And if there is one instance where ImagineFun's version supersedes that

of dedicated theme park games, it is that the designers of the *Minecraft* servers had to work with much less—both geometrically and in terms of animation—than either the real-life parks or the theme park simulators we will examine next.

Planet Coaster and Parkitect's Competing Philosophies of Park Creation

Both *Planet Coaster* (2016) and *Parkitect* (2018) are continuations of pedigreed theme park game philosophies, as the former brings the three-dimensional visual spectacle of *Theme Park World* (1999) and *RCT 3* (2004) to the forefront with free-form building tools and a creator-focused approached, whereas the latter stays closer to the stylized, isometric school of *Theme Park* (1994) and *RCT 1–2*, which—while having modular construction and plenty of theming options—enables a more management-oriented gameplay. So, for example, while *Planet Coaster* might let you organize a fireworks display, create custom dark rides, and build your own fairy tale castle, *Parkitect* urges the player to consider the movement of goods, place utility corridors, and be mindful of consistent theming that factors into the guests' enjoyment of the park. But the single biggest difference is that in *Parkitect*, as in *RCT 1* and *2*, one cannot ride the rides, whereas *Planet Coaster* and *RCT 3* gave the players the opportunity to experience their creations from an on-board perspective. Both games feature a detailed campaign mode, whose scenarios challenge the players to set up a theme with end goals that often restricts their gameplay options, and a sandbox mode, which allows the player's creativity to run rampant, without a concern for money or time.

As Lukas observes, in scenario play, parks are "on the verge of disorder, and the player must restore order by attending to rides, including dispatching maintenance men to them when they malfunction,"[78] and of course, they must turn a profit. However, the main attraction is not to make a well-oiled financial machine—since it is relatively easy to do so—but rather, it is the self-expression displayed through building and

78. Lukas, *Theme Park,* 226.

tinkering with various rides and flows of people. In this process, players "establish authorship" of the parks as they "reflect on how the theme park has evolved into a global model and a text that is being constantly rewritten."[79]

Be that as it may, the greatest innovation of the digital medium is not in just representing the theme park per se, but in simulating it as a process, with flows of G-forces, people, and money. Capitalism has always been the lifeblood of the parks, and while articles, films, books, or paintings might depict the consequences of the venture, only digital games place the burden of juggling park expenses and income on their customers. Of course, scholars have noted that "the more advanced computer games are, the more they are in tune with neo-liberal ideology,"[80] and business management simulators are the prime terrain for tuning in. Perhaps, though, the fun also originates in the fact that "we are always already neo-liberal subjects that are prone to be attracted by neo-liberal games."[81] As the success of the games attest, players do like to take a peek behind the financial scenes, but the main draw will always be in seeing one's creations take flight.

From the first title in the genre, *Theme Park*, such games have always been notable for their modular, tile-based method of construction, where rides are built like model railways. Notably, *RCT* designer Chris Sawyer's earlier forays into game design included *Transport Tycoon* (1994),[82] which has a similar track-laying mechanism. As technology progressed, separate edifices housing multiple attractions could be built, and with the advent of full three-dimensional modelling, a torrent of creativity had

79. Ibid.

80. Graeme Kirkpatrick, Ewa Mazierska, and Lars Kristensen, "Marxism and the Computer Game," *Journal of Gaming & Virtual Worlds* 8, no. 2 (2016), 124.

81. Sebastian Möring and Olli Leino, "Beyond Games as Political Education—Neo-Liberalism in the Contemporary Computer Game Form," *Journal of Gaming and Virtual Worlds* 8, no. 2 (2016), 156, https://doi.org/10.1386/jgvw.8.2.145_1.

82. Chris Sawyer, *Transport Tycoon*, Microprose, DOS, 1994.

been unleashed by the player communities. Today, few games rival the architectural suppleness of *Planet Coaster* to recreate actual theme parks from LEGO®-like primitives, though it takes painstaking effort and time to do so.

An important conceit of the theme park is the separation of show and backstage areas, which is replicated in both games. Although both *Parkitect* and *Planet Coaster* enable the creation of backstage areas, only *Parkitect* compels you to systematically do so as a game mechanic. Guests have a quantified immersion score, which goes down if they can see staff paths, utility buildings, or backstage employees, not to mention a lack of foliage and décor. It is through mechanisms such as these, along with the intricate business simulation, that players get a sense of how the theme park becomes a machine, "one composed of all the various rides, mechanical devices, subsystems, processes and performances that make up its functional system,"[83] and there is more than a hint of irony in the realization that digital technology makes such reflection possible.

