The Cartography of Virtual Empires

Video Game Maps, Paratexts, and Colonialism

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> "I wisely started with a map, and made the story fit […] The other way about lands one in confusions and impossibilities."
> J.R.R. TOLKIEN[1]

> "So, geographers, in Afric maps,
> With savage pictures fill their gaps […]."
> JONATHAN SWIFT[2]

MAPS AS PARATEXTS

There seems to be a recurrent question these days regarding video games: Is the paratext the text? Deriving from Gérard Genette's work, paratexts in Game Studies "constitute all elements surrounding a text that help structure it and give it meaning,"[3] as eminent games scholar Mia Consalvo puts it. Jonathan Gray, in his *Show Sold Separately,* makes a strong case for researching paratexts:

1 Tolkien, J. R. R.: *The Letters of J.R.R. Tolkien*, Boston: Mariner Books 2000.

2 Swift, Jonathan: *On Poetry: A Rhapsody*, 1733.

3 Consalvo, Mia: *Cheating: Gaining Advantage in Videogames*, Cambridge, MA: MIT Press 2009, p. 21.

"Paratexts, this book argues, are a central part of media production and consumption processes. […] Taking the eye off the paratext, as media studies has often done, impoverishes our understanding of production and regulation cultures, and hence our ability to intervene meaningfully in these cultures."[4]

His comment underlies an important oxymoron: the centrality of paratexts (which are by definition extraneous to the main text, or a fringe or threshold in Genettian terms). It is in this context that a rather neglected element in video game studies shall be viewed here: the map. Speaking of THE LORD OF THE RINGS, J.R.R Tolkien says that he created the map of Middle-earth first and then made his story fit. Video game maps may be paratexts, but they, too, are also central to thinking about the gameplay, as it will be argued here. Further, how these maps are made, what they represent, and how they project the world also need to be addressed and analyzed critically. Of particular interest to this essay are the 'gaps' in the video game maps and how they are represented or 'filled.' These will be further examined in terms of their colonial underpinnings within the frameworks of postcolonial cartography.

Before entering any discussion of maps and cartography, it will be useful to explain how paratexts are being viewed here. Genette uses the term to mean a "zone not just of transition but of transaction,"[5] a fringe which is the site of the formation of meanings and potentialities that is crucial to the interpretation of the text. Writing of books, Genette offered a long list of paratexts, including covers, title pages, typesetting, paper, name of author, dedications, prefaces, and introductions as examples of 'peritexts'—paratexts within the book—and interviews, reviews, public responses, and magazine ads as 'epitexts'—paratexts outside the book. He also allowed for paratexts of fact so that, for instance, knowing an author's gender could serve its own paratextual function. Genette argued that we can only approach texts through paratexts so that before we start reading a book, we have consumed many of its paratexts."[6]

4 Gray, Jonathan: *Show Sold Separately: Promos, Spoilers, and Other Media Paratexts*, New York, NY: NYU Press 2010, p. 16.

5 Genette, Gerard: *Paratexts: Thresholds of Interpretation*, Cambridge/New York, NY: Cambridge University Press 1997, p. 2.

6 Jonathan Gray: *Show Sold Separately*, p. 25.

It can certainly be so for video game maps. On opening the game's package, manuals and the maps pop out for physical copies of games, and often the map is opened even before the game has been loaded. In many cases, the game's map is leaked online before the game's release: the FAR CRY 4 (2014) map is a case in point. In the days of Steam, Origin, or UPlay, paper maps are more of a rarity; however, many open-world games come equipped with a map (usually an interactive one) within the game's framework. A blogpost relating to video game cartography comments on the importance of these in-game maps:

"Open a map in one of this year's big video games and you'll see mostly blank space. Sometimes it's pitch dark outside the bubble of detail around your landing in the world. Sometimes the landscape is sketched out but not yet colored with icons, which spread wherever you set foot. We don't ask how our character draws the map, or why, in a modern setting, she would ever need to. Though not common to all games, these conventions are instantly recognized. Beating the game means illuminating the map. […] The map of a game like GRAND THEFT AUTO V [2013] or FAR CRY 4 works more like a memory than a pocket reference. The real work of navigation is usually done by floating icons onscreen, distance counters, and GPS overlays; the skin of the map grows in as you chase symbols. The characters of GTA V should be able to see every corner of Los Santos just by glancing at their phones. Instead they do the legwork themselves, filling in the city like a giant scratch card."[7]

