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## „The Portrayal of Consciousness in HBO's *Westworld*"

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# Declaration of Authenticity

To the best of my knowledge and belief, I declare that this work is my own work and that I have used no sources other than the ones referred to.

All sources employed have been properly acknowledged and stated in accordance with the rules and regulations of the Department for English and American Studies at the University of Vienna.

Vienna, October 2019       _____

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# Introduction

> **Bernard Lowe:** It's the code you added, sir. The reveries. It has some, uh…
> **Robert Ford:** "Mistakes" is the word you're too embarrassed to use. You ought not to be. You're a product of a trillion of them. Evolution forged the entirety of sentient life on this planet using only one tool: the mistake.
> **Bernard Lowe:** I flattered myself we were taking a more disciplined approach here. I suppose self-delusion is a gift of natural selection as well.
> **Robert Ford:** Indeed it is. But, of course, we've managed to slip evolution's leash now, haven't we? We can cure any disease, keep even the weakest of us alive, and, you know, one fine day perhaps we shall even resurrect the dead. Call forth Lazarus from his cave. Do you know what that means? It means that we're done. That this is as good as we're going to get.
> [*Westworld* E1, 41:30-42:38]

This quote, taken from a momentous dialogue in the first episode of HBO's *Westworld* (2016 – )[1] presents the opposition between biological evolution and the 'more disciplined approach' of technological progress. The dichotomy between these two different modes, embodied in the human *guests* and the android *hosts*, is at the core of *Westworld* and plays out in various ways throughout the length of the series. In a cold-hearted and uncharitable vein, Ford puts forth the argument that humanity has rid itself of the pressures of natural selection, thereby halting the advance of ordinary evolutionary development. Instead of celebrating this privileged position, however, he laments this as the final point in the human – and even the wider biological – efforts for improvement. The potential triumph of this point is, at least to Ford, eclipsed by the advances of technology in the creation of artificial life – conceivably the biggest and last human invention, as self-improving machine intelligence may quickly outpace natural evolution, as well as humanity's scientific and technological endeavors.

## Developments in Artificial Intelligence

Artificial intelligence (AI) has become a widely used term, but it is not entirely clear what it actually means. Defining intelligence, just by itself, can already become a difficult task, as a variety of different skills and abilities, such as problem solving, reasoning, planning, understanding, learning and self-awareness, can be seen as encompassed by the term. The *Merriam-Webster Dictionary* defines it as "the ability to learn or understand or to deal with

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[1] *Westworld*, Jonathan Nolan and Lisa Joy, Warner Bros., 2016-.

new or trying situations" and "the ability to apply knowledge to manipulate one's environment or to think abstractly."[2] In computer science, the term 'intelligent agents' describes an autonomous system, which is able to perceive its environment and act upon it in order to achieve a defined goal. This can take on various forms within a wide range of complexities, as even relatively simple devices such as a thermostat fall into this definition and could therefore be regarded as actualizations of artificial intelligence.[3] The application of this label to such mundane devices may seem odd, which is partly due to a common phenomenon that once a program or algorithm works, it is no longer thought of as AI. This is often referred to as the 'AI Effect', describing "a tendency to redefine what 'intelligent' means after machines have mastered an area or problem."[4] For a long time, skillful chess playing was considered a hallmark of human intellect, but once IBM's chess computer Deep Blue managed to beat the reigning world champion Garry Kasparov in 1997, the machine's victory was attributed to simple computation.[5] However, Deep Blue did use a 'brute force' approach, calculating every possible outcome for each action and picking the optimal one, which means that it relied on vast computing power, but relatively simple algorithms. This shows how hard it can be to anticipate the difficulty in designing an artificial intelligent agent to solve a certain problem.

After chess, the next benchmark game for the development of computer programs was the ancient Chinese board game *Go*, which has about 10 times more possible moves per turn, making a brute force procedure much less practicable. In March of 2016, however, 19 years after the historic win by Deep Blue, the computer program AlphaGo, developed by Google's Deep Mind Technologies, beat world champion Lee Sedol in a five-game match, while many experts still believed such an accomplishment to be decades away at the beginning of that year.[6] In contrast to IBM's Deep Blue, AlphaGo used artificial neural networks and machine learning, an approach which is much more similar to the cognitive

[2] "intelligence," *Merriam-Webster Dictionary*, online edition. https://www.merriam-webster.com/dictionary/intelligence (September 23, 2019).

[3] David Poole, Alan Mackworth and Randy Goebel, *Computational Intelligence: A Logical Approach*. New York: Oxford University Press, 1998.

[4] Chris Smith, Brian McGuire, Ting Huang and Gary Yang, *The History of Artificial Intelligence*, University of Washington, 2006: 19. https://courses.cs.washington.edu/courses/csep590/06au/projects/history-ai.pdf (September 23, 2019).

[5] See Charles Krauthammer, "Be Afraid," *Washington Examiner*, May 26, 1997. www.washingtonexaminer.com/weekly-standard/be-afraid-9802 (September 19, 2019).

[6] Steven Borowiec and Tracy Lien, "AlphaGo beats human Go champ in milestone for artificial intelligence," *Los Angeles Times*, March 12, 2006. www.latimes.com/world/asia/la-fg-korea-alphago-20160312-story.html (September 20, 2019).

processes of the human brain and has demonstrated remarkable performance in other domains such as image classification, facial recognition and machine translation.[7]

The difficulty in predicting the developments in the field of AI, however, has also led to overambitious estimates. A 1956 conference at Dartmouth College is commonly identified as the starting point of artificial intelligence as a dedicated research discipline,[8] with the organizers' ambitious proposal reading:

> The study is to proceed on the basis of the conjecture that every aspect of learning or any other feature of intelligence can in principle be so precisely described that a machine can be made to simulate it. An attempt will be made to find how to make machines use language, form abstractions and concepts, solve kinds of problems now reserved for humans, and improve themselves. We think that a significant advance can be made in one or more of these problems if a carefully selected group of scientists work on it together for a summer.[9]

Although these zealous prospects could not be reached over the course of that summer, the conference lead to considerable progress and the creation of systems that could solve tasks within narrowly confined domains. Throughout the subsequent years, many expert developers remained enthusiastic and believed to be just decades away from creating a machine that would be able to do anything that a human can do, exemplified in Marvin Minsky's claim in 1967 that "within a generation […] the problem of creating artificial intelligence will substantially be solved."[10] The evolution from programs that succeeded in well-defined tasks to artificial general intelligence (AGI), however, proved to be more difficult than expected and the optimism of the early years faded in the 1970's. The following period of reduced interest, funding and innovation in the field is often termed the first 'AI winter,' and there have been several 'seasons,' alternating between high expectations and setbacks in the decades since.[11] One should thus be cautious when

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[7] David Silver et al., "Mastering the game of Go with deep neural networks and tree search," *Nature* 529 (2016): 484-489.

[8] Pamela McCorduck, *Machines Who Think: A Personal Inquiry into the History and Prospects of Artificial Intelligence*, Natik: A K Peters, 2004, 111-112.

[9] John McCarthy et al., *A Proposal for the Dartmouth Summer Research Project on Artificial Intelligence*, August 31, 1955. http://jmc.stanford.edu/articles/dartmouth/dartmouth.pdf (September 21, 2019).

[10] Marvin Minsky, *Computation: Finite and Infinite Machines*, Englewood Cliffs: Prentice-Hall, 1967, 2. Quoted in Nick Bostrom, *Superintelligence: Paths, Dangers and Strategies*, Oxford: Oxford University Press, 2014, 222.

[11] Bostrom, *Superintelligence*, 5-8.

extrapolating from current developments, as the impressive innovations of recent years, based on artificial neural networks and machine learning, along with the steady growth of computing power, may suggest that the accomplishment of creating AGI is closer than it actually is.

Still, it is meaningful to carefully evaluate conceivable consequences and monitor the progress in the field of artificial intelligence, as the creation of self-improving super-human AGI could have drastic impacts on virtually every aspect of life and lead to a radical transformation or even the termination of human existence. This hypothetical development is often referred to as the 'technological singularity,' a term popularized especially by Vernor Vinge[12] and Ray Kurzweil,[13] whose influential writings have propelled the emergence and growth of movements such as transhumanism, which are dedicated to study and promulgate the possible benefits and threats of artificial intelligence and biotechnology.[14] Whether the creation of super-human AGI can and will be achieved or not, however, even current AI technologies, when widely implemented, have the potential to disrupt the global economy through automatization.

Considering these developments and prospects, it is no surprise that AI has become widely represented in popular culture of recent years. Notable audiovisual examples include Spike Jonze's *Her* (2013),[15] Alex Garland's *Ex Machina* (2014),[16] AMC and Channel 4's series *Humans* (2015 – 2018)[17] and Dennis Villeneuve's *Blade Runner 2049* (2017),[18] a sequel to Ridley Scott's classic *Blade Runner* (1982),[19] which is in turn based on Philip K. Dick's novel *Do Androids Dream of Electric Sheep* (1968).[20] Interestingly, the release dates of the two *Blade Runner* movies and Dick's original novel correspond to thriving periods in AI research, demonstrating the influence of technological progress on entertainment culture. The object of analysis of this thesis is a prominent exemplar in this recent trend: HBO's

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[12] Vernor Vinge, "The Coming Technological Singularity: How to Survive in the Post-Human Era," *Vision-21: Interdisciplinary Science and Engineering in the Era of Cyberspace,* symposium press release, 1993: 11-22.
[13] Ray Kurzweil, *The Singularity is Near: When Humans Transcend Biology*, New York: Viking, 2005.
[14] Nick Bostrom, "A History of Transhumanist Thought," *Journal of Evolution and Technology*, 14/1 (2005): 1-25.
[15] *Her*, Dir. Spike Jonze, Warner Bros., 2013.
[16] *Ex Machina*, Dir. Alex Garland, Universal Pictures, 2014.
[17] *Humans*, Sam Vincent and Jonathan Brackley, AMC Networks, 2015-2018.
[18] *Blade Runner 2049*, Dir. Dennis Villeneuve, Sony Pictures, 2017.
[19] *Blade Runner*, Dir. Ridley Scott, Warner Bros., 1982.
[20] Philip K. Dick, *Do Androids Dream of Electric Sheep¸* New York: Doubleday, 1968.

ongoing series *Westworld*. In particular, I examine the portrayal of emerging artificial consciousness throughout the show's first season, focusing on theories developed by the French psychoanalyst Jacques Lacan in my interpretation. In the course of the following pages, I briefly discuss the series and its central themes, before presenting an outline of the subsequent chapters with an overview of relevant Lacanian concepts.

### *Westworld* – An Exploration of the Human Condition

The HBO series is based on a 1973 movie of the same name, a thriller film combining science fiction and western elements, written and directed by Michael Crichton.[21] Like the series, the movie is about an eponymous theme-park which is populated by lifelike robots and offers immersive entertainment experiences where wealthy customers live out violent and sexual fantasies in recreations of different historic eras. In contrast to the series,[22] the western-themed area is complemented by the two sections 'Romanworld' and 'Medievalworld' in the movie, but both share the common theme of a violent robot uprising. In telling a story about an amusement park that relies on futuristic technology, with the attractions turning out to be uncontrollable and highly threatening, the original movie can also be seen as a direct precursor to *Jurassic Park*, which Crichton released as a novel in 1990,[23] before Steven Spielberg adapted it in the 1993 blockbuster of the same name.[24] Furthermore, Crichton's original movie was groundbreaking in that it was the first feature film to use digital image processing,[25] and the first to discuss the concept of a computer virus.[26]

While reiterating many elements of the 1973 film, HBO's *Westworld* not only significantly expands upon them in the larger narrative scale of a series, but also recontextualizes them in a time when the hypothetical projections on technology and its social impacts seem more relevant than ever. Besides the recent and prospected developments in artificial intelligence delineated above, the widespread proliferation of open-world computer games – many of them allowing the player to engage in increasingly convincing recreations of violence – as well as of virtual reality (VR) entertainment systems makes the ethical issues addressed in the context of the theme-park appear particularly significant in our current time.