There is another backstage/frontstage-style distinction in construction, that of building above the ground or below, since ground-level buildings must adhere to the lay of the land, while building below the ground opens up spaces that are virtual interiors of the plot, with fewer constraints on how to build. Some scenarios, for example, restrict your ability to demolish buildings or scenery.[84] Thus landscape becomes a resource as in the *Parkitect* scenario Kaiserberg, when a ski resort whose owner, as the mission briefing says, "wants to be prepared for climate change. . . . All of your coasters need to stay close to the ground—can you use the slopes to your advantage?"[85] This means that there is a height restriction imposed upon the player, making it tough to create high drops out of thin air.

83. Lukas, *Theme Park,* 102.

84. I thank Sylvaine Hamar, better known as Silvarret within the theme park game community, for a lively and extended personal discussion on Zoom about the various aspects of theme park rides and scenario design he did for *Parkitect*. It is the author's great regret that we could not include many of the talking points in the final version of this chapter.

85. https://parkitect.fandom.com/wiki/Kaiserberg.

Immersion is certainly more heightened for the player than the virtual guests when you start theming the lands. The scenario's names already suggest intended themes, as in *Planet Coaster'*s "Captain Lockjaw's Buried Treasures" and "Dex-R's Science Shenanigans," or *Parkitect*'s "Sakura Gardens" and "Mystic Oasis," which rely on tested and true formulas to frame the player's possibilities and give each scenario a unique flavour. Furthermore, individual build objects are also grouped under such themes, like "Adventure" or "Candyland" in *Parkitect*, or "Rustic Set" and "Spooky Set" in *Planet Coaster,* but this is by no means prohibitive, so players are free to mix and match to create custom themes.

Downloadable content and updates add new scenery packs regularly with some of them paying homage to the genealogy of the medium, such as *Planet Coaster'*s Classic Rides Pack with its swinging chairs and gondola rides and the World's Fair Pack's focus on distant cultures. It is telling that the countries chosen for the latter (China, USA, France, Morocco, Italy, Germany, Japan, UK, Mexico, and Spain) echo many of the themed pavilions of Disney's EPCOT Center, rather than those of the anthropological villages of yore, like the cultures of the Philippines or Sub-Saharan Africa. Apparently, the designers want to inspire players to recreate, as well as remix, the heritage of the theme park.

Dark rides were important in our discussion earlier because they signalled the height of illusionistic ride design. And while the games' dark ride tools are no match for real Imagineering, both *Parkitect* and *Planet Coaster* mark a giant step forward, as previous instalments of the genre found the challenge of the dark ride too daunting to implement. In effect, *Parkitect*'s dark rides can hardly be called inspired or unique, as they only have a slow-moving ride vehicle with little customization for indoor space, and the same building blocks as outdoor scenery, only under a roof, and the sculptures that can be placed are not animated. However, *Planet Coaster* shines in this department as the ride buildings have separate themed, animated object sets, the ride vehicles can be tilted towards the moving tableaux, the ceiling has animated skyboxes with effects, and as the players observe from their on-board view of the ride. Thus, the pieces fall into place in *Planet Coaster*, completing the feeling of virtually

being in a fantasy world or a haunted house. Obviously, part of the magic fades due to the computer's ease of animating anything, which detracts from the technological virtuosity of physical ride design that employs visual tricks of all sorts to sell the illusions. Yet, as the next section shall make clear, these tools are more than enough for creators to make stunning reimaginings of rides and lands from classic theme parks.