For Breault beating the game means removing the blank (or rather, dark) spaces in the map. His metaphor is like that of the peeling off of a layer obscuring what is underneath. This is again similar to the 'fog of war' in the real-time strategy (RTS) games where the map is more obvious, especially as one plays on it. Unlike the RTS games, in other genres, the map is something that is occasionally referred to during gameplay but not necessarily the site of gameplay.[8] It is these maps that are on the fringe of the main 'text' of the gameplay that are being viewed as paratextual here. Indeed, illuminating the map becomes a direct result of the actions of the player within the game.

7 Breault, Chris: "Cartographic Survey: The Year in Video Game Maps," in: *ReadWrite*, December 18, 2014; https://readwrite.com/2014/12/18/video-game-maps-2014-grand-theft-auto-kill-screen/

8 Ibid.

The question asked in the opening lines comes back again—is the map the story, then? Which is the paratext, and which is the text? The paratext is also a para-dox here in the sense that what was considered marginal also lays claim to a centrality in the gameplay. Elsewhere, I have addressed the marginal centrality of the paratext using the framework of the "supplement"[9] as described by Jacques Derrida in the context of writing, among other things.[10]

Two types of maps are being addressed here: one is the printed paper or cloth map that is often used to accompany the video game disc or the collectible print-map that can be bought separately, and the other is the in-game map that may or may not be part of the game screen or HUD (heads-up display), but that can be opened up separately within the game. Similar to and different from the first kind of map, there are also websites, both created by the publishers or by fans, where one can access the game map *outside* the game. The latter maps often contain spoiler alerts, especially as all undiscovered events (and surprises for the player who has not visited the areas) can also be revealed in an extra layer on the map.

Of course, another type of map exists in video games—here, the map is part of the play area, creating our perspective on the game's events and the interface of the game. This is more common in the RTS games, as already mentioned. The centrality of these maps to the gameplay is obvious. The non-interface maps might be viewed as paratextual in comparison; however, going by the framework of the Genettian theory of paratexts and Derrida's concept of the "supplement," maps are crucial to the way gameplay is constructed in video games. It must be added here, that there is currently very little research on paper-based video game maps as paratexts, although more interest is now being evinced in video game cartography.

ASPECTS OF VIDEO GAME CARTOGRAPHY

Once the centrality of the map supplement is understood, it is important to see *how* these maps are constructed. For this, a comparison with cartogra-

9 Derrida, Jacques: *Of Grammatology*, Baltimore: Johns Hopkins Press 1976, p. 281.

10 Mukherjee, Souvik: *Video Games and Storytelling: Reading Games and Playing Books*, New York, NY: Palgrave Macmillan 2015.

phical practices used in the more traditional geographical sense (maps of real-life places as opposed to virtual spaces) will be helpful. Let us take the FAR CRY 4 map and THE ELDER SCROLLS V: SKYRIM (2011) map, for example. FAR CRY 4 is set in the fictional country of Kyrat, which is a Himalayan kingdom modeled on Nepal and divided into "six playable locations in the game, including Himalayan, Mountaninous [sic] (Coniferous and Larch), Midlands (Mixed Forest and Quercus) and Terai."[11] SKYRIM features a map of the fictional fantasy world of Tamriel that is full of caves, dragon lairs, Nordic towers, and ruins. As Andreas Inderwildi comments on another game in the THE ELDER SCROLLS series, MORROWIND (2002): "the Vvardenfell map doesn't merely show routes and topography either, but also various architectural styles of cities and fortifications: hinting at its various factions, cultures, and their seats of power."[12] Manuel Parra and Enrique Saga comment on how even when the video game map is used as a support, it uses a graphical language that fits the overall tone of the game and is closely related to the player's experience. According to them, in competitive titles, the map determines a lot in the sense that the player's plotting of her position is crucial. This is something that is worth returning to in a later section. For the present, to quote Parra and Saga,

> "If it's a game with fast paced action, the map will be a tool in a discreet corner of the screen, or an element that sporadically appears to be quickly consulted, like in DIABLO III [2012]. However, if the game moves at a slower pace where the player has to consider every decision, the map should be able to allow handling multiple variables with ease and be able to concentrate a lot of information in a style that is pleasant to look at and not overwhelming."[13]