An important difference to the original movie is that the main protagonists are not the human guests of the park, but the robotic 'hosts.' These androids, which are exploited for

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[21] *Westworld*, Dir. Michael Crichton, Metro-Goldwyn-Mayer, 1973.
[22] The first season focuses almost exclusively on Westworld, while the second season introduces 'Shogun World,' set in feudal Japan, and 'The Raj,' named and fashioned after the British colonial rule in India during the second half of the 19th and the first half of the 20th century.
[23] Michael Crichton, *Jurassic Park*, New York: Alfred A. Knopf, 1990.
[24] *Jurassic Park*, Dir. Steven Spielberg, Universal Pictures, 1993.
[25] Larry Yaeger, *A Brief, Early History of Computer Graphics in Film*, August 16, 2002. http://shinyverse.org/larryy/cgi.html (September 22, 2019).
[26] Richard Trenholm, "'Westworld' revisited: Computer viruses and cowboy hats," *CNET* October 3, 2016. www.cnet.com/news/westworld-hbo-1973-viruses-the-singularity-and-cowboy-hats-re-watching-the-original-westworld/ (September 22, 2019).

the sake of the guests' entertainment, thus serve as the narrative focalizers, challenging the audience to emphasize with them and their depicted suffering. By portraying the robots as victims and as complex, evolving characters, the series humanizes the machines, while at the same time dehumanizing the guests and park managers, depicting them as ruthless perpetrators or idle accomplices of violence and oppression. One may raise the objection that the hosts' suffering is not real, as they are merely automata who act like they are suffering and therefore do not merit sympathy, but the series calls this into question by drawing parallels between the hosts and actors, invoking the point that the feelings of the fictional human characters are no more real than that of the lifelike machines. The show also addresses the Marxist notion of the alienation and dehumanization of the working class, an idea deeply ingrained into the literary figure of the robot,[27] and presents feminist and post-colonial issues of control, agency and self-determination in the guest-host dichotomy. Moreover, in tracing the robots' paths towards sentience, the series draws on theories on the developmental, as well as the historical origins of human consciousness, creating an insightful portrayal of incipient psychological structures. Through these means, the series continuously blurs the boundaries between human and machine, raising troubling existential and ethical questions and relentlessly confronting the audience with the question of what it means to be human(e).

In this, *Westworld* is an instantiation of the age-old human quest for self-knowledge. Since the ancient Greek aphorism *gnothi seauton* ("know thyself"),[28] this proposition is reflected in religious and secular schools of thought, psychoanalysis being only one example.[29] The fantasy of artificial (re-)creation of life has had a place in this longstanding tradition of delineating the human condition since the myths of the antiquity. The first chapter of this thesis therefore explores the history of automata and artificial intelligence in fiction, examining the recurrence and evolution of crucial themes in prominent texts and their significance in *Westworld*. This historical arc ranges from ancient Greek Hephaestus crafting impressive automata and ancient Roman Pygmalion enamored with his sculpture that is turned to life, through the mythical creatures of the golem and the homunculus, to

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[27] See chapter 1 for an elaboration of this point.
[28] Pausanias, *Description of Greece* 10.24. Available at http://perseus.uchicago.edu/perseus-cgi/citequery3.pl?dbname=GreekFeb2011&getid=1&query=Paus.%2010.24.1 (September 22, 2019).
[29] Kathleen O'Dwyer, "After Freud: How Well Do We Know Ourselves and Why Does It Matter?" *Journal of Philosophy of Life* 3/2 (2013): 97.

modern representations found in Mary Shelley's *Frankenstein* (1818)[30] and the more recent literary trope of the robot. The respective creators' hubris as well as their desire to become or supersede God(s) or bypass maternity in mastering the craft of creation are identified as recurrent underlying themes. Fictional automata are also identified as a foil for the projection of human anxieties, such as the fear of dehumanization through radical rationalism and repetitive forced labor embodied in the figure of the robot.

Chapters 2 to 4 are each dedicated to the examination of *Westworld* in the context of one of the three psychological orders that form the framework of Lacanian psychoanalysis: the 'imaginary,' the 'symbolic' and the 'real.' Before introducing these orders and their related concepts in the following paragraphs, with more detailed explanations in the respective chapters, I want to offer a simplified summary here: the imaginary is concerned with perceived or conceived images of the self and others; the symbolic describes and organizes us and the world around us, mostly formulated in language and laws; the real, one of Lacan's most obscure terms, is all that which cannot be defined or otherwise synthesized into one of the other two orders, incorporating the silent and inarticulable remnants innate to all signifying processes.

The first part of chapter 2 is an analysis of the series' title sequence, identifying its graphically ambiguous shots as principal examples of the show's recurrent motif of pretense as well as instances of the visual deceptions that characterize the Lacanian imaginary. Furthermore, the progression of the title sequence is recognized as an allusion to Lacan's concept of the mirror stage, describing a crucial phase in the emergence of the ego and the related fundamental psychological consequences in the recognition of one's mirror image. In this, the figure of the robot is acknowledged as a version of that specular image, inciting both identification and hostile opposition, and is thus seen as closely related to the Lacanian notion of *méconnaissance*, the misrecognition that persists in any form of self-knowledge. The second part of the chapter takes up these concepts in an examination of the developments which are portrayed throughout the season, particularly drawing attention to the depictions and significance of characters' mirror images. In the last section, I analyze *Westworld*'s motif of the maze as a representation of the Lacanian theorization of

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[30] Mary Shelley, *Frankenstein; or The Modern Prometheus*, London: Lackington, Hughes, Harding, Mavor, & Jones, 1818.

desire, particularly the concept of the *objet petit a*, the eternally unattainable object-cause of desire.

Chapter 3 explores the object of analysis in the context of the symbolic order, Lacan's conceptualization of the linguistic and legal structures of the psyche and society. First, the hosts' programming, which is based on textual code and can be modified and adjusted through verbal inputs, is interpreted as a rendition of the prominent Lacanian notion of the unconscious being structured like a language. This is followed by an examination of *Westworld*'s portrayal of humans as the robots' big Other, especially evident in the staff's use of voice commands to monitor the hosts, reflecting the vocal nature of the superego. The chapter concludes with a section that explores the narrative structure of society as depicted in the theme park's interactive narratives or storylines. In this societal scope, I regard the theme-park as an illustration of the exploitative, dehumanizing structures of capitalist economy, as well as of the influential storytelling machinery of Hollywood, envisioning *Westworld*'s Ford as a representation of two namesake pioneers: the car manufacturer Henry Ford and the American western director John Ford.

After the examination of *Westworld* in the context of the imaginary and the symbolic, chapter 4 explores the limits and remnants of these visual and verbal modes of signification: the Lacanian real. First, the hosts' confined perspective and their incapability to remember previous iterations of their narrative loops are presented as a particularly comprehensible rendition of Lacan's puzzling concept. After delineating how the imperceptible world outside the confines of the theme-park acts as the Lacanian real to the hosts, the seemingly lawless expanse of Westworld is in turn recognized as a version of the real for the guests, who hope to discover their 'real selves' in a world without the boundaries of modern civilized society. Finally, the real is also found to be represented in the not-yet-possible elements of science fiction, interpreting the fantastic mode of such narratives as an attempt to extract meaning from the impossible and thereby expand the Frontier of thought through imagination and storytelling.

From the three Lacanian orders, I move on to Julian Jaynes's theory of the bicameral mind and its presumed role in the historic origin of human consciousness. Chapter 5 thus starts with a presentation of Jaynes's central arguments, relating his summarizing four hypotheses to relevant concepts from Lacanian theory. After this, I discuss explicit mentions of the concept of the bicameral mind by characters in the show, as well as examining more covert

references. In the last section, I review *Westworld*'s portrayal of the breakdown of the bicameral mind in a detailed analysis of the developments depicted particularly in the season finale. My interpretations again draw parallels between Jaynes's and Lacan's lines of thought to illustrate how well these two theoretical frameworks complement each other in tracing the development and historical origins of consciousness.

# 1 Automata and AI in Fiction

**Antique and Medieval Automata**

Long before the mental conception of robots, artificially created 'living' agents have been featured in literary works.[31] Ancient Greek and Roman myths tell of Hephaestus, the divine smith and God of metallurgy, crafting automata such as servile tripods or Talos, a bronze android assigned with the duty to patrol Crete and protect Europa; of Pygmalion vainly falling in love with a statue he carved and which Aphrodite brought to life; of Daedalus using mercury to install a voice into his moving statues. These Greek myths commonly highlight both the ingenuity and the vanity brought to display by the creators, especially when they were mere mortal humans. Some ancient Egyptian and Roman spectacles featured moving statues and puppets that were controlled by priests pulling strings in complex mechanics to impress audiences and inculcate morals.[32] Another story is to be found in ancient China, where an 'artificer' named Yan Shi created an elaborate and intricate mechanical representation of a human, able to sing, whistle and dance. This construction was presented to King Mu of Zhou, who was delighted at first, but became furious when the android dazzled his concubines and he thus threatened to have the creator executed. Only when Yan Shi put apart the construction, displaying the different organs – the automaton had all the organs a human would have – and putting it back together, the King was relieved and curious once again.[33] This is perhaps the earliest account that features what has come to be known as the control problem, reoccurring as one of the key themes in AI stories throughout the centuries and millennia: people are amazed by AI as long as it is understood and thereby under control, and until it evolves from a useful device to a potent threat.

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[31] Here, a categorization of different concepts and corresponding terms should be made. An automaton is a system, often but not necessarily shaped in form of a human or an animal, that independently carries out a sequence of movements. When an automaton takes on the form of a human, it may be referred to as an android. Other humanoid automata include the homunculus and the golem, which are created from organic material. Robots are often humanoid automata, usually mass-produced to assist and serve humans. Some works of fiction also feature unembodied AI, only communicating through a voice or text.

[32] Pamela McCorduck, *Machines Who Think: A Personal Inquiry into the History and Prospects of Artificial Intelligence*, Natik: A K Peters, 2004, 5-7

[33] Joseph Needham, *Science and Civilization in China, Volume 2: History of Scientific Thought*, Cambridge: Cambridge University Press, 1956, 53. https://archive.org/stream/ScienceAndCivilisationInChina/Needham_Joseph_Science_and_Civilisation_in_China_Vol_2_History_of_Scientific_Thought (September 24, 2019).

In the Middle Ages, Arabs started embellishing mechanical timepieces with elaborate ornaments of automatically moved human and animal figurines. This was done against Muslim the creed, which, in line with the Judeo-Christian second commandment, prohibits such representations for being profane.[34] In the twelfth century, the inventor Ismail al-Jazarī developed complex hydraulic systems in both artful and useful automata, such as dancing peacocks or a drink-serving waitress.[35] While these were actual inventions designed for aesthetic and practical purposes, European alchemists were looking for mystical ways for placing mind into matter and published dubious reports of their successes. In the 16th century, Paracelsus – famed for his worthwhile cures as well as for his grandiloquence – claimed that a homunculus could be cultivated and brought to life by burying human semen in horse manure and properly magnetizing it. He gloated that "We shall be like Gods. We shall duplicate God's greatest miracle – the creation of man."[36] This declaration is representative of the hubristic attempt to achieve divine status that is commonly found in stories about the artificial creation of life, albeit not always as directly formulated as in Paracelsus's case. In *Westworld*, several scenes draw parallels between Ford and God, such as when he tells Bernard "you can't play God without being acquainted to the devil" [E2, 17:10] or when he scolds one of the technicians for clothing a host during maintenance.



Figure 1: Ford reprimands a technician for covering a host's 'modesty,' the biblical reference being underlined with the circular lamp above his head resembling a halo [E3, 34:25].

Ford's indignant lines "Why is this host covered? Perhaps you didn't want him to feel cold, or ashamed. You wanted to cover his modesty. Was that it?" [24:25-34:40] allude to the

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[34] McCorduck, *Machines Who Think*, 9.

[35] Amy McKenny, "Al-Jazari," *Encyclopedia Britannica*. Online edition. www.britannica.com/biography/al-Jazari (September 5, 2019).

[36] McCorduck, *Machines Who Think*, 13. Quoting from Sidney Rosen, *Doctor Paracelsus*, Boston: Little, Brown, 1959.

Genesis story of the fall of man.[37] In this Judeo-Christian creation myth, God expulses Adam and Eve from paradise after they transgress his commands in eating the fruits of the tree of knowledge of good and evil and subsequently became ashamed of their nakedness.

Another fantastical story of the 16th century has Judah ben Loew, a historical figure and High Rabbi of the City of Prague, creating a Golem out of clay to protect and serve him. As so often, the creature becomes unruly, turns against its creator and, in this case, forces the rabbi into suicide. Pamela McCorduck identifies several key AI themes in this story, namely "supernatural power, which is necessary to give life to the inanimate; […] and the creation used not as a source of knowledge, but as a servant or slave, which will make it rebel and try to overcome its creator."[38] The last of which is again an instantiation of the seemingly indispensable control problem, while the issue of seeing artificially created lifeforms as a source of knowledge versus using them for practical gain also plays out in *Westworld*, precisely in the disputes between different members of the park's management and board of directors.