The Business Simulator as Building Tool: Bricolage at the Virtual Theme Park

When you build the fun fair of your imagination, you seldom plan it well ahead. You start with plopping down a couple of rides, a few shops, connect them to a pathway, and see what happens. In these games, you do not build your own rollercoasters with the blueprint fully sketched out (although some templates are added by the designers)—starting from the station platform, you proceed one module at a time, interconnected with the previous segments, and you put in a lift hill, a drop, a loop, a corkscrew, and so on, until you snake back to the station. The only guiding principles are what you remember seeing or riding before and what looks cool. When you design buildings, you work from small primitives, which could be put to any use, and you make do with what you have. Such an approach to architectural design is called bricolage, from the French word meaning "to tinker." Inspired by its adoption for anthropology by Claude Lévi-Strauss, design thinkers have reclaimed bricolage as a bona fide design philosophy that celebrates on-the-spot thinking, repurposing, and cobbling together of disparate forms and styles in order to get the job done.[86] I argue that bricolage is exactly what goes on in the LEGO® set-like construction paradigm of theme park building and management games, since builders in the game have to rely on architectural primitives in order to construct their themed entertainment Meccas. Simple geometrical shapes are twisted, bent out of shape, and kit-bashed into submission for the creator's vision to materialize.

86. Panagiotis Louridas, "Design as Bricolage: Anthropology Meets Design Thinking," *Design Studies* 20, no. 6 (1999): 517–35, https://doi.org/10.1016/s0142-694x(98)00044-1; Irénée Scalbert, "The Architect as Bricoleur," *Candide: Journal for Architectural Knowledge* 4, no. 7 (2011): 69–88.

Most scenarios and sandbox games of *Parkitect* and *Planet Coaster* offer a vast digital canvas for the player to build an entertainment empire upon. Players, however, often stick to tried and true forms, partly due to the force of cognitive imperialism with which the theme park has colonized our minds, and partly due to the mimetic desire of the miniature-maker to construct a microcosmic version of a colossal, million-dollar venture. In fact, as early as *RCT*'s "Added Attractions" expansion pack, a map based on Alton Towers has been recreated by the designers, and the other expansion, "Loopy Landscapes," brought Heide-Park and Blackpool Pleasure Beach into the game. *RCT 2* also featured digital reimaginings of five of the Six Flags brand of US theme parks. The designers thus kickstarted a trend in which intrepid players sought to recreate famous parks as well as build their own that riffed on the conventions of traditional theme park design.

It should come as no surprise that Disney is a focus for aspiring virtual builders; it is a brand much beloved with a devoted fanbase, and the designs of their parks are unparalleled in the industry. To understand the powers of custom creation and the technological development of the genre, let us compare a recreation of the original Disneyland in *RCT 2*[87] with one of Disneyland Paris in *Planet Coaster*.[88] RenderedMouse's version was built between 2004–2009, and the limitations of *RCT 2* become apparent at the outset. The game is not capable of rendering buildings of sufficient height to be scale-appropriate: Sleeping Beauty Castle is a squat, splodgy construct barely six-stories high. Nor are the dark ride buildings much to look at—most are miniature car rides with little interior décor, let alone animatronics; however, the ride choices, vehicles, and colours are theme-appropriate (e.g., Mr. Toad's Wild Ride has antique automobiles, the Matterhorn is a white bobsled coaster, Jungle Cruise is

87. RenderedMouse, "Disneyland RCT2," June 29, 2011, http://www.renderedmouse.com/projects/4/roller-coaster-tycoon-2/disneyland-rct2/; "Disneyland RCT, Part 1," uploaded on January 22, 2013, YouTube video, https://www.youtube.com/watch?v=1PoFGJVmyOk; "Disneyland RCT, Part 2," uploaded on January 22, 2013, YouTube video, https://www.youtube.com/watch?v=qbU5QKJPLjc.

88. LMBT [FR], "PARC.DISNEYLAND. PARIS DISNEY.LMBT," February 8, 2017, https://steamcommunity.com/sharedfiles/filedetails/?id=859626891; ToonStudiosProd, "DISNEYLAND PARK RÉALISÉ À 100%! Episode 1/5," uploaded on July 17, 2018, YouTube video, https://www.youtube.com/watch?v=_85xDP8SLYM.

a river raft ride with elephants frolicking in the water, Frontierland uses the Western theme, etc.). A remarkable exception is their versions of The Haunted Mansion and Pirates of the Caribbean, which are notable for the inclusion of many custom-modeled items. These two virtual attractions resemble the Disney originals rather well. Still, the overall impression is of a rudimentary sketch. At every turn, the beholder of this iteration feels that the primitive building blocks of the game necessitated clever shorthand to convey the essences of the rides.