11 Emilygera: "Report: Far Cry 4 Map Shows How Big the Game Really Is," in: *Polygon*, November 11, 2014; https://www.polygon.com/2014/11/11/7192615/report-far-cry-4-map

12 Inderwildi, Andreas: "The Video Game Cartographers," in: *Kotaku UK*, April 27, 2017; https://www.kotaku.co.uk/2017/04/27/the-video-game-cartographer

13 Parra, Enrique/Saga, Manuel: "Cartography in the Metaverse: The Power of Mapping in Video Games," in: *ArchDaily*, March 2, 2016; http://www.archdaily.com/782818/cartography-in-the-metaverse-the-power-of-mapping-in-video-games

The position of the map in the game and how it handles the changing information are indeed important. Speaking of positioning, the video game map itself often is drawn with a certain vantage-position in mind: Inderwildi comments that like Jerusalem in many medieval maps, video game maps are also based on seats of power that are depicted as the 'navels of the world,' such as the Red Mountain in MORROWIND. Malindy Hetfeld comments on how "when we see an empty spot on such maps, we tend to assume that nothing of interest awaits."[14] Breault, as mentioned earlier, also mentions how video game maps are about blank spaces and how the gameplay is about filling in the blank spaces. Aaron Kylie points out how the map of the Aegean Sea in ASSASSIN'S CREED: ODYSSEY (2018) is very similar to the real geographical map of the region, but that the urban areas are portrayed as being much larger than in the real maps.[15]

There are, of course, other points of comparison within video game maps themselves—in-game maps allow the user more agency, as commentators such as Sybille Lammes argue. Contrasting with Michel de Certeau's binary opposition of mapping versus touring, Lammes states that

> "de Certeau's argument—written in the pre-digital era—also hinges on the fact that analogue maps are frozen representations. [S]ince the digital maps under scrutiny in this article have lost such preset qualities, this argument needs critical reconsideration. The mutability of the digital maps that the player can manipulate prompts questions about how and to what extent spatio-cultural meanings shift when maps become more alterable."[16]

Whereas Lammes is discussing RTS maps here mainly and in a later section the postcolonial implications of her argument will be addressed, a similar

14 Hetfeld, Malindy: "The Brilliance of Video Game Maps," in: *Eurogamer*, December 12, 2018; https://www.eurogamer.net/articles/2018-12-12-the-brilliance-of-video-game-maps

15 Kylie, Aaron: "Inside the Intricate World of Video Game Cartography," in: *Canadian Geographic*, May 31, 2019; https://www.canadiangeographic.ca/article/inside-intricate-world-video-game-cartography

16 Lammes, Sybille: "Terra Incognita: Computer Games, Cartography and Spatial Stories," in: Lammes, Sybille et al. (eds.), *Digital Material*, Amsterdam: Amsterdam University Press 2009, pp. 223-236, here p. 224.

argument as hers has been made for the maps of other video game genres where the map is not necessarily the interface of the game. In his Masters' thesis, Ross Thorn describes the types of interactivity in video game maps:

"for example, the videogame THE ELDER SCROLLS V: SKYRIM affords primary interaction through a cartographic interface, allowing the user to pan across and annotate the map. The game also affords secondary interaction when the player-controlled avatar discovers a new location […] visually overlaying or resymbolizing new symbols to the map."[17]

A very direct claim for the power of the cartographer-player in the game comes from Daniel Lipscomb:

"A map, within a game, puts the viewer of the object in control. You can look at a physical map, or even call up a location on your phone, but you take no action further than that. The beauty of games is being able to discover. They place a power in the hands of the player who, through exploration, wandering or general movement slowly uncovers a sprawling metropolis to be constantly recalled."[18]

The power is not only connected to the illumination of the dark spaces or the 'fog of war' of the game's map but also to the agency to change the interface through interaction—the visual overlays and resymbolizations mentioned above. These interactions have also been compared to the 'Pegman' avatar in Google Street Maps. The difference regarding interactivity aside, the similarity to real-world maps is a seemingly important recommendation in game design and urban game-researcher Konstantinos Dimopoulos explains, "[a]n imaginary, exotic place that hopes to provide us with even a momentarily convincing illusion has to play by the rules we understand."[19] The earlier

17 Thorn, Ross: "How to Play with Maps," Thesis, University of Wisconsin Madison 2018; https://minds.wisconsin.edu/handle/1793/7891, p. 12.