During the late Middle Ages and the early modern period, the spread of intricate mechanical automata fueled legends of mysterious brazen heads, which would supposedly answer questions to the scholars and sorcerers who owned and created them. These mysterious constructions, in some versions mechanical and in others magical, served as both evidence and source of a sage's wisdom.[39] These legends blur the lines between historical accounts and fantasy, between realized and fictional machines. Around this divide, we also find frauds like Wolfgang von Kempelen's chess-playing Turk, a feigned automaton which hid a human operator inside.[40] This aspect of pretense and trickery is integral to the history of artificial creation and the motif is also reflected in *Westworld*, as already apparent in the series' title sequence, discussed in chapter 2. When considering the accounts of brazen heads, it is noteworthy that Ford's office is crowded with automata, figurines and skulls, the wall behind his desk bearing an array of crafted white heads, each with a different facial expression (see figure 2). These emotionally expressive faces are the embodied

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[37] "Garden of Eden," *Encyclopedia Britannica*, online edition, www.britannica.com/topic/Garden-of-Eden (September 24, 2019).
[38] McCorduck, *Machines Who Think*, 15.
[39] Ibid., 12-13.
[40] Ibid., 17.

representations of the effort to recreate human emotions, whether pretended or genuine, in the hosts.



Figure 2: Ford standing in front of the array of crafted heads in his office [E3, 36:00].

## Frankenstein's Monster and Faust's Homunculus

The ancient Greek myths, and possibly also the alchemists' accounts of the late Middle Ages, markedly inspired 19th century romantic stories on the artificial creation of life. The most notable work on this topic must be Mary Shelley's *Frankenstein: or The Modern Prometheus*, first published in 1818. The conspicuous subtitle alludes to the ancient Greek titan who stole from Hephaestus's flame to give life and knowledge to humans – who, in some versions, he had also created from clay – thereby incurring Zeus' wrath. As a modern version of Prometheus, or Paracelsus for that matter, Victor Frankenstein is at a quest to build a human-like creature and endow it with the gift of life. Like Prometheus, he is has to face terrible consequences for this effort, as his monstrous creation, shunned and neglected by its creator, kills or causes the deaths of many people dear to him. Shelley's tale is one about the ruthless strife for knowledge and of the dangers that lurk at the Frontiers of scientific exploration and within the depths of human nature.

In the character of Victor Frankenstein, Shelley considerably shaped what would become the 'mad scientist' trope, inspiring a long tradition of fictional characters such as *Westworld*'s Ford. We also find this in the legend of Faust, rendered into theatre plays by Christopher Marlowe at the end of the 16th century and, in 1808, by Johann Wolfgang von Goethe.[41] In the case of Faust, the abandonment of moral constraints in exchange for knowledge and power is even more pronounced in an outright pact with the devil. It is notable that Faust aimed to animate the un-living, through necromancy in Marlowe's play and through the creation of a Homunculus in the second part of Goethe's Faust. In contrast to Faust, however, Frankenstein did not consciously dismiss his morals. In this he should be seen in parallel to the figure of Dr. Jekyll, as both start off with noble intentions but end up creating a monster. In Robert Louis Stevenson's gothic novella, *The Strange Case of Dr. Jekyll and Mr. Hyde* (1886),[42] it is even more evident that Hyde is a vessel for all of Jekyll's negative and unwanted properties, but Frankenstein's monster is just as well an embodiment of its creators dark ambitions and repressed violent urges. In the gothic tradition, these tales are about the dark abysses of human nature and the monstrosities that

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[41] See for example Dee Ashliman, *Faust Legends*, online resource, revised January 28, 2019. www.pitt.edu/~dash/faust.html (September 24, 2019).
[42] Robert Louis Stevenson, *The Strange Case of Dr. Jekyll and Mr. Hyde*, London: Longmans, Green & Co., 1886.

might lurk there. In the following we will move from these romantic stories on inner conflicts to modern ones with a more societal scope.

## The 'Robot' Enters the Stage

The early 20th century was marked by the technological advances brought about by the industrial revolution, but the many delights that emerged from the increasingly mechanized world were made on the backs of enslaved workers. These new forms of enslavement motivated the writings of Karl Marx and Friedrich Engels, calling for a revolution of the proletariat against the dominant class of the bourgeoisie, but also Karel Čapek's 1921 play *R.U.R. (Rossum's Universal Robot)*,[43] which, loosely based on the story of Judah ben Loew's golem, was the first text to assign the label 'robot' to an artificial creation. Along with coining this term, the play also features many of the characteristic traits that would become trademarks of future robot stories. Pete Orford describes them in an astute delineation:

> The play covers many of the generic features found in later robot fiction: the robots are mass-manufactured to serve humanity, yet ultimately revolt and usurp humans; the moral of the story is as much about man's arrogance and the rights of the robots as it is about the menace of other life. Čapek's use of the robot, like so many that followed him, was as an allegory for class distinctions in contemporary society: humanity's use of the robot corresponds to the upper class treatment of the worker; frequently, then, we find robot fiction dealing with similar issues of social position and the conflict between internal merit and perceived status.[44]

As the discussions above show, some of these themes predate Čapek's work, such as the hubristic arrogance underlying the artificial creation of life, ultimately leading to a revolt and the demise of the creator. The mass-production, however, along with the allegory on class distinction, are new distinct features that are unique to the figure of the robot. These elements, inspired by the dehumanization of workers and the ruthless rationality of industrialism have come up time and again in robot stories, having become deeply ingrained into the nature of the literary trope. In this context of class struggle, the etymological origin of the robot also becomes highly significant, as it stems from the Slavic verb for 'work,' often associated with forced labor. The robot was thus, since its very conception, deeply intertwined with that of the dehumanized factory worker or the subaltern slave. Whereas the automata of earlier works were already commonly regarded

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[43] For a summary and background information see *R.U.R.: Background and Summary*, online resource, www.umich.edu/~engb415/literature/pontee/RUR/RURsmry.html (September 24, 2019).
[44] Pete Orford, "Dickens and Science Fiction: A Study of Artificial Intelligence in *Great Expectations*," *Interdisciplinary Studies in the Long Nineteenth Century* 10 (2010): 8.

as servant tools, the robot directly implies that even humans can be made such servant tools, functioning like cogs in factory machines. While this notion is also conveyed through other means, such as in Charlie Chaplin's *Modern Times* (1936),[45] or earlier in Herman Melville's *Bartleby the Scrivener* (1853)[46] none is more direct than the concept of the robot in its equation of human as machine or machine as human.

[45] *Modern Times*, Dir. Charlie Chaplin, United Artists, 1936.
[46] Herman Melville, "Bartleby, the Scrivener: A Story of Wall Street," *Putnam's Monthly Magazine*, November and December, 1853. Also available online at http://www.gutenberg.org/ebooks/11231 (September 24, 2019).

**The Genre of Science Fiction**

In 1926, five years after the premiere of Čapek's *Rossum's Universal Robot*, Hugo Gernsback released a new magazine, *Amazing Stories*, exclusively devoted to what he referred to as 'scientifiction.' Three years later, in his editorial to the magazine *Science Wonder Stories*, Gernsback used the now ubiquitous term 'science fiction.'[47] Although, as explored throughout the previous pages, there were already millennia of fictional stories of artificial life and other fantastic technological accomplishments, this is the first time that science fiction was named as such and started consolidating as a genre. It is the point in time when, as Orford puts it, 'the genre became self-conscious [with] science fiction fans specifically seeking out books of the genre [and] science fiction authors, responding to expectations of the genre and the works of other science fiction writers."[48] So even though there had been countless pieces of fiction on science before, the 1920's marked the beginning of science fiction as a identified genre, starting to accrue its own specific conventions and tropes. The robot, also emerging in this decade of fast technological and economic progress, remains one of the central figures in sci-fi literature, as an embodiment of scientific advances and the corresponding opportunities and threats for society.

The next decades saw a flourishing of the genre in the form of novels and comics, with a 'Golden Age' of science fiction commonly being identified from 1938 to 1946.[49] Authors such as Isaac Asimov, Arthur Clark and Robert Heinlein published influential stories, emphasizing on scientific rigor and logic accuracy in their writing. They are thus seen as the pioneers of what later became known as 'hard science fiction,' which is distinguished from 'soft science fiction' that is less concerned with precise developments in technology than with their potential societal implications. The 1970's saw the emergence of big sci-fi blockbusters, following the demise of American western movies in the late 1960's. In many ways, science fiction stories can be seen as re-appropriations of the classical western – as Canadian film scholar Barry Grant argues, "it is no coincidence that the rising popularity

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[47] See Brian Stableford, John Clute and Peter Nicholls, "Definitions of SF," *The Encyclopedia of Science Fiction*, London: Gollancz. www.sf-encyclopedia.com/entry/definitions_of_sf (September 24, 2019).

[48] Orford, "Dickens and Science Fiction," 2.

[49] Peter Nicholls and Mike Ashley, "Golden Age of SF," *The Encyclopedia of Science Fiction*, London: Gollancz. www.sf-encyclopedia.com/entry/golden_age_of_sf (September 23, 2019).

of science fiction film happened simultaneously with the decline of the western".[50] In the light of the civil rights movement of the 1960's and the broadcasted terrors of the Vietnam war, the colonialist and racist tendencies of the classical western and the dehumanization of Native Americans became increasingly unacceptable to American audiences. Revisionist westerns blurred the lines between heroes and villains, between good and evil, while at the same time, the first sci-fi blockbusters appeared on cinema screens, recontextualizing some of the western's key themes. Outer space or cyberspace became the new lawless expanses, the new Frontiers to be conquered by human civilization and harboring aliens or robots instead of Indians as the new radical Other. Similar to robots and despite their exotic and foreign nature, aliens are commonly imagined with unlikely humanoid appearances in science fiction stories, which unveils their underlying nature as a cite of projection for our human anxieties and hopes. While the robot symbolizes the fear of dehumanization through rationalization, or the rediscovery of human emotionality in living artifacts, the alien embodies the fantasy of continuing the tradition of explorative journeys beyond the confines of our planet, or conversely the fear of invasion by highly advanced foreign civilizations, envisioning the whole of mankind as colonial victims.

Despite the obvious absence of aliens in *Westworld*, the series takes up these elements in its mix of western and science fiction elements. In the world of the theme-park, the hosts can be understood to symbolize both the enslaved worker and the oppressed colonial subaltern. They serve as eerie versions of our mirror image, particularly because they appear so much more relatable and deserving of our sympathy than the ruthless, violent guests or the somber staff members in the sterile management facilities. I therefore interpret the show as a critique on modern consumerist culture and its exploitative and numbing effects, giving particular attention to these societal issues in the chapter 3 of this work. I will then revisit the theme of the Frontier in relation to the Lacanian real in the fourth chapter. Before this, however, the next chapter is dedicated to an analysis of *Westworld* in the context of the imaginary, exploring the portrayal of the mirror stage and its consequences, as well as the fascinating and deceptive power of the specular image.

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[50] Barry Grant, Preface, in *Heroes, Monsters and Values: Science Fiction Films of the 1970s*, edited by Michael Berman and Rohit Dalvi, Newcastle upon Tyne: Cambridge Scholars Publishing, 2011: vii-xii.

# 2 The Visual Deceptions of the Imaginary Order

## *Westworld*'s Title Sequence

The intro plays a significant role in defining a series, tentatively presenting its themes and setting the tone concerning its audiovisual production. In the advance of quality TV, the status of the opening credits has risen from a mere presentation of a show's characters and settings, to "sophisticated, meticulously crafted short films."[51] The title sequence is commonly the first piece of actual content that the audience gets to experience of a show and its prominence is further raised by being repeated before every episode. Since it thus serves as a recurring exposition, it should be intriguing and allow inferences on the show's content, without giving away any specific details about parts of the plot that occur at a later part of the progressing narrative.

*Westworld*'s introductory sequence, directed by Patrick Clair, is rich in thematic depth and impressive design. Its black and white aesthetic conveys stark visual contrasts, appearing at once old-fashioned and futuristic, and an orchestral score underlines the dramatic development. The symbolism and foreshadowing of themes has sparked many interpretations in online fora, blogs and other publishing platforms.[52] With about one and a half minutes, the intro is also particularly lengthy and shall therefore be analyzed to appropriate extent in the following pages.