Even so, some design choices are questionable despite the obvious simplicity of the builder's toolkit. For example, Frontierland hosts a visibly Russian flag, Tom Sawyer Island is absurdly spacious, few coasters (if any) have on-board photos (although the game has the option of installing one), and the restaurants are nowhere near in size to the originals (since most are just single-tile kiosks in *RCT*). Another understandable departure from the physical parks is the fact that, unfortunately, all in-game rides must be constructed within the confines of the park's de facto boundaries—in Disneyland, several show buildings stretch beyond the walkable areas of the park. One can palpably feel the negotiation of the creator with the punishingly strict limitations of the *RCT 2* engine.

These are thrown into sharp relief when we take a look at streamer LMBT [FR]'s stunning "Parc Disneyland" build, which they claim has taken over 4,300 hours to model. While this creation is not based on the Anaheim park but its Parisian counterpart, in every other respect they are comparable. Here, Le Château de la Belle au Bois Dormant is by far the tallest building in the entire park, its spires reaching well above Frontierland's peaks, complete with the requisite boxy topiary trees. Discoveryland's Star Wars Hyperspace Mountain is rendered in gorgeous detail (albeit redder than the original), Les Mystères du Nautilus features a walk-thru replica of Nemo's submarine from the 1954 Disney film, and so on. Pirates of the Caribbean is impeccably realized, from the meandering queue to the depths of the attraction: the fort scene has shooting cannons

complete with smoke effects, the town scene boasts instrument-playing pirates, and the ride even has a pirate dangling his feet above the heads of the riders, just like in the original. Also, the show buildings are properly demonstrated to be stretching beyond the park limits.

Still, the shops are once again limited by the game, as it has *Planet Coaster*-created fictional brands serving hot dogs and ice-cream, even though a restaurant can be named accurately, such as with Plaza Gardens. For this level of detail, a curious absence is the lack of dedicated cast member entrances and exits modelled in the finished build. Also missing are service walkways (which would be present in *Parkitect*); proper signage, typefaces, and logos for many rides; and Disney's famous themed trash cans. And naturally, any intellectual property, like costumed characters, are rendered in much lower detail than in *KDA*. This owes everything to the fact that each building was constructed from tiny geometric shapes, the building tool stretched to its absolute limit of what can be modelled. It is also worth noting that the entertainer mascots cannot be Disney-attired, the in-game rides feature no spoken words or music, and there are very few signs communicating to the guests. Even so, the architectural design of Disneyland Paris is realized to an astounding extent; the finished product is a true labor of love.

Indeed, all creators take liberties with the source material, both due to the digital nature of each game, whose engines must, first and foremost, be able to run a game with simulated guests and G-forces at relatively high speeds, but also due to the sheer volume of detail of the physical parks that must be excised to make a build realizable in the first place. The omissions themselves speak to the architectural integrity of the theme park vision: exteriors are much more lavishly detailed than the interiors of the rides, since believable immersion into the virtual world would both tax the creators and the hardware, and a true realization of a dark ride would be nothing short of making an actual video game. Guests still get to enjoy their rides, but video games do not need to hide machinery that makes the illusion believable, as it would happen with the physical parks. What is backstage in real life is obscured by the interface, and therefore does not have to be designed into the game. Nonetheless, the

idea of the theme park as a semiotic assemblage that provides seamless immersion is upheld and even perfected by the virtuality of the video game medium. Player-creators understand this and use the limited but flexible toolkit to reproduce the narrative integrity of themes. That is the true power of bricolage: starting from humble beginnings, creators jury-rig geometry to do their bidding, overcoming the limitations of technology and maximising architectural effect with the tools at hand.

Intermedial Themes in Digital Theme Park Productions

As this short survey of the possibilities of theme park games has shown, different genres and representational schemata offer radically different toolsets for engaging with the virtual interiorities of the parks. You, the player, can express yourself by enjoying your day in a theme park built for one in an open-world game like, *Kinect: Disneyland Adventures*, earning more money you can spend (and spend you shall!) and riding attractions that are more spectacular and challenging than the physical ones. Your body is virtualized in an avatar, and your motions are transferred into the virtual world, replacing some of the lost kinaesthesia of the video game. The game constantly interpellates you to perform corporeally, and the implied body of the theme park patron becomes a locus of agency once again—more so than in the physical rides—with its strict code of conduct.