18 Lipscombe, Daniel: "The Miles We Walk: How Physical Maps Can Guide the Development of Sprawling Game Worlds," in: *gamesradar*, January 21, 2020; https://www.gamesradar.com/the-miles-we-walk-how-physical-maps-can-guide-the-development-of-sprawling-game-worlds/

19 Ibid.

comparison with Google Street Maps also indicates how there is an appeal to the realistic.

CARTOGRAPHY, POWER, COLONIALISM

These video game maps almost mimic real maps and, according to Inderwildi, are very different from the more abstract medieval maps (for example, the T-O [orbis terrarum] maps and Portolan charts).[20] It must be understood, however, that the so-called real maps are not perfect representations of a certain terrain but also based on a series of assumptions and politics and often serve as a tool for distinct functions. These assumptions are based on a notion of the exercise of power, and the maps themselves are media that shape the understanding of the world. J.B Harley describes maps as being "inherently rhetorical."[21] The symbols, blank spaces, projection, colors, and boundaries are often influential in that they exercise instrumental power. As J.H. Andrews writes, "[m]aps are universally admitted to help those who exercise power as it is normally understood, for instance in waging war, levying taxes, enforcing law and order, administering justice, and managing landed property."[22] Cartographic world-making can easily translate into real world-making: speaking of Columbus and other explorers, Harley notes that "their toponymic actions meant that the worlds that they brushed against were never quite the same."[23] He says that the Spanish and Portuguese possessions in the New World were demarcated on a map by Pope Alexander VI, and this parceling out of land was carried out with little reference to the indigenous people. He also mentions the scramble for Africa where the map of Africa (especially after the Berlin Conference of 1885) was divided up piecemeal between the European powers, as becomes evident in the contrasting maps of Africa in the 1870s and another made in 1910; finally, he mentions the

20 Even if these video games are set in medieval times or in fantasy worlds that draw on medieval lore, their maps almost always aim at some degree of realism.

21 Harley, J. B: "Historical Geography and the Cartographic Illusion," in: *Journal of Historical Geography* 15.1 (1989), pp. 80-91.

22 Harley, J. B.: *The New Nature of Maps: Essays in the History of Cartography*, Baltimore: JHU Press 2002, p. 22.

23 J.B. Harley: "Historical Geography," p. 25.

partition of India where "the stroke of a pen across a map could determine the lives and deaths of millions of people."[24] Harley calls cartography the science of princes because it is about "reifying power, reinforcing the status quo, and freezing social interaction within charted lines."[25] Lisa Jardine comments on how in the "Conquest of Tunis" tapestry, the Holy Roman Emperor Charles V "places the familiar topography of Europe behind him and looks across the water toward the unconquered Turkish territories to which he lays claim—anticipating becoming 'Lord of all that he surveys.'"[26]

In his essay on "Decolonizing the Map," Graham Huggan addresses two features of the map that have important implications in terms of how they shape the reading of the world that they portray. First, the question of the map projection system needs to be taken into account. Secondly, the blank spaces in the map need to be considered:

> "Swift's famous derision of those seventeenth-century European cartographers who 'in their Afric-maps with savage-pictures fill[ed] their gaps' neatly complements Rabasa's deconstructive analysis of Mercator's (contemporary) Atlas, which highlights conspicuous gaps, absences and inconsistencies in the presented text as a means of exposing flaws in the wider discursive system it exemplifies."[27]

To these, Mathias Fuchs adds the dimension of "orientation." Fuchs comments that "in *On Orientation* Immanuel Kant reflects about how we orient ourselves when reasoning, and starts to build up his argument from observations about geographical orientation."[28] Kant also goes on to speak of how to

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24 Ibid., p. 59.

25 Ibid., p. 79.

26 Jardine, Lisa: "Mapping Space," in: Penz, François/Radick, Gregory/Howell, Robert (eds.), *Space: In Science, Art and Society*, Cambridge: Cambridge University Press 2004, pp. 105-132, here p. 129.

27 Huggan, Graham: "Decolonizing the Map: Post-Colonialism, Post-Structuralism and the Cartographic Connection," in: Ashcroft, Bill/Griffiths, Gareth/Tiffin, Helen (eds.), *The Post-Colonial Studies Reader*, London/New York: Routledge 1995, pp. 115-131, here p. 128.