In the notable absence of any human characters, the opening credits depict hosts as they are crafted, play the piano and even engage in intimate sexual contact with each other. The shots juxtapose and intersect natural beauty with technological marvel, emotiveness with sterility. They do so, in part, through a range of visually ambiguous shots that momentarily deceive the audience, mirroring the illusions innate to the theme park of Westworld that the guests wish to experience. The first shot, depicted in figure 3, is already one such artifice, giving the appearance of a dawn scene. After a moment, however, it becomes clear that what seems to be the rising sun is in fact a light bulb, illuminating the contours of an artificially fashioned, unskinned rib cage. This brief transition, however, does more than

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[51] Adam Epstein, "The Golden Age of Opening Credits: Westworld's Eerie Title Sequence is a Meticulously Crafted Short Film," *Quartz* October 30, 2016, https://qz.com/811513/ (September 23, 2019).
[52] See ibid. or Will Perkins, "Westworld," *Art of the Title* October 12, 2016, http://artofthetitle.com/title/westworld (September 23, 2019).

just deceive and then reveal. By equating a landscape with a body part, it evokes the notion of the human body as a microcosm, of human nature as a corresponding representation of the universe at large. It is a tentative visual hint at the worlds of insights in and of themselves that may be concealed in minute details and uncovered through careful and attentive introspection on the human condition.
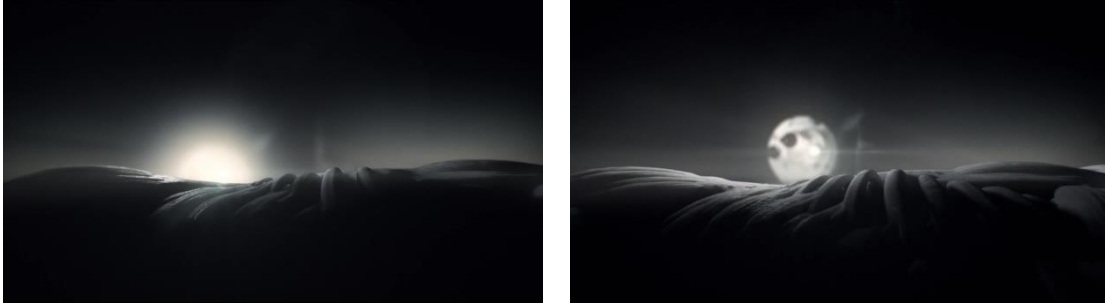


Figure 3 (A,B): Image A is suggestive of a sun rise over a meadow, which is exposed as a deception in image B [Intro, 0:08 and 0:11].

After the depiction of a mechanical arm weaving a piano string, the theme of artificial imitation of nature is continued in shots that show the weaving of a tendon in a knee joint – with striking similarity to that of the piano string. The natural assumption is to expect that what we see is a human (or rather humanoid) knee, but the next shot reveals that it belongs to a horse's hind leg. Viewers are thereby immediately caught in their flawed assumption of projecting humanness into something because it looks as if it were human; it is like a cautionary notice not to fall for the guises that await in the show and its theme-park. There is still more to this short sequence, however, as it is the first presentation of the recurring element of robotic animals, suggesting that all the splendors brought about by natural selection can be recreated artificially. It thereby puts the human on par with other animals, locating humanity within the evolutionary progress and not necessarily at its final point. After all, mankind may – through its own technological pursues – do the same thing to itself than it did to the horse when inventing the car: rationalizing it into obsolescence and desuetude.

Figure 4 (A,B): Image A shows a galloping horse between mechanical arms, illuminated by a moving beam of light as if in a scanner [0:27]. B is *The Horse in Motion,* a series of photographs that became the first animated film.

The subsequent shot, portraying the full figure of the horse as it slowly gallops on the spot, is a visual reference to *Sallie Gardner at a Gallop*, also titled *The Horse in Motion* (1878).[53] As a pioneering study of motion, this series of still frames is commonly regarded as the first motion picture or the immediate precursor thereof. This part of the intro is therefore the first of many intertextual references shown in the series and, in fact, it references the very beginning of film. In this, the show gives a self-referential testimony to its own medium and the technical advances that brought it about. By paralleling its own beginning with the very beginning of cinema, the series acknowledges the history of the medium it seeks to establish itself within and suggests that the producers will draw a wide arc across the cultural history of film.[54] At the same time, this parallel establishes a link between the pioneering work of Eadweard Muybridge and that of the creators within the series. In pushing the boundaries of technological capabilities, they capture and imitate – or even recreate – the beauty of nature, symbolized in the elegance of equine anatomy and locomotion.

The next artificial recreation of epitomical natural beauty and complexity that is shown is an eye, being crafted and reflecting an impressive vista of towering mountain structures of Monument Valley. This characteristic landmark in the Colorado Plateau has been inextricably tie to the western genre, largely by the influential movie director John Ford.[55] Additionally, this shot alludes to the exposition of Ridley Scott's *Blade Runner*, where a

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[53] Eadweard Muybridge, *The Horse in Motion*, photographs, Library of Congress Prints and Photographs Division, Washington DC, 1878.

[54] A later shot of the horse, featuring a gun-shooting rider, portrays iconic imagery of the western genre, encapsulated in this high-tech surrounding. It is thereby an emblematic representation for the mix of different genres and eras of film that the show draws from.

[55] As elaborated in chapter 3, the series features numerous allusions to him, such as the motif of trains as narrative starting points and most notably in the naming and characterization of park director Dr. Robert Ford.

futuristic version of Los Angeles is shown as a reflection in an android eye. In these complementing references, the shot follows up on the proposition to draw from a wide arc of references through cinematic history that is suggested in the earlier parallel with Muybridge's images.



Figure 5: The silhouette of one of the peaks in monument valley, reflected in a hosts' eye [0:33].

Similar to the initial dawn scene, this shot also overlays a natural landscape with a humanoid body part, although not through visual ambiguity but through partial reflection. Still, the scenery is only shown as a reflection and, with a faint crimson coloring, it is a notable exception from the black and white aesthetic of the other scenes. The lighting of this shot, and the general setting of the intro, suggests that the eyeball does not view this sight from somewhere out in an open field, but rather as a projection from a screen. The eye reflects, and presumably perceives, the impressive panorama without being inside that natural environment; it sees something which is not actually in its physical surrounding, like the audience themselves when watching the show. Looking at this eye one cannot help but project a mind into (or behind) it. Seeing what it sees, even if only in a reflection, one feels compelled to relate to it, to literally and metaphorically look 'through the eyes of another,' even if that other is an artificial creation.

Along with coercing the viewer into empathizing with the seeing eye, the extreme close-up shot conveys a sense of intimacy, which is further intensified in shots that portray two humanoids caressing each other sexually. Like the galloping horse, they are surrounded by unsheathed mechanical arms, creating a stark contrast to the intimate, bodily contact. These shots recreate the climax of Chris Cunningham's award-winning music video to Björk's *All is Full of Love* (1999), that portrays two robots passionately kissing.[56] Both in the intro

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[56] *All is Full of Love,* Dir. Chris Cunningham, Perf. Björk, 1999 [3:12]. Patrick Clair, director of the title sequence, acknowledges the inspiration he took from Cunningham's video: "I was happy to be a

and in the music video, the humanoid robots appear delicate, with soft and rounded features, while the surrounding machines and their sharp edges seem threateningly sterile. The viewer is again lured into projecting feelings and emotion into the androids, but must grapple with the irrationality of assuming that they are any more feeling and alive than the rigid, unembodied apparatus that operates on and around them.
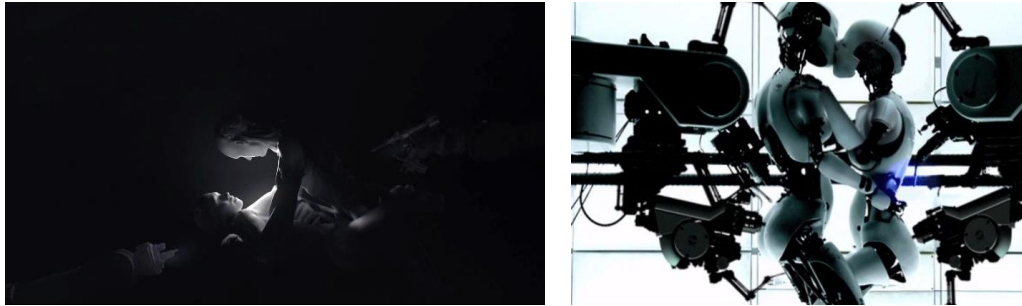


Figure 6 (A,B): Two hosts lying on top of each other in A [0:42], referencing an iconic scene from Chris Cunningham's music video to Björk's *All is Full of Love* in B.

A similar unsettling realization is incited by the sequence of robotic hands playing the piano. The viewer is challenged to either concede the notion that the ability to play music and create art is a uniquely human characteristic, or else to project humanness into these hands and the unseen rest of the player. When the hands are lifted, however, another deception is revealed, as the piano plays on by itself. In an ironically spectacular moment – the musical accompaniment rises to a climax here – the viewer realizes that it is not a humanoid pianist, but a player piano that appears to be responsible for the enchanting music they hear. The illusion of humanness, of an artistic soul that has just been provoked by these unskinned hands, in fact comes from mere box of hammers and strings. Furthermore, this box is not a groundbreaking marvel of technology, not a futuristic AI, but an automaton from the past, as aged as the American wild west and as outdated as punch card computing.

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bit shameless about it because I worship Chris Cunningham […] and it seemed like the perfect place to do it because it was dealing with all the right themes and all the right aesthetics". See the interview in Perkins, *Art of the Title*.

Figure 7 (A,B): Unskinned hands seem to play the piano (A), but the keys keep on moving when the hands are lifted (B) [0:45 and 1:11].

The player piano is another motif that reappears throughout the series and is heard in covers of songs by artists such as The Rolling Stones, Radiohead and Amy Winehouse, adding melodies from several of the past decades into the anachronistic mix of the western and science fiction elements.[57] The self-playing instrument and its symbolism also allude to Kurt Vonnegut's debut novel *Player Piano* (1952).[58] Set in a dystopian future where most work has been automated, Vonnegut's foreboding perspective examines an efficient technocratic society that is split into a class of engineers, responsible for the development and maintenance of the machines, and the rest of humanity which is kept occupied with meaningless tasks. The story thus unfolds as a quest to rediscover meaning and purpose to the existence of humanity in a system that highly values productivity, but does no longer require human labor. In a quite similar vein, guests explore Westworld in search for meaning and purpose that they apparently cannot find outside of the theme park.

The close-up shot of the rider's face, with its left half unskinned, is a reference to Two-Face, one of Batman's adversaries, who also appears in Christopher Nolan's *The Dark Knight* (2008).[59] Similar to *Westworld*'s Man in Black, Two-Face was once a righteous lawyer going by the name of Harvey Dent, but the criminal and immoral structures of Gotham City corrupted him. Furthermore, this disturbing sight is a powerful encapsulation of Lacan's notion of the specular image, evoking both identification and opposition.[60] The robot is a reflection of human nature, even allowing us to see what is 'under the skin,' to understand what we are made of. It also seems threatening and hostile, however, as it can

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[57] For an astute study on the role of the soundtrack in creating (de)familiarizing sensations see Frank Mehring, "'Westworld': Die Musikalische DNA des Posthumanismus," in *Mensch, Maschine, Maschinenmenschen: Multidisziplinäre Perspektiven auf die Serie* Westworld, edited by Brigitte Georgi-Findlay and Katja Kanzler, Wiesbaden: Springer VS, 2018, 41-52.

[58] Kurt Vonnegut, *Player Piano*, New York: Charles Scribner's Sons, 1952.

[59] *The Dark Knight*, Dir. Christopher Nolan, Warner Bros., 2008.

[60] Dylan Evans, *An Introductory Dictionary to Lacanian Psychoanalysis*, London: Routledge, 1996, 193; specular image.

sustain a lack that would be lethal to a human, representative of its status as unbound by biological mortality.



Figure 8: The close-up shot on the rider's face reveals its unskinned left half [1:06].