In theme park management simulators, one sees the entertainment empire from above by building, adjusting prices, optimising performance, and also expressing their own creativity through multifaceted construction tools. In the same manner that Disneyland is a personal expression of the mid-century, Midwestern, and middle-class optimism of Illinois-born Walter Elias Disney with sights and sounds that were so dear to his heart, individual players can infuse their own parks with their personalities and showcase their creations to the wider community of game enthusiasts. As the sheer amount of content creator uploads on YouTube and Steam Workshop suggests, creators use the lessons learned by theme parks intentionally and put them into good use in the creation of their own parks. It is particularly telling that recreations of actual theme parks abound, since the quality of verisimilitude is a clarion call for fans to

praise and compare the creations with the originals. In fact, the high number of such recreations is reminiscent of the way real-life parks play it safe with their conservative adherence to well-recognized intellectual properties.

On a more intermedial note, I would like to summarize how designers of theme park video games must manipulate the four media modalities when migrating from the physical to the digital world to convey the essence of parkdom to their players.

Firstly, the sensorial modality is constrained by the technical medium of display. Real-life parks assail all senses to create overwhelming sensescapes; in theme park games, sounds are just as present, however, they are more concentrated and deliberate: all voiceovers, effects, and music have to be pre-recorded and scripted to be played, whereas the live parks have a lot of incidental audio, background noise from the guests, less-than-family-friendly exclamations that might be overheard, and in general, noises that remind people of the messiness of life beyond the curated image of the parks. In the games, the visual verisimilitude ensures a high degree of fidelity, especially in licensed games, but the appearance of the architecture is stylized, even in construction games. This is due to the limitations of processing and rendering power. On the other hand, this stylization is also the exaltation of the utopian impulse already inherent in the ideology of the theme park: the materiality of the real site and the wear and tear of years of use require constant maintenance, whereas, technically, the virtual theme park can remain pristine, unless developers programme visual representations of destruction and decay into the simulation (as is the case with vandalized benches and lampposts, and the breakdown of rides in *Rollercoaster Tycoon* or the destruction of buildings in *Epic Mickey*).

Furthermore, the senses of smell, taste, and touch (as well as the all-important refreshment of water in the summer heat of the real-life parks) are not present in the virtual recreations. Even though theme park games might present restaurants or simulate guest needs, one cannot, in fact, engage in gastronomical pleasures, nor would they get to experience the smells of an immersive ride. As I have discussed before, real parks

engage the guest's haptic and proprioceptive senses to deliver a memorable experience. These must be replaced in video games with the pleasure of agency. Some of our interaction with the park through our senses is implied, however: the in-game camera is "splashed" with water droplets on water rides and the player avatar visibly shakes when it collides with objects in *KDA*. The full body is only addressed as a performer in Kinect's games—most interactions are abstracted by the input devices in the building and management games. Riding the player's creations onboard in *Planet Coaster* implies kinaesthesia through audiovisual cues of acceleration and deceleration.

The spatiotemporal modality is addressed by the designers when they recreate the spatial relations in the various lands of a Disney theme park to achieve a mimetic reality effect, but it is shattered in the reimaginings of the actual rides, which now extend the experience for twice-thrice the length of the originals to compensate for the lack of sensory channels in the digital medium. Physical spaces are adapted to better suit the interactivity of the digital medium: players can affect the virtual spaces to a far greater degree than a guest would be able to in a real-life park. Likewise, the constraints of a purchased plot of land act as natural barriers for the theme-parkization of the whole world, per Gottdiener. There is no such barrier in a virtual space: traversable game land is only subject to the whims of the game designers, and in principle, could extend into infinity. In fact, as we have seen with the repurposed rides in *KDA*, spaces can extend well beyond the modelled ride buildings, and as we have examined with regard to *Planet Coaster* and *Parkitect*, space is used ad hoc to provide challenges for the players, such as with an artificially small park that the player-designer needs to find workarounds for.