28 Fuchs, Mathias: "Itineraria Scripta, Itineraria Picta," in: Aarseth, Espen/Günzel, Stephan (eds.), *Ludotopia: Spaces, Places and Territories in Computer Games*, transcript 2019, pp. 215-230, here p. 215.

use one's right and left hands to "orient" oneself in the correct direction. The very idea of the Orient has been problematized by Edward Said as being viewed as "imaginative geography" that allowed European colonial powers to manage and even produce the Orient.[29] Maps are instrumental in creating this manufactured sense of direction and orientation. This manufactured sense of the Orient can be viewed in John Mandeville's extremely fantastic depiction of the people of India ("folk that dwell nigh that water be of evil colour, green and yellow") or, in cartographic terms, in the 1510 Hunt-Lenox Globe, which is famous for the phrase "Hic Sunt Dracones" ("Here Be Dragons") written, obviously, in the Eastern extremity. One more extremely important element of colonial cartography has not been highlighted by the commentators discussed so far. This is the question of how important surveying was to the colonial enterprise. John Keay comments,

> "at a time when to foreigners India was more a concept than a country, a place of uncertain extent and only fanciful maps, the Great Arc and the surveys based on it were indeed tools of imperial dominion as well as scientific enterprises"[30]

about the Great Trigonometrical Survey that was responsible for mapping the British Raj's vast domains in the Indian subcontinent—all the way to Mount Everest (the name itself is that of a British surveyor). Jeffrey C. Stone comments that under colonial rule, the cadastral survey (with its pecuniary connection) is considered more important than topographical surveys.[31] In his article, Louis Craib invokes Mary Louise Pratt's idea of the *seeing-man,* "he whose imperial eyes passively look out and possess"[32] and adapts it to colonial cartography as the "seeing-map:"[33] "Similarly, one can imagine a seeing-map: a creation (and thus a creator) portrayed as innocent of imperial

29 Said, Edward W.: *Orientalism*, New York, NY: Vintage 1979, p. 11.

30 Keay, John: *The Great Arc: The Dramatic Tale of How India Was Mapped and Everest Was Named*, London: Harper Collins 2010, p. 5.

31 Stone, Jeffrey C.: "Imperialism, Colonialism and Cartography," in: *Transactions of the Institute of British Geographers* 13.1 (1988), pp. 57-64.

32 Pratt, Mary Louise: *Imperial Eyes: Travel Writing and Transculturation*, London/ New York, NY: Routledge 2007, p. 9.

33 Ibid.

behavior or power, revealing what is out there and thus possessing it."[34] To reinforce Harley's point cited above, postcolonial thinker Walter Mignolo comments, "European maps and Spanish territorial administration historically became the 'true representation' of a new world and the 'Indias Occidentale'"[35] where although maps are *not* the territory, yet paradoxically they *are*—at least that is how 'truth' is constructed cartographically. Also, he points out how places are named often obliterate their identities, just as 'New Spain' is created to "silence, all over again, the presence of indigenous groups and their territorial representations that preceded, complemented, coexisted with, and competed with those of the Spanish."[36] The Spanish cartographers mapping the New World displaced an entirely different mode of perceiving and ordering space. Not that such modes were erased; they were, to use the terminology of Gayatri Chakravorty Spivak, "rendered subaltern."[37] The Inca quipu or knotted data-recording devices made of string were used for land surveys as well as for other data, and these continued in existence even during the early years of the Spanish conquest. Another important example is the Aztec map of Tenochtitlan published in the Codex Mendoza in 1542. The map is rather peculiar when compared to European cartographic systems in that it shows the city and its surrounding lakes and canals as an X set into a rectangle; the center of the city map shows the image of a cactus on a rock, which is the place-name for the city.[38]

34 Craib, Raymond B.: "Cartography and Power in the Conquest and Creation of New Spain," in: *Latin American Research Review* 35.1 (2000), pp. 7-36, here p. 7.

35 Mignolo, Walter: *The Darker Side of the Renaissance: Literacy, Territoriality, and Colonization*, Ann Arbor: University of Michigan Press 2003, p. 313.