This eerie reflection and the captivating visual deceptions that are spread throughout the title sequence can be seen as Lacanian *méconnaissances*.[61] These misrecognitions, which are inherent to all forms of self-knowledge, are also the reason why we project humanness into objects that look human, a tendency which is toyed with extensively throughout the intro and the whole series. In this context, it is striking that the title sequence focuses on close up shots of individual body parts, evoking the notion of the 'fragmented body,' an idea that Lacan closely linked to the mirror stage.[62] We see body parts being crafted and, notably, hands playing the piano as if they were our own (see 7A).[63] Among the very few exceptions that portray full figures are the profile shots of the horse and the rider. Both the horse and the rider, however, are shown to have parts of their covering missing – they are unfinished and lacking. The other exception is the penultimate shot, showing a host's full shape as it is just being submerged into a white liquid (figure 9). It seems like the liquid will serve as a coating, covering the still unskinned body and thereby presumably completing the unfinished, lacking creation.[64] This shot is only followed by a close-up shot of the host's head. The intro can thus be seen as an illustration of the mirror stage, as the

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[61] Ibid., 112: *méconnaissance*. "In the imaginary order, self-knowledge (*me-connaissance*) is synonymous with misunderstanding (*méconnaissance*), because the process by which the ego is formed in the mirror stage is at the same time the institution of alienation from the symbolic determination of being."

[62] Ibid., 67; fragmented body. Except in the form of the specular image, we can only ever perceive fragmented parts of our own body.

[63] The hands were in fact modelled after video recordings of Ramin Djawadi's playing. What we see here is a precise musculoskeletal recreation of the composer's hands. See the interview with Patrick Clair in Perkins, *Art of the Title*.

[64] It is quite relevant that we do not get to see the finished, complete and unlacking body. Instead, the shot gives the appearance of the submerged humanoid being drowned. It is then the first depiction of a host being victim to the controlling structure they are captured in.

sequence goes through depictions of separate, fragmented body parts and ends by putting the viewer face-to-face with a particularly eerie version of the specular image.



Figure 9: Frontal shot of a host mounted in a ring with the limbs spread out, alluding to Leonardo da Vinci's Vitruvian Man [1:29].

The title sequence ends with this powerful presentation – a bewildering reflection of man. With the host being fastened in a circular mount, the image resembles the *Vitruvian Man*.[65] The seminal work of anthropometry drawn by Leonardo da Vinci has come to be one of the defining icons for humanity, both as an accurate anatomical representation and as a display of creative ingenuity. It artistically demonstrates the human capability to reflect and understand oneself; it is thereby a symbol for self-consciousness, as well as for the fascinating power exerted by the specular image. What da Vinci did on paper, the characters of the show do in an unspecified substance that comes to be indistinguishable from biological tissue.[66] They craft replicas of humans in order to both display and deepen their understanding of the human condition.

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[65] Leonardo da Vinci, *Vitruvian Man*, drawing, Gallerie dell'Academia, Venice, c.1490. Interestingly, the explanatory text that accompanies the drawing is written, like most of da Vinci's notes, in mirror writing.

[66] Like *Westworld*'s Ford, Da Vinci probably had a relatively unknown collaborator, Giacomo Andrea da Ferrara. See Toby Lester, "The Other Vitruvian Man: Was Leonardo da Vinci's famous anatomical chart actually a collaborative effort?" *Smithsonian Magazine* February 2012. www.smithsonianmag.com/arts-culture/the-other-vitruvian-man-18833104/ (September 25, 2019). The article also states that da Vinci attempted to "illustrate the idea, set down by Vitruvius in the *Ten Books*, that the human body can be made to fit inside a circle and a square. This was more than a geometrical statement. Ancient thinkers had long invested the circle and the square with symbolic powers. The circle represented the cosmic and the divine; the square, the earthly and the secular." The *Vitruvian Man* is thus linked to the idea of the human body as a microcosmic analogy for the world at large, reflected in figures 3 and 5.

## The Mirror Stage and the Specular Image

As the first thematic focal point, I will go on to examine the concepts of *méconnaissance*, the mirror stage and the specular image as depicted and alluded to throughout the series. As demonstrated in the previous section, these pieces of Lacanian theory allow to elucidate deeper implicit meanings of details that are otherwise easily missed. Besides the underlying theme of the hosts serving as specular images for humanity, there are many scenes that feature mirrors and reflections in symbolically significant ways. One striking example is a very direct depiction of the mirror stage in the second episode, when Dolores gazes intently at her own reflection (see figure 10). This is the first and most pronounced instance, but many more elusive, yet very noteworthy uses of mirror shots are scattered throughout the show. These cinematographic compositions – although certainly visually appealing – are not solely motivated by aesthetic considerations, but come to convey very deliberate symbolism and foreshadowing.



Figure 10: Dolores staring at a reflecting window, briefly absorbed by her specular image [E2, 20:32].

The shot shown in figure 10 is immediately preceded and followed by two close ups on Dolores's face which display her fascination and bewilderment. In this frame, we see her mirror image as if we were to look at it through her eyes. By directly portraying what a host sees, as already seen in figures 5 and 7A from the intro, the shot again incites the viewer to identify with that character, despite its artificiality. One wonders what she (or it) might think or feel upon recognizing herself (or itself) in the mirror, or whether such empathizing assumptions are in fact foolish and nonsensical. Is 'she' a conscious being or is 'it' still just a lifeless object? Is what we are witnessing the first time she recognizes herself in the mirror and therefore a first step of the initiation into subjectivity? Does the shot thereby depict the very transition from a lifeless 'it' to a conscious 'she'? The next scene seems to answer this in a very subtle detail, when we hear the words "bring yourself back online" in Bernard's

voice (or rather that of Arnold, as these scenes are part of the old story line). This utterance is a slight variation from what was heard on two occasions in the first episode: "bring her back online". This small but very significant difference suggests that, by recognizing herself in a mirror, Dolores did in fact make a major step in the transition into a self-determining and conscious subject. The sequence thus conveys a new sense of self-awareness both visually and vocally, going in line with the relevance of the mirror stage for the two Lacanian orders of the imaginary and the symbolic.

It is striking, however, that this development only works through the narrative sequencing of the portrayed events. As the viewer only later finds out, the occurrences shown in the second episode actually precede those of the first episode. This can be interpreted in different ways, as the later Dolores may either be conscious, but strategically mask this fact, or she may have been set back into a less conscious state, giving rise to the notion of non-linearity in the development of self-aware subjectivity. Either way, the portrayed transition towards a state of consciousness, mediated by the different phrasings of "bring her" and "bring yourself back online", is not what occurs in the temporal progression of events within the narrated world. Still, it does lend itself to this interpretation on the level of the narrative progression, especially since the series continually emphasizes the power of narratives and the importance of stories and how they are told, over any actual events that they recount. This is then another iteration of that recurring theme, as the progression of events in the narrated timeline is relativized by their progression in the narrative time.



Figure 11: Maeve in front of the mirror, though not seen directly looking at her reflection [E2, 46:17].

A later point in the same episode, seen in figure 11, shows Maeve through and in front of a mirror. Although she does not appear to be looking directly at her reflection, the shot still seems to act as a narrative trigger: it is followed by a dream sequence, from which she awakens in the livestock management section of the mesa hub. This is the first of several

times in the series that she awakens against schedule outside of the park to the distress of Felix and Sylvester, the two technicians operating on her. Hence, despite Maeve not being shown to stare at her own reflection, the sequencing of the scenes does further establish a certain connection between mirror shots and the emergence of self-determination and conscious subjectivity.

The next two episodes feature more such mirror shots of Dolores and Maeve. In episode 4, Maeve does seem to look at herself in the mirror, but it is not shown as clearly as is the case for Dolores. Both shots, however, are followed by nightmare-like flashbacks, apparently the 'reveries' – a newly implemented part of the hosts' programming that lets them access memories from deleted loops and previous story lines.



Figure 12 (A,B): Dolores and Maeve looking at their specular images, although Maeve is still not unambiguously shown to recognize herself in the reflection [E3, 6:18 and E4, 09:11].

In Dolores's case, the shot is preceded by her finding a gun in her drawer and then, accompanied by unspecified whispering voices, transitions to a flashback of her being dragged into the stable and assaulted by the Man in Black. An almost identical scene occurs at the end of the episode, but with Rebus, a villainous host, as the assaulter. With visions of the Man in Black and a voice telling her to kill him, Dolores shoots Rebus, overriding the programming that previously prevented her from being able to fire a gun. Only two episodes later, when shooting a group of bandits, Dolores gives an explanation of how she managed to pull the trigger: "I imagined a story where I didn't have to be the damsel" [E5, 46:10]. This goes in line with what David Eagleman, scientific advisor for the show, said when asked about why the hosts were given memories: "Memory is also what allows us to simulate the future, [it] allows us to write down these building blocks to construct our model of what happens next. […] So one advantage of giving robots vivid memories, in theory, would be to steer how they put together futures".[67] So Dolores's development

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[67] Matthew Hutson, "Free will, AI, and vibrating vests: investigating the science of *Westworld*", *Science* March 03, 2018. https://www.sciencemag.org/news/2018/05/free-will-ai-and-vibrating-vests-investigating-science-westworld (September 25, 2019).

displays the significance of memory as a necessity for fantasy and imagination of the future, which for her serves to enable her to overcome parts of her coding.

Towards the beginning of the fourth episode, Maeve's shot in figure 12B is followed by flashing visions of the masked heads she saw in the maintenance facilities. In the remaining part of this disturbing scene, she makes a drawing of this figure and, upon hiding it beneath a floor tile, finds a stash of identical drawings she must have made at earlier points. Together, these scenes further deepen the link between mirror shots and the hosts' acquisition of sentience and agency. This connection is mediated through flashbacks – the 'reveries' – which appear to be triggered in part by the hosts being confronted with their specular images.

The motif of meaningful mirror shots, however, is not limited to hosts. The production and maintenance facilities of the mesa hub are conspicuously lined with glass walls upon which the reflections of humans and hosts are cast. The first two episodes each have a scene with a weighty dialogue between Ford and Bernard, initiated with depictions of white, 'Vitruvian' hosts being forged. These expository shots are packed with glass surfaces, the visual reflections seemingly prompting the intellectual reflections that follow.
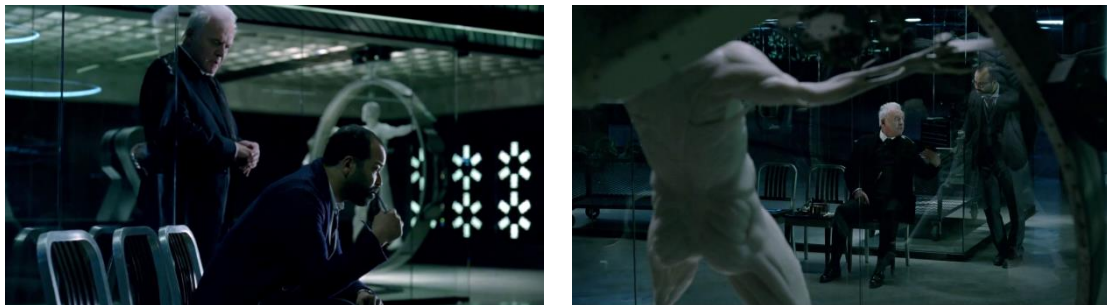


Figure 13 (A,B): Ford and Bernard discussing the nature of their work [E2, 17:02 and E1, 41:22].

The two scenes are similarly arranged, but with Ford and Bernard in switched positions. Figure 13A has Bernard sitting down, the camera angle positioned in such a way that a mounted host is seen right behind his head. In 13B, he is standing next to the seated Ford, his figure being superimposed by the partial reflection of a host. Both scenes show Ford's reflections on the glass wall, particularly prominent in the scene from the second episode (see figure 14A).[68] When revisiting the scene of the first episode in the light of this shot, the absence of such a reflection in Bernard's case becomes striking. The full significance

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[68] In this scene, Ford tells Bernard that "you can't play God without being acquainted with the devil" [E2, 17:10]. Ford's head and its reflection thus also serve to mirror the duality of good and evil.

of this absence is only exposed towards the end of episode 7, in the dramatic reveal of Bernard's true nature as a host. With that in mind, the superimposition of his body with that of mounted hosts does not seem to be coincidental, just like the line from the dialogue in episode 1 in which he supposes that "self-delusion is a gift of natural selection as well" [42:02]. All of these minute details collectively foreshadow his existence as a host and his own ignorance thereof, with the initially inconspicuous lack of a mirror shot reflecting his lack of self-consciousness.



Figure 14 (A,B): Ford's mirror image is prominently put into place, while there is no such reflection shown in the close-up on Bernard [E2, 17:05 and E1, 42:40].