Kinect: Disneyland Adventures can be completed in about sixteen hours of playtime, much less than a weekend spent in the parks. The users of theme park management simulators usually only play a map for a couple of hours in order to finish scenario goals, so they park-hop more often than actual park goers: maintaining a park once they run out of room to expand is not nearly as much fun as building something new. The video game space is more malleable than the million-dollar environments of

the physical parks, and often flatter, as attested by the recreation of Disneyland in *RCT 2* in which infrastructure that is essential for running the parks is often missing (but *Parkitect* does feature them more than other software). As Lukas observes, "like a virtual reality space the theme park creates a new temporal and spatial order; it causes [. . .] a suspension of the day before and the day after; the only thing that matters while being in the theme park is that day itself, the time spent inside the park."[89] And the virtual reality spaces of computer games exploit the exclusivity of their players' attentions by abstracting that experience: *KDA* does not have a night-and-day cycle or weather simulation, but *Parkitect* and *Planet Coaster* does, with its spectacular night-time illumination and the fluctuating weather system that affects how willing people are to go on certain rides. However, the parks do not have seasonal attendance highs and lows, and they do not close for the winter, like many continental parks do.

Most of the concessions to the artificiality of the virtual parks come in the material modality. As everything is coded and rendered, *KDA* only implies interaction with different objects through collision detection and hitboxes. The G-forces of a rollercoaster ride are only abstractly calculated in management simulators, but guests can theoretically withstand forces that would kill actual humans. Thus, guest safety is more assumed than assured by the players. Harm can't really come to you in *KDA*, and while guests may die in park management games, such disasters do not completely upend the simulation.

Planet Coaster and *Parkitect* also only simulate some needs of the guests, such as hunger, thirst, fatigue, and nausea, which either factor into something that could be sold to them, or something that can be quantified in a park rating. Finally, a real-life issue that players must worry about less is that of the crowds: since computer people have no volume—only

89. Lukas, *Theme Park,* 235.

animated models and sprites—they can safely walk through each other (*Planet Coaster* seems to program guests to get out of each other's way but clipping into each other is still an issue) and this means that crowds do not have to be managed the same way one must in real parks.

The semiotic modality is where the representations borrow most from existing parks. Although guests do not need to be explicitly communicated to, even earlier instances, such as *RCT 2,* featured marquees to stop guests from entering certain paths. Guests can also buy park maps to find out where they want to be going and can get a feel for how intensive a ride is by looking at it. The games communicate intended use and options for influencing the game-world through textual and audiovisual means: *KDA* has a narrator character that calls out actions that must be performed, whereas park simulators convey scenario goals in briefings and use charts, tables, and figures to give insights into the park's financial performance, guest relations, marketing strategy, and more. Custom-made parks usually have signage, but they do not affect in-game guests—rather, they are included for fellow players to communicate what rides were modelled and to give an aura of verisimilitude to digital parks. Similarly, virtual guests do not pick and choose rides because of their immersive qualities. Instead, they select them due to a hard-coded preference for the quantifiable statistics of built rides: their intensity, excitement, and nausea ratings. *Parkitect*'s immersion statistic is more akin to a general park rating to bring the backstage-frontstage area mechanics in play, and it tracks the amount of decoration rather than its consistency and coherence.

Finally, in accordance with Jørgensen's addendum to Elleström's model, the all-important operational and agentive aspect of these games must be considered, both of the player and the simulated guests. In *KDA*, the player controls a single avatar, who must ride, collect, and shop till they drop, using their body to operate it. However, the complex movements of the human body sometimes do not track well to the Kinect operating system, and this results in the wrong input which might result in failing one of the challenges of a ride. In general, the player is well aware that the translation from the corporeal to digital runs into obstacles,

making operating a much iffier affair than in the Windows port of the game where there is a lack of ambiguity owing to the controls being mapped onto keystrokes and mouse swipes. The two management sims are more straightforward because of the abstraction of building a virtual theme park: mouse and keyboard controls enable the intuitive conceptual modification of building plans and road layouts, but especially in *Planet Coaster*, the bewildering array of sliders, buttons, and statistics on the user interface might hinder the unwary player of making sense of their options right away—the game has a significant learning curve.