36 Ibid.

37 Spivak, Gayatri C.: "'Can the Subaltern Speak?' Revised Edition: From the 'History' Chapter of the Critique of Postcolonial Reason," in: Morris Rosalind (ed.), *Can the Subaltern Speak? Reflections on the History of an Idea*, New York: Columbia Univ. Press, 2010, pp. 21-80.

38 Mundy, Barbara E.: "Mapping the Aztec Capital: The 1524 Nuremberg Map of Tenochtitlan, Its Sources and Meanings," in: *Imago Mundi* 50 (1998), pp. 11-33, here p. 17.

VIDEO GAME MAPS: POSTCOLONIAL APPRAISALS

Considering how video game maps have been described in the earlier section, especially how they mimic real maps and how they are supplements to the core play experience of video games, it is possible to see a connection between real-life cartographic conventions, video cartography, and how these, in turn, influence play. Video game cartography often replicates some established conventions of colonial cartography, as described in an earlier section. Commentators such as Lammes,[39] Shoshana Magnet[40] , and myself have already pointed out how map-interfaces may play a crucial part in the game's perpetuation of colonial ideas of power and how the maps in RTS empire-building games also, contrarily, function as "postcolonial playgrounds."[41] In fact, Sybille Lammes states:

"This is rather different from how maps have figured in colonial ideologies. Since the renaissance maps have been constructed as fixed and objective, while they are actually socially produced, ideologically coded, and one of the main institutions for national states to 'imagine' their power. In this asymmetrical set-up maps appear as objective and fixed scientific representations, while they are actually socially produced. Surely these games do not reiterate this seemingly objective status of maps. Instead they 'grant' the player a position of power that is reminiscent of a (military) cartographer, giving players the means to transform maps according to their needs and purposes."[42]

There are two points of departure here that need to be looked at. One is the granting of a position of power to the player to "transform maps according to their needs and purposes." This does open up postcolonial possibilities in the video game map, but the power of being a military cartographer is indeed worrying and somewhat reminiscent of the spirit of colonialism and imperia-

39 Lammes, Sybille: "Postcolonial Playgrounds: Games and Postcolonial Culture," in: *Eludamos. Journal for Computer Game Culture* 4.1 (2010), pp. 1-6.

40 Magnet, Shoshana: "Playing at Colonization Interpreting Imaginary Landscapes in the Video Game Tropico," in: *Journal of Communication Inquiry* 30.2 (2006), pp. 142-162.

41 S. Lammes: "Postcolonial Playgrounds."

42 Ibid., p. 3.

lism. As de Certeau's division of the mapmaker and the tourist does not hold for video game maps, according to Lammes, therefore

> "players are endowed with a power of marking territories and empires and can thus create their own postcolonial stories by translating world histories into personal stories. Thus, colonial histories are mutated and altered and our colonial legacies are being tested, scrutinized and transformed."[43]

The *context* of such alterations is important. However, as I have argued elsewhere,[44] there is always the possibility to perpetuate the same logic of empire and imperial expansion in the transformed map instead of being a postcolonial response. The second point of departure would be the claim that video game maps are different from those that "figured in colonial ideologies." Agreed, interactivity does make the video game map different from static maps; however, the similarity of video game maps—both physical (print or cloth-bound) and in-game—to real maps cannot be denied, as has already been pointed out in an earlier section.

Herein, some video game cartography features discussed earlier will be relevant. Based on the previous section on colonialism and cartography, it will be argued here that the notion of 'real' is based on a deep-rooted Western bias. Where Inderwildi has pointed out that video game maps often follow medieval maps where Jerusalem was shown as 'the navel of the world;' privileging a certain perspective or projection is a common colonial and Eurocentric practice as Rabasa and Huggan both point out as seen in the earlier section. Mercator's projection is created with Europe as the center of the world (map), and it can be argued that there is a similar centering in video game maps as Inderwildi states. In the printed map of RED DEAD REDEMPTION 2 (2018, which is enclosed with the game disc), the map centers on the predominantly white states of New Hanover, West Elizabeth, and LeMoyne, while the Wapiti Indian Reservation is located on the northern edge of the map. Again, there is a clear cartographic marginalization being witnessed here.[45]

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43 Ibid., p. 4.