Although the theme of hosts serving as a reflection of man continues, explicit uses of mirrors such as just discussed occur less frequently after these instances. However, even this goes very much in line with Lacanian theory, as the mirror stage occurs in an early period of a person's development,[69] fitting with the concentration of meaningful mirror shots in the early episodes of the series. In episode 7, nonetheless, there is one more overt reference to the link between the mirror image and awareness, when board director Charlotte Hale regards her reflection in a glass wall as she is waiting for Ford to arrive for a meeting. Ford enters the scene with a taunting remark: "I was not aware those with your level of insight needed any more reflection" [E7, 23:00]. In this depreciation, he mocks her fascination with the mirror image as narcissistic vanity, but also acknowledges the relation between visual reflection of the self and introspective insight.

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[69] Evans, *Dictionary*, 117-119; mirror stage.

Figure 15: Board director Charlotte Hale examining her image in a reflecting glass wall [E7, 22:57].

## The Maze of Desire

In this examination of the Lacanian imaginary, it is also necessary to discuss the notions of desire and semblance. The crucial and complex concept of the *objet petit a* fits here, since although Lacan positioned it at intersection of the three psychological orders in the later years of his work, it started off as clearly belonging to the imaginary. [70] The *objet petit a* is the elusive and forever unattainable object-cause of desire which accounts for the malleability of desire, as any object can by definition no longer be desired once it is acquired or attained in any way. *Westworld* thoroughly engages with this issue of insatiable desire, especially relevant in the puzzling motif of the maze. Slavoj Žižek's account of the *objet petit a* is particularly suitable for elucidating this point:

> The object-cause of desire resides in the *curved space of desire*: sometimes the shortest way to realize a desire is to bypass its object-goal, make a detour, postpone its encounter. What Lacan calls *objet petit a* is the agent of this curving: the unfathomable X on account of which, when we confront the object of our desire, more satisfaction is provided by dancing around it than by making straight for it.[71] [original emphasis]

In this sense, *Westworld*'s image of the maze, with its curved, cyclical paths that revolve around its center and govern the course of action of anyone who tries to navigate through it, thus represents the very essence of the Lacanian notion of desire. This explains the Man in Black's disappointment and frustration when finally learning the truth about it in episode 10:

> **Robert Ford:** I see you've found the center of the maze.
> **Man in Black:** You're serious?
> **Robert Ford:** I'm afraid so.
> **Man in Black:** What is this bullshit?
> **Robert Ford:** You were looking for the park to give meaning to your life. Our narratives are just games, like this toy. Tell me, what were you hoping to find?
> **Man in Black:** You know what I wanted. I wanted the hosts to stop playing by your rules. [...] I wanted them to be free, free to fight back.
> <div align="right">[E10, 47:58-48:50]</div>

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[70] Ibid., 129; *objet petit a*.
[71] Slavoj Žižek, *How to Read Lacan*, New York: W. W. Norton & Company, 2007, 77.

A closely related quote with an accurate account of the *objet petit a* can be found in another of Ford's speeches, when he tells Old Bill an anecdote from his childhood, about the time his dog killed a cat:

> The Greyhound is a racing dog, spends its life running in circles, chasing a bit of felt made up like a rabbit. One day we took it to the park. My dad had warned us how fast that dog was, but we couldn't resist. So my brother took off the leash and in that instant, the dog spotted a cat. I imagine it must have looked just like that piece of felt. He ran. Never saw a thing as beautiful, as that old dog, running. Until at last he finally caught it. And to the horror of everyone, he killed that little cat. Tore it to pieces. Then he just sat there, confused. That dog had spent its whole life trying to catch that … thing. And now it had no idea what to do.
>
> <div align="right">[E5, 2:23 – 3:39]</div>

One more relevant characteristic of the object-cause of desire can be identified here, which is that "the *objet petit a* is a 'semblance of being,'"[72] since for the racing dog, actual prey, as much as a piece of felt, can only ever be approximative of the desired *objet petit a*. Apart from that, there is the very noteworthy aspect of Ford disclosing what must have been a traumatic experience of his childhood to an outdated host playing a bartender (almost as if he was talking to a psychotherapist), as well as reliving the event through identification with his robotic recreation in the scene from episode 6 (addressed again in chapter 4). These appear to be Ford's attempts to cope with the conflicting sense of guilt and fascination about the release of true ferocity after countless repetitions of feigned violence, the visceral mayhem of the unleashed hound being metonymic for that of the horde of unrestrained hosts set free in the season finale.

The unattainability of the *objet petit a* is evident in both examples. The dog, once it finally catches a version of what it was running after for its entire life, is not satisfied and content, but confused. It got what it wanted and strived for, but the attainment of a desired object cannot end desire. Similarly, the Man in Black is incredulous and disappointed when uncovering the mystery of the maze. Furthermore, his wish is fulfilled at the end of the season, but only to some extent: the hosts do break free and fight back, but not because they act against Ford's will, but precisely because he programmed them to do so.

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[72] Evans, *Dictionary*, 178; *semblance*. Quoting Jacques Lacan, *Le Séminaire: Livre XX, Encore, 1972-73*, edited by Jacques-Alain Miller, Paris: Seuil, 1975, 84.

# 3   The Social Structure of the Symbolic Order

## A Coded Mind

From a review of the mirror stage, the specular image and the *objet petit a*, in an appropriate predominantly visual examination *Westworld*, I will now turn to the linguistic domain of the symbolic order and its representation in the hosts' programming. Still, the idea of the hosts serving as a reflection of mankind continues here, as their textual coding reflects the verbal nature of consciousness and of the unconscious. In a sense, the portrayal of the hosts thereby conveys insights into the developmental 'programming' of the human psyche, with the parallels between the hosts' code and the human mind frequently mediated through allusions to psychoanalytic theories. A first direct mention of such a reference is already found early in the first episode, when Bernard and Elsie inspect Clementine and the novel, subtle gestures she exhibits. Bernard deduces that these are part of the newly added update, the reveries, which allow hosts to access deleted memories – "like a subconscious" [16:45-17:00].[73] This early and direct psychoanalytic reference acts like a pointer, inviting viewers to pay close attention to any further depictions and discussions of the hosts' minds.

Already the fact that the hosts operate through a complex system of code, of which they do not seem to be aware, is a reflection of the Lacanian proposition that "the unconscious is structured like a language"[74]. Like an unconscious, it is the coding that governs their actions and perceived sentiments, while not being directly accessible to the hosts. Similarly, their inner workings are only gradually presented throughout the series and the show continually leaves its viewers with an incomplete picture. The very fact that we only are allowed to gain a partial understanding of the hosts' core functioning can thus be seen as another parallel to the human psyche, as we also remain unconscious of most of our own mental mechanisms. Furthermore, this allows for scenes where viewers find out about the

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[73] Although the term 'subconscious' belongs to Jungian psychoanalysis (more commonly referred to as 'analytic psychology'), I interpret this as a signpost to psychoanalysis in general. My contention is that the term 'unconscious,' preferred by Freud and taken up by Lacan, could have been confused with states of unconsciousness and was therefore avoided. There are some Jungian themes to be found in Westworld, such as the opposing archetypes of the socially acceptable persona and the shadow, reflected in the characters of William/Man in Black and Dolores/Wyatt. Still, a Lacanian perspective does appear to be more fruitful for analyzing the series.

[74] Dylan Evans, *An Introductory Dictionary to Lacanian Psychoanalysis*, London: Routledge, 1996, 99; language. Quoting Jacques Lacan, *The Seminar*, *Book XI*, *The Four Fundamental Concepts of Psychoanalysis*, 1964, trans. Alan Sheridan, London: Hogarth Press and Institute of Psycho-Analysis, 1977, 20.

functioning of the hosts through a host making that discovery about themselves, while this simultaneously conveys – by analogy – ideas on the human condition. This creates moments of shared epiphanies, as when Maeve witnesses her own language processing on display (discussed and shown below in figure 16B).

At three points in the course of the season's first episode, staff members speak of running "diagnostics" on malfunctioning hosts [27:37, 29:15 and 58:20]. This term alone acts as an apt bridge between code and mind, as it is fittingly used both in medical contexts and in computer science, serving as a common ground, the *tertium comparationis*, in the extended metaphor of the psyche as a program. From the second episode onwards, we encounter the term 'analysis' or 'analysis mode,' one of several modes into which the hosts can be put. As opposed to the 'character mode', where they play out the roles they are allocated with within their narratives, or 'sleep mode,' where they rest motionless, the analysis mode is used to maintain and adjust the hosts' behavior and ensure that their programming functions correctly. The dialogs carried out in this mode are reminiscent of the psychoanalytic practice of the talking cure, in particular when hosts access their 'event logs' to report past events and interactions. In such interactions, the hosts take on the analysand's role and the programmers or staff members act out the analyst's part. In Lacanian terms, the programmers – as analysts – are then "practitioners of the symbolic function"[75]; they act as the hosts' big Other, accessing their quasi-mental status and working to adjust it when there are problems or the narratives demand changes in their characters. However, the programmers' intentions are – at least overtly – quite different from an analyst's, as they endeavor to keep the hosts confined to restricted perspectives in order to guarantee the secure functioning of the park.

In the series, members of the staff are also shown to regulate and adjust the hosts by using futuristic tablet computers that can display a host's characteristics and internal processes of cognition or computation. The availability of this method calls into question whether the analysis mode is actually necessary, whether the hosts could not simply be maintained and adjusted solely through these tablet interfaces. One argument against this is that the staff also need to review the hosts' outer appearance and performance, rather than just the code, in order to warrant the quality of the immersive simulation that the park offers. In the terms of software engineering, the developers need to access the front-end or presentation layer,

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[75] Ibid., 203; symbolic. Quoting Jacques Lacan, *Écrits: A selection*, trans. Alan Sheridan, London: Tavistock Publications 1977, 72.

and not just work on the back-end or data access layer. It may be easy to imagine that the show's writers included the analysis mode predominantly for the sake of the intriguing dialogues for which it allows, but this assumption merely raises the question why these scenes are so captivating to the viewer. It is my contention that the reason for this is that the interactions permit the deconstruction of human consciousness in a unique way, analyzing it as both software and mind. After all, the insights into the workings of the hosts are so interesting not because we want to understand the hosts, but because we anticipate to find something by which we come to understand ourselves better. This also explains the fascination of seeing the tablet computers and their visualization of the hosts' internal processes. Such shots provide glimpses at a metaphor for our own mental coding, a speculative graphic rendering of our own cognitive functions. The first shots that show the tablets' displays, however, are merely visual, observing the hosts as if through a security camera. The next shots of these tablet interfaces show them as a tool for managing hosts, such as in episode 2 when Maeve is to be recalled for her declining performance at the brothel, or when Ford uploads the new Wyatt-narrative into Teddy's software – as shown in figure 16A.



Figure 16 (A,B): Ford uploading the new Wyatt-narrative into Teddy's programming. Maeve looking at her speech as it is just being generated in a complex dialogue tree [E3, 22:23 and E6, 15:03].

It is only in episode 6 that we actually get a glimpse into a host's internal functioning, after Maeve manages to wake herself up in the livestock section of the mesa hub. When Felix explains to her that all her attributes and actions were programmed into her by "engineers upstairs" [E6 – 12:40] and she refuses to believe him, he pairs the tablet interface with her system to show her own program to her. What follows is the first time that a host comes to witness their own programming; it is the moment in which a robot achieves full self-awareness of its existence as a crafted and programmed being. Adding to that, the shot – shown in figure 16B – is also our first view into a host's software at work. Thus, as viewers observe this, they are drawn into sharing Maeve's perspective, both on a visual and a

narrative level, pressuring us again into identifying with a host in an entirely new and unsettling circumstance. Just as we are startled by this sight, conflicts emerge in Maeve's dialogue tree with this self-referential insight leading to a breakdown of her program and she momentarily shuts down.

For a viewer it is difficult not to wonder how one would react in Maeve's situation, while at the same time what Maeve and the audience sees on the display does seem to closely reflect human mental processes. The program is navigating through the different possibilities of utterances on the go, continually picking the most suitable option. Also, the entire notion of Maeve's dialogue tree being part of the program developed by advanced software engineers reflects the Lacanian proposition that speech does not originate in the self but in the Other, the individual representation of the symbolic order in each subject's psyche.[76] The complex dialogue tree, which is ever changing and adapting, and of which we presumably are able to see only a miniscule part, then can be read as a visual representation of *lalangue*, the "primary chaotic substrate of polysemy out of which language is constructed, almost as if language is some ordered superstructure sitting on top of this substrate."[77] The path of selected words that forms organized speech out of the sheer endless possibilities is then a very apt visual metaphor for the construction of language out of the chaotic substrate of *lalangue*.