In terms of in-game agency, ride operators are only visible on *Planet Coaster*, as both *Parkitect* and *Kinect: Disneyland Adventures* choose to only imply their existence. Even in *Planet Coaster*, ride operators are not paid separately as employees, since only janitors, mechanics, security guards, vendors, and entertainers are paid, and even they do not enter into collective bargaining or operate as a workforce—they behave as if they are individual contractors. The ride operation and safety protocols are also assumed rather than simulated, clearly because of the superhuman ability of guests to withstand physical tribulations. Guests do not complain about the behavior of staff members, or lack thereof—even though emotional labor is a key distinguishing feature of theme parks, it is not simulated. In contrast, *KDA*'s cast members have prerecorded voice-overs and, like Audio-Animatronics, they perform perfectly. All in all, whether on the ground in *KDA* or high above the clouds in the management sims, the player may act as a demigod, to whom the virtual interiors of the theme park games open up so that they may draw maximum enjoyment from the digital parks. The implied interactor is a composite of what the Imagineers, the park managers, and the game designers want them to do, and the player's own desires to express themselves through conforming and rewriting the codes of conduct is afforded to them.

Exit Through the Gift Shop: Conclusions

As I hoped to have shown in this chapter, the virtualization of the theme park experience is both a necessary and inevitable fact of convergence culture, and the pandemic only helped to accelerate this tendency. Whether using VR to explore decommissioned rides, roaming the streets of Disneyland in your own home, or building the theme park of your imagination, video games and digital technology have made the virtual interiorities of the theme park more accessible and more expressive than ever before. "Fantasy, in its fullest [form], must be given a place and this place, in turn, is asked to perform."[90] Video games visualize and operationalize that fantasy of the theme park, while strategically privileging certain experiences and intended readings in the name of fun. But, as many YouTube videos which show the sadistic genocide of digital parkgoers in games like *RCT 2* or *Planet Coaster* attest, these intended readings are not hard limits to the player's agency.

Theme park games offer a unique interaction of the virtualized body of the guest and the idealized narrative space of the lands and rides. I have endeavoured to use spatial analysis from below to highlight how the player's toolset changes the way virtual theme parks operate and create interiorities. As Fraser writes, "the method through which we form knowledge of video game space is in fact the very method through which we form knowledge of 'real world' urban spaces."[91] This made me more willing to make explicit connections between real-life architectural theory and its use in the building of virtual theme parks. Fraser's work suggests that this connection might in fact be a two-way street, but it would take a thorough analysis of contemporary architectural theory and practice to prove so.

90. Lukas, *Theme Park,* 137.

91. Benjamin Fraser, "Why the Spatial Epistemology of the Video Game Matters: Mētis, Video Game Space and Interdisciplinary Theory," *Journal of Gaming and Virtual Worlds* 3, no. 2 (2011), 103, https://doi.org/10.1386/jgvw.3.2.93_1.

In closing, I must admit that spatial constraints have forbidden me from pursuing more tangential, but just as interesting, avenues of inquiry. Further research could elaborate on how existing, non-theme park video game genres utilize theming today and what principles of theme park design make their way into the level and world design of, say, open-world action-adventure games, or first-person shooters. Another investigation could profit from examining the communication between user and game, i.e., how the semiotic modality shifts and constrains certain interpretations of the theme park experience. And ultimately, it would be worth taking a deeper look at how Virtual and Augmented Reality devices change our experiences of the virtual theme park compared to those we have in the Kinect and building-and-management simulators.

Theme park games literally treat their worlds as toys, and the outcome of such a move is that "immersion becomes thematized"[92] in the digital space. If there is a "theme park world picture" comparable to that of the amusement park, it materializes in "new spatial, architectural and geographic forms; it affects doing by structuring new models of the person, self and social relationships; it affects knowing in terms of its unique project of culture; and it affects telling by introducing new narratives that are used to understand the world."[93] The architectural forms, though they often remediate existing theme parks, do so with no concern for the physicality or materiality of the park beyond what is hard-coded into the game, resulting in more inventive yet impossible-to-realize architectural fever dreams.

The players do not only create but share their creations: they prototype and test rides, receive feedback, and thereby build an audience and community on social media platforms. They negotiate the essential elements of what a theme park is, they retool and reevaluate their own relationships as they work through the limited toolsets of the games and act as bricoleurs of their own right, and, finally, they infuse their creations with thoughtful commentary that interweaves real-life parks and their

92. Marie-Laure Ryan, *Narrative as Virtual Reality* (Baltimore: Johns Hopkins University Press, 2001), 199.
93. Lukas, *Theme Park,* 240.

own design process, curating them for fellow enthusiasts. It is through this process of cultural renewal that they form a "theme park game world picture," so to speak, one that is modular, maker-oriented, mimetic, and mediated, perhaps even to a greater degree than physical theme parks.

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