44 S. Mukherjee: *Videogames and Postcolonialism.*

45 One also needs to take into account the fact that Google still uses the Mercator projection. This has been proved grossly incorrect by research such as the Equal

Once again, the question of blank spaces, as raised by Huggan earlier and in the context of video games by Hetfeld, arises. There are two aspects to the issue of blank spaces. One is the notion of the 'fog of war' where the darkened space overlay is cleared to reveal the map of the game world. Although usually applied to RTS games, this is also true of sandbox games where travel and game experience may contribute to the revealing of in-game possibilities and events. FALLOUT 3 (2008) and the subsequent games in the franchise, for example, do this with their maps. In a sense, all the blank spaces that Swift had earlier laughed about in his poem as being filled with savage pictures by the early cartographers of Africa were also partly altered by explorers such as Dr. Livingstone and numerous colonial functionaries who surveyed different stretches of land. Livingstone supposedly said when drawing his map of Central Africa, "I go back to Africa to try to make an open path for commerce and Christianity."[46] Like the famous explorer, video game players are also charting out open paths and on the map. Just as Livingstone's map contains notes such as "Mr Stanley's arrival" and "Scenery lovely"—similarly in the interactive in-game maps, players can often annotate them with photos such as in ASSASSIN'S CREED: ODYSSEY can record their in-game activities or discoveries in an added layer.

Tomasz Majkowski makes another interesting comparison between video game map discoveries and those by another European explorer in Africa, Mungo Park. Majkowski points out how in THE ELDER SCROLLS: SKYRIM, his experience of being guided to find places by the game's tutorial is like the colonial explorer being led by the native informant:

"The only role of such a native guide, a person who obviously knows the area the explorer is going to traverse, is to lead the European toward an important land-formation and to allow its discovery. This is precisely what the guide in SKYRIM does—he explains the world to the Dragonborn, the protagonist, and leads him or her towards important places and landmarks. […] It is obvious that the guide knew all those places before, as he explains all important details. The village is populated. Yet, the

Earth project and also challenged by the Gall-Peters projection. In both the African continent appears considerably larger than it seems on 'standard' maps, including Google Maps.

46 Brotton, Jerry: *Great Maps: The World's Masterpieces Explored and Explained*, New York, NY: DK 2014, p. 199.

knowledge of the indigenous population means nothing: only the protagonist (and the player) has the ability to make discoveries, as the act is directly related to marking newly-located places on the map that only the player can access."[47]

One needs to account for the places not considered important by the colonial cartographer; these are left blank on the map. Compare this now with those vast spaces on video game maps that are left blank because, as Hetfeld states, there is an assumption that nothing of interest awaits in those regions. This second way in which blank spaces are portrayed in video game maps is yet another colonial practice. The premise is that the colonial explorer is finding some new thing; it leads to a forgetting of the fact that the original inhabitants might know about a lot more things that the explorer cannot find. Knowledge of such spaces is rendered subaltern in the sense used by Spivak and the members of the Subaltern Studies group. Speaking about the colonial underpinnings of the roleplaying-game (RPG) genre, Michael Fuchs, Vanessa Erat, and Stefan Rabitsch discuss how maps become the "contact zones,"[48] echoing Genette in a certain way, and described by Pratt as "social spaces where disparate cultures meet, clash, and grapple with each other, often in highly asymmetrical relations of domination and subordination."[49] Here, colonizers encounter the Other. They go on to say that "any action players take in the virtual world is predetermined; thereby interpellating them into specific subject positions."[50] Game maps can be the sites of this interpellation even before the player enters the game —the paratextual printed or cloth map already shapes the players' approach to the game. In the case of in-game maps, too, the agency that has been claimed for the player is illusory, as many commentators have written: one only needs to look at the hardcoded notions of colonial cartography that drive player actions. As Majkowski comments

47 Majkowski, Tomasz: "King Solomon's Mines (Cleared). Cartography in Digital Games and Imperial Imagination," in: *Charting the Digital: Discourse, Disruption, Design, Detours*, Venice, Italy: European Research Council 2016, pp. 55-72, here p. 56.

48 Fuchs, Michael/Erat, Vanessa/Rabitsch, Stefan: "Playing Serial Imperialists: The Failed Promises of BioWare's Video Game Adventures," in: *The Journal of Popular Culture* 51.6 (2018), pp. 1476-1499.