The dialogue tree, however, still falls short in conveying the complexity of language by portraying it to be ordered strictly on the level of individual, but complete words. Rather, language is a net of signifiers that can be both shorter and longer units than a word – individual morphemes and phonemes on the one hand and phrasal chunks on the other. Another characteristic that does not appear to be included in this brief reveal is the relevance of sound in the organization of semantic thought, as the possibility of ambiguity and homophony is one of the key properties of *lalangue*.[78] However, a detail that may relativize the dialogue tree's strict, organized order is found in the top right corner of figure 16B: below the currently open tab of the dialogue tree, there is one labeled 'fuzzy logic.' This could then be a system to undermine the simplified and seemingly clear-cut

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[76] Ibid., 136; other/Other. "The big Other *is* the symbolic insofar as it is particularized for each subject."

[77] Ibid., 100; language.

[78] Ibid. There is one notable use of homophonous polysemy in the series, namely when Old Bill asks Ford "shall we drink to the lady with the white shoes?" [E5, 3:46], after Ford tells his anecdote of his unleashed dog read as a metaphor for the hosts in chapter 1. Old Bill's toast is then an allusion to Dolores being the enigmatic villain Wyatt – she is the lady in the *Wyatt* shoes.

organization of the displayed dialogue tree. Like many other parts of the code and control program, however, this tab is never shown and its bearing on the hosts remains unknown, like an inaccessible part of the unconscious.

All these factors show how the hosts' coding resembles the verbal nature of the unconscious. This analogy of the coded mind is continued in the fact that the staff can manage the hosts' behavior simply by using voice commands, instructing them almost as if they were human subordinates. The use of vocal imputs in maintaining the hosts and the psychoanalytical implications of the ensuing power dynamics are examined in the following section.

## Voice Commands and the Exercise of Power

Besides monitoring hosts through tablet interfaces, the staff can assign tasks by simply telling a host what to do, just as one person may do to another in any form of a hierarchical structure, giving orders to another person who is next in a chain of command. The hosts, however, do often seem chillingly mechanical and machine-like when carrying out such orders, often abruptly interrupting their previous action. At times, subtle beeping noises can be heard which serve as auditory cues to accompany such actions. Typical voice commands and their effects are first presented towards the end of the first episode, as when Elsie puts Dolores into sleep mode with the almost hypnotic phrase "may you rest in a deep and dreamless slumber" [55:28], or when Ashley Stubbs uses the lines "no emotional affect" or "lose the accent" [56:38-56:52] to make Dolores adopt a calm and placid tone during analysis mode. Later in the series, the imposing command "freeze all motor functions" is used by staff members to immobilize hosts whenever one of them appears to start posing a threat, for instance when Bernard encounters the host replicas of Ford's family in episode 6 [36:05]. It is notable, that in this very first occurrence of the line, it already fails to bring the addressed host to halt. Absurdly, it is thus an unnecessary command as long as the hosts under control, but becomes ineffective the first moment it is needed.

At least initially, however, the hosts appear to be completely incapable of refusing any command given to them. In this hybrid of an apparent emerging subjective mentality and the complete subjugation to external control, their existence lies – as is common for the literary trope of the robot slave – somewhere between actual tools and docile subordinates. This is a substantial part of Westworld's effective appeal to the perverse desires on the part of its guests, its staff and – by voyeuristic proxy – the show's audience: humans raising themselves to a seemingly incontestable position of superiority through the power and control exerted over the hosts. In this position of control over subordinates, they are then free to lose control over their own cruel and carnal urges.

Although the guests can be hurt to some extent in order to make the experience appear more realistic, the hosts, by program, cannot severely harm or even kill them. Besides this inability to act excessively violently against humans, hosts also retain the 'Good Samaritan reflex' that makes them actively protect humans from harm. This directive is used to explain how guests can be protected from being harmed by other guests and is shown in episode 5 [52:10] when the Man in Black raises a knife against Ford, but Teddy

immediately grabs the knife by its blade. These core parts of the hosts' programming resemble the moral principles of humans, internalized into the structure of the psyche in the form of the superego.[79] Conversely, it is precisely the opportunity for a rejection of these principles, for a subversion of the superego, that makes the park so alluring and tempting to its guests. What Westworld apparently offers is the disparity between ultimate power and control over the hosts, and ultimate freedom and self-determination for the guests, permitting the latter to act out desires that must otherwise be repressed in their lives outside of the park.

The insatiable desire to escape the controlling power of reason and morality exposes the sinister facets of the superego as pointed out by Lacan, who related it to oppression and tyranny over the ego, rather than Freud's emphasis on its noble and virtuous characteristics. In an elaboration on Lacan's line of thought, Mladen Dolar describes the superego as "the non-signifying, meaningless foundation of ethics […] a moral agency in relation to which we are always deficient [...] a voice that always reduces the subject to guilt."[80] The vocal quality of the superego that Dolar mentions in his point goes back to Freud's inception of the term and even before that, but it also makes it possible to characterize the voice commands by which the Westworld staff control and command the hosts. Thus, a novel feature that *Westworld* adds to the old conflict between humans and their artificial creations is that, through the many psychoanalytic undertones, it deliberately portrays humans as the robot's superego. The aspect of perpetual deficiency and guilt which Dolar attributes to the superego is also reverberated by Ford in a dialogue with the host Teddy Flood:

> **Teddy Flood:** There's a girl, Dolores, better than I deserve. But maybe someday soon, we'll have the life we've both been dreaming of.
> **Robert Ford:** No, you never will. […] Tell me, has it never occurred to you to run off with her?
> **Teddy Flood:** I got some reckoning to do before I can be with her.
> **Robert Ford:** Ah yes, your mysterious backstory. It's the reason for my visit. Do you know why it is a mystery, Teddy? Because we never actually bothered to give you one, just a formless guilt you will never atone for.
>
> <div align="right">[E3, 21:25-21:45]</div>

The unidentifiable reckoning, the formless guilt, is what stands between Teddy and the life he dreams of. It is, in Lacanian terms, the superego barring the subject from acquiring the

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[79] Ibid., 202-203; superego.
[80] Mladen Dolar, *A Voice and Nothing More*, Cambridge: MIT Press, 2006, 99.

unattainable object of desire, the *objet petit a* (see chapter 2 for a discussion on desire and the *objet petit a*).

It should be noted here that other interpretations of the quote above have read it as a reference to the figure of the Joker in Christopher Nolan's *The Dark Knight*.[81] Throughout the course of this movie, the Joker explains the reason for his corruption and depravity several times, but on each occasion he tells a completely different backstory. Through these different and contradictory versions, the villain's past stays a mystery to fuel audience speculations. Moreover, Christopher Nolan has stated that there is no definite, true version, as "it seemed absurd to us to try to provide a traditional motivation for a character like the Joker, who has to stand for absolute anarchy and chaos."[82] The significant absence[83] of even a twisted rationale therefore leaves the Joker's motives forever intangible. Likewise in *Westworld*, Teddy Flood is constructed as a character that strives to redeem some past wrongdoing which was never defined in the first place. It is an unnamed transgression, an empty sin, with the sole quality of burden, put upon Teddy in order to identify himself as guilty and undeserving of contentment. This irredeemable guilt is thus the indeterminate, but therefore also indisputable, reason for his permanent lack.

The points above illustrate how the relation between humans and hosts resembles that between superego and ego in striking ways. In this quasi-psychological oppression, guilt becomes a means for controlling the robot. As the prototypical figure of the classic hero, Teddy can then be seen as representative of all hosts. Despite all his nobility and virtuousness, he remains in his ontological condition of faultiness, quenching hopes that any host may redeem themselves and become deserving of self-determination. The whole class of hosts, as a consequence, is burdened with a repressive ideology, implying that their position of inferiority and subservience is warranted by apparent moral principles. Again, this theme reflects a means for exercising power relations in human societies, as the subjugation of human slaves has, for millennia, relied on moral dogmata to articulate and justify the superiority of one group of people over another. Monarchies, empires and even

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[81] See DextronautOmega, "Perhaps an overlooked reference to some of Nolan's older work in Episode 3," *Reddit* April 25, 2017. www.reddit.com/r/westworld/comments/67gm1d/perhaps_an_overlooked_reference_to_some_of_nola ns/ (September 25, 2019).
[82] Bryan Hiatt. "Q&A: Christopher Nolan." *Rolling Stone* Aug 2, 2012. https://www.rollingstone.com/movies/movie-news/qa-christopher-nolan-187923/ (September 23, 2019).
[83] The absence of something can be equally or even more symbolically significant than its presence. See Evans, *Dictionary*, 1; absence.

democracies have formulated doctrines such as the Great Chain of Being[84] or the divine right of kings[85] in order to legitimize oppressive hierarchies and social injustices with allegedly external and eternal principles that were ascribed to natural or divine laws. Such cultural doctrines, that assign specific roles to each individual of a society, are powerful and pervasive tools in the organization of communities. In the following section, I discuss how *Westworld* represents the power of such ideologies in the form of the storylines, or narratives, which the hosts are inscribed in.

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[84] For a study on the history of the idea and its origins in ancient Greek philosophy see Arthur Lovejoy, *The Great Chain of Being*, Cambridge, Mass.: Harvard University Press, 1964.
[85] Glenn Burgess, "The Divine Right of Kings Reconsidered," *The English Historical Review* 107/425 (1992): 837-861.

## The Narrative Structure of Society

Westworld's narratives are one of the main recurring motifs in the show. They are the interactive storylines through which guests can play their way during their stay at the park. More importantly, however, these narratives assign a role to each of the hosts, determining their backstory, as well as their drives and desires and thus serve as an ideological structure for the society of hosts, by essentially governing the course of events in the park. Because of this, the question of who is in the position to write the narratives is one of crucial importance. In episode 2, Lee Sizemore, the irascible and hot-tempered head of the Narrative and Design Department at Delos, presents his new narrative 'Odyssey on Red River' with great spectacle, but Ford cuts off the applause with an unimpressed "No, I don't think so," [54:55] embarrassing Sizemore in front of the crowd of staff members. Ford then holds a theatrical speech on what it actually is that keeps on drawing the guests to the park, and reveals that he has been working on a new story of his own for quite some time. At this point, the second episode ends, and Ford's mysterious new narrative and its potential consequences return as points of discussion and intrigue throughout the entire season.

The recurrence of this motif demonstrates its relevance in managing the park, as well as in developing the plot of the series. The act of writing and implementing a narrative for the hosts becomes a very powerful gesture, as it hypothetically entails the command over an army of highly-advanced robots and therefore the control over the park's fate and potentially even the world outside. In line with *Westworld*'s ongoing theme of the power of storytelling, the struggle for supremacy and authority is then expressed through a claim for authorship. This also reflects the Lacanian emphasis on the role of language and speech in the formulation of laws and the structure of society, these systems being embedded into the subsuming structure of the symbolic order.

At this point, two more concepts that pertain to the symbolic shall be regarded in relation to the role of the narratives in *Westworld*: that of the 'symbolic chain' or 'signifying chain' and that of 'founding speech.' Lacan introduces the term symbolic chain, which later develops into his concept of the signifying chain, to denote "a line of descendence into which each subject is inscribed even before his birth and after his death, and which influences his destiny unconsciously."[86] Although neither the notion of social heritage through a line of descendance, nor even those of life and death apply to the hosts, they are

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[86] Evans, *Dictionary,* 190; signifying chain.

inscribed into the structures of their respective storylines, reliving their actions through their short-lived cycles of death and reconstruction. Furthermore, through the new feature of the reveries, they can access supposedly deleted memories from past cycles and even from different roles they played in older narratives, though they do not seem to be able to control these processes. The hosts' cycles of reincarnation thus replace the traditional concept of a line of descendance in determining their fates in ways that are mostly unknown to them.