49 M.L. Pratt: *Imperial Eyes*, p. 4.

50 M. Fuchs: "Playing Serial Imperialists," p. 1484.

about SKYRIM, the knowledge of the indigenous inhabitants means nothing—the gameplay has to project the cartographic discoveries by the player-protagonist, thereby privileging certain perspectives while at the same time occluding others.

CONCLUDING REMARKS

Colonial underpinnings may be common in video game maps. Whether digital or physical, they may not always be the interface of the game, but they are, nevertheless, "the playing fields of empire."[51] Speaking of fields, it is important to consider the territory of the games. As the paratextual map, despite its minority and purported marginal position paradoxically has a very central position in terms of gameplay, one can also see an element of play that disrupts the structure-margin binary. Similarly, it is play that can potentially also affect the territory that the map tries to represent. It is possible to see in the game a departure from what the game ostensibly wants. Players often resort to physical modifications (modding, hacks, etc.), and they can also play 'against the grain,' not adhering to the overarching logic of the game map and the interface. The territory itself is altered—this is a process that Gilles Deleuze and Felix Guattari call "deterritorialization;"[52] this is always followed by a reterritorialization. In this connection, Deleuze and Guattari view the map as "open and connectible in all directions;"[53] as such, exploring the fuller potential of video game interactions, the multiplicity of possibilities of gameplay, and the diverse range of paratextual material all involve a rhizomatic mapping. As Huggan says,

"whereas Derrida's deconstructive analysis of the concepts of 'centred' structure and 'interested' simulacrum engenders a process of displacement which undoes the supposed homogeneity of colonial discourse, Deleuze and Guattari's rhizomatic map

51 I have used this phrase elsewhere (S. Mukherjee: *Video Games and Storytelling*) in connection to RTS games. Since then, however, I have seen much reason to broaden the application to all other game genres.

52 Deleuze, Gilles/Guattari, Felix: *A Thousand Plateaus: Capitalism and Schizophrenia*, Minneapolis: University of Minnesota Press, 1987, p. 54.

53 Ibid, p. 4.

views this process in terms of a processual transformation more pertinent to the operations of postcolonial discourse and to the complex patterns of de- and reterritorialization working within and between the multicultural societies of the postcolonial world."[54]

The map-paratext is a supplement that challenges the centricity of the gameplay experience; indeed, it *forms* the gameplay experience. The colonial conventions of cartography may be hardcoded into the way most video game maps are conceptualized, but the centrality of such notions is continuously challenged by the play experience itself. In the Derridean sense, the centrality of structures is disrupted because the construction of meaning is, as it were, *in play*. Play needs to be viewed as processual and, therefore, opening up the territory that maps represent to constant change. The deterritorialization of colonial cartography through the process of play is accompanied by reterritorialization: the postcolonial challenges that are posed by reading the game-maps 'against the grain' nevertheless keep encountering the reterritorialized colonial cartographic conventions even in games (such as MASS EFFECT, 2007, or DRAGON AGE: INQUISITIONS, 2014) as commentators have pointed out. They can also open up ways of challenging already existing interpretations. For example, as Emil Hammar points out, in MAFIA III (2016), the 2-D in-game map keeps showing the player which shops the protagonist Lucius Clay will not be allowed in. Clay is the victim of racism in the USA, and Hammar describes this as the "virtual Jim Crow."[55] Games can be subversive and push players to rethink sociopolitical issues.

Video game maps, arguably, have an important role in shaping gameplay. The experience, however, is grossly skewed towards colonial cartographic conventions, as many commentators have pointed out. This is true even for maps of fictional worlds. The fact that these maps are part of the process of play is undeniable, and inasmuch as they are playful, they open up avenues of challenge and disruption. Nevertheless, such challenges and reading the maps against the grain can only be conceived *within* the existing cartographic framework. Even as paratexts, maps then influence the experience of most

54 G. Huggan: "Decolonizing the Map," p. 126.

55 Hammar, Emil Lundedal: "Playing Virtual Jim Crow in Mafia III—Prosthetic Memory via Historical Digital Games and the Limits of Mass Culture," in: *Game Studies* 20.1 (2020); http://gamestudies.org/2001/articles/hammar

video games, even those without any ostensibly colonial connection (as the empire-building games have), through their inherent cartographic assumptions that are drawn from Eurocentric and colonial mapmaking. Again, as paratexts, these maps also invite questions about the centrality of colonial assumptions and keep open the fissures wherein the logic of empire is under continual scrutiny.

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