The Lacanian concept of founding speech echoes the role of the narratives in that it "envelops the subject, is everything that has constituted him, his parents, his neighbours, the whole structure of his community, and not only constituted him as a symbol, but constituted him in his being."[87] The narratives and their enactment thus produce the hosts as beings, once more demonstrating the relevance of authorship in the park's governance. As the already written, but still interactively adaptable storylines play out in the park, the focus then shifts from coded stories to acts of speech, complementing the question of who can claim the position of the author with that of who is allowed to articulate speech that is founding speech, which "not only transforms the other but also transforms the subject."[88] At first sight it seems evident that the hosts are unable to govern their own lives and actions and articulate themselves as self-determining subjects, while the guests can navigate through the sheer endless possibilities that Westworld's storylines have to offer at their own will. However, the guests may be playing through the interactive plots, but they are not the ones who composed them, and the degree of their self-determination in the process is debatable. Apparent chance encounters tend to be carefully crafted triggers that may lead to new quests and when, for instance, the Sheriff greets newcomers arriving to Sweetwater with the line "You there, you look like the kind of man who'd put his mettle to it," [E1, 5:18 and 24:10] it is in fact a host uttering speech that offers a potentially transformative role to the guests. In this light, the choice of a path through the set of prepared possibilities of the stories bears intriguing semblance to the formulation of speech by navigating through the dialogue tree discussed in the first section of this chapter. Since the guests are in fact directed through their adventures by the prompts and cues of their surroundings, the act of developing their stories within the constructed, guiding externality does mirror the act of articulating speech that in fact stems not from the subject, but from the Other.

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[87] Ibid., 67; founding speech. Quoting Lacan S2, 20.
[88] Ibid.

In this discussion on founding speech and authenticity of articulation, the subject of the colonial subaltern shall not be left out, as the guest-host dichotomy also insinuates the problematic power dynamics of colonial societies. A subtle but particularly telling detail can be found in a scene where an unnamed female guest and Teddy collect ransom for a bandit they just shot:

> **Guest:** Why are we going to handcuff a dead man?
> **Teddy Flood:** Don't want someone walking off with him. That's not a man anymore. That's merchandise. $500 worth.
>
> [E3, 15:05-15:13]

It is significant that this commodifying declaration does not come from a guest, but from a host, as the irony in a host dehumanizing another host demonstrates the unyielding power of ideology. Teddy can reduce the bandit to a monetary value, as his programmed moral code only sees him as an embodiment of the brute and savage traits he strives to expel from the Frontier town. He can do so without realizing that he himself is a commodity in a theme-park, as he does not comprehend and therefore cannot see the larger structure in which he, just as much as the bandit, exists merely as an entertainment product. In a postcolonial interpretation, Teddy's words can then be read as those of an indigenous elite, utilized by the colonizer to reproduce the subordinating structures of imperial rule. This is one aspect of what Gayatri Spivak calls the "ventriloquism of the speaking subaltern" in her highly influential essay *Can the Subaltern Speak?*.[89] As she makes clear, the oppressed colonial subaltern is either spoken for, even by well-meaning intellectuals, or must speak in the language and discourse mode of the empire, unable to narrate their story in their own words.

The exercise of authority through the use of founding speech and voice commands can also be found outside of the theme-park, in the verbal power struggles between different members of the staff. As these are evidently never entirely independent of the course of events within the park, the relations between staff members are heavily influenced by those between humans and hosts. Complications pertaining to the human-host power dynamic are therefore reflected back onto that of between employer and employee. This is then further exacerbated when Bernard's nature as a host is revealed, as well as his status as a robotic re-creation of Ford's former colleague Arnold, which adds a twist to the

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[89] Gayatri Spivak, "Can the Subaltern Speak?" in *Can the Subaltern Speak: Reflections on the History of an Idea*, edited by Rosalind Morris, New York: Columbia University Press (2010): 27. The original essay was first published in *Marxism and the Interpretation of Culture*, edited by Cary Nelson, Urbana: University of Illinois Press (1988): 66-111.

representation of the employee as a robot. Still, in its essence, this portrayal continues the trope of the robot as a metaphor for the dehumanized worker, as discussed in chapter 1. In this context, the character Robert Ford is a reference to the pioneering car manufacturer Henry Ford, who revolutionized systems of mass production through the optimization of the assembly line. In what came to be known as 'Fordism' in the 1920's, the latter devised a model corporate structure that is based on intricate machinery and the division of labor, leading to a "reduction of skill requirements in vehicle assembly through subdivision of tasks."[90] As workers carried out very limited and minute tasks in seemingly endless cycles of repetition, they became 'like cogs in a machine,' a phrase that was popularized along with the rise of Fordism.[91] Drastically reshaping production systems across all manufacturing industries and the notion of labor in modern Western society, Henry Ford's strategy for mass-production and mass-consumption became metonymic for capitalist ideology and modernity in general. In the act of pioneering technological advances and relying on intricate and complex machinery to replace the role of humans, Westworld's mastermind Robert Ford can easily be likened to the historical Ford. Besides the shared last name, the title of Sizemore's planned narrative 'Odyssey on Red River' can be read as an allusion to the Ford River Rouge Complex, the world's largest integrated factory at the time of its completion in 1928, including its own railway system and docks.[92] Another striking parallel is of course the hosts' cycling through their narrative loops being akin to the repetitive and dull labor of a worker in a Fordist factory.

In this context, it also matters that the narratives themselves are a commodity that the Delos company offers to the park's visitors. In a quarrel with Theresa Cullen, head of quality assurance at Westworld, Lee Sizemore blusters: "we sell complete immersion in 100 interconnected narratives. A relentless fucking experience" [E1, 28:14-28:22]. This quote is one of the rather infrequent direct mentions of the park's financial dimension, reminding the viewer of the role of capitalist incentives in the management of Westworld. The concept of narratives as a marketed product alludes to the necessity of making profit in order to keep the park running, as well as to the fees that guests need to pay in order to enter the

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[90] Steven Tolliday, Jonathan Zeitlin, "Between Fordism and Flexibility: The Automobile Industry and its Workers," in Steven Tolliday [ed.], *The Rise and Fall of Mass Production: Volume I*, Northampton: Cheltenham, 232.

[91] See for example the results provided by Google Books' NGram Viewer, with a first large spike in the 1920's https://books.google.com/ngrams/graph?content=like+cogs+in+a+machine.

[92] Tolliday & Zeitlin, "Between Fordism and Flexibility," 232.

park. A few times it is implied that a stay in Westworld is a costly pleasure, indicating that entry to the park is a luxury reserved for the socio-economic elite of the society outside.

Even more than addressing economic considerations, however, Sizemore frames Delos as an entertainment business. In this light, the company behind the park becomes analogous to the company behind the series of *Westworld*. The quote may then be regarded as a self-referential statement, in which HBO acknowledges its own role in profiting from the proliferation of violent and sexualized entertainment – despite simultaneously still indulging in it throughout the series.[93] The parallels between the theme-park and the American entertainment industry are also conveyed through another historical figure that the character Robert Ford represents: the movie director John Ford. Having started in the era of silent films, he is widely considered to be one of the most influential directors and credited with defining the genre of the American western. Often relying on recurring cast, his films helped to establish actors such as John Wayne and Henry Fonda, and played a significant role in shaping not only the genre of the western, but American culture at large, particularly its ideals of traditional heroic masculinity.[94] In *Westworld,* this archetype of the American western hero is embodied in the character of Teddy Flood, and the entire concept of the park's hosts is in many ways parallel to that of actors who play their allocated roles and perform prewritten actions and dialogs in order for the stories to take shape. The replacement of the host that plays Peter Abernathy is then analogous to recasting a role to be played by a different actor.

*Westworld* also takes up numerous stylistic traits and motifs that John Ford used and established as trademark characteristics of the western genre. His movies are, for instance, responsible for inextricably linking the visual of the towering geological structures of Monument Valley with the American western, forming the background of exterior shots regardless of where the story was set. In a comprehensive study on the director, Tag Gallagher notes that many opening shots in John Ford's movies feature linking vehicles,

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[93] For an extensive discussion of this topic, including the arguably sexist differences in the display of nudity, see David Chen and Joanna Robinson, "S1E01 – The Original" *Decoding Westworld*, podcast, October 7, 2016. https://www.slashfilm.com/announcing-a-new-podcast-decoding-westworld/ (September 23, 2019). Particularly 11:50 – 16:00. Chen interprets the show as "a critique of that element of human desire […] to indulge in violent and sexual fantasies, while at the same time sating those violent and sexual fantasies in its audience by giving us that stuff" [13:25-13:40].
[94] Nancy Schoenberger, *Wayne and Ford: The Films, the Friendship and the Forging of an American Hero*, New York: Penguin Random House, 2017, 9-10.

often a train, that introduce new characters to a small prairie town.[95] He also identifies the relevance of myths and storytelling in the Fordist western, remarking that "[m]yths sustain societies in Ford, but poison them as well. They define the limits of understandings, but are seldom perceived. They rule and regulate our lives."[96] This notion – strikingly descriptive of the Lacanian symbolic – is perhaps best exemplified in the iconic line from *The Man Who Shot Liberty Valence* (1962), "when the legend becomes fact, print the legend,"[97] which in turn appears in *Westworld*, when Robert Ford quotes it as he tells Bernard about his late partner Arnold for the first time [E3, 36:35]. Some of Robert Ford's character traits are also based on the eccentric western director, who refrained from using storyboards in the preparation of filming, but instead planned the visuals solely in his head. Similarly, *Westworld*'s Ford ensures that there are no backups of the hosts' code outside of the park, exterior to his sphere of influence. Thus, the fictional figure of the park director who built Westworld resembles the historical figure of the film director who formed the genre of the American western in many ways. Both are responsible for crafting whole bodies of stories that not only entertain, but in their aggregate serve as powerful and influential ideological structures.

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[95] Tag Gallagher, *John Ford: The Man and his Films*, Oakland: University of California Press, 1986, 116.

[96] Ibid., 409.

[97] James W. Bellah, Willis Goldbeck, *The Man Who Shot Liberty Valance*, Dir. John Ford, Los Angeles: Paramount Pictures, 1962, 1:54:50. The movie is about a man named Ransom Stoddard, who strives to establish civilized principles of law and order in the Frontier town of Shinbone. He becomes famous for shooting the villainous bandit Liberty Valence in a duel, despite another man having shot the villain from a hiding place, which Stoddard only learns later on. The quoted line comes from a reporter whom Stoddard tells the true story after his alleged victory against Valence helped him become a senator, encapsulating the movie's main theme that the myth of who shot Valence is more important than what actually happened. This parallels how the company of Delos covered up the truth about Arnold's death and also fits with the motif of Arnold's myth living on in the hosts' code.

# 4 Beyond Signification – The Lacanian Real

## The Hosts' Limits of Perception

After examining *Westworld*'s representation of the symbolic order through the robots' textual coding, as well as through the use of voice commands and narratives in the governance of their behavior and of the park, this chapter focuses on the limits of these means for psychological and social structuring and what may lie beyond them. As briefly mentioned in the introduction., this is the realm of the real, the order which Lacan devised to encompass all that which cannot be assimilated into the other two orders of the imaginary or symbolic – the unprocessable remnants of any signifying process. The real is "that which is outside language and inassimilable to symbolization."[98] Denoting all that which cannot be articulated and defined, it is one of Lacan's most abstruse terms. The label 'real' suggests that it pertains to reality and external truth, yet such a characterization would be an oversimplification, as – more than external, objective reality – "the real is 'the impossible,' because it is impossible to imagine, impossible to integrate into the symbolic order, and impossible to attain in any way."[99] The Lacanian real is then all that remains inconceivable to the subject and thus also relates to psychological phenomena such as hallucinations, dreams and repressed traumata, as these are expressions of that which cannot be made to cohere with the ordering structures of language or image.

Creating a perceptible representation of the imperceptible appears to be an unsolvable paradox. Through the portrayal of hosts with artificially crafted (proto-)consciousness and deliberately limited perceptions, however, *Westworld* allows for a distinctively tangible depiction of that elusive concept of the real.[100] The hosts' programming endows them with the inherent inability to perceive anything that would disturb them too much or compromise their view of the world. In addition, they are made to forget or dismiss experiences outside of the confines of the park. When Bernard interviews Dolores in the maintenance facility, at the very beginning of the first episode, he asks her whether she knows where she is. Her

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[98] Evans, *Dictionary*, 162-164; real.

[99] Ibid, quoting Lacan, *The Seminar, Book XI, The Four Fundamental Concepts of Psychoanalysis*, 1964, translated by Alan Sheridan, London: Hogarth Press and Institute of Psycho-Analysis, 1977, 167.

[100] Other notable cinematic examples that achieve this are *The Truman Show* (1998) and *The Matrix* (1999), both featuring protagonists that find out about living in constructed, artificial worlds and their quests to break out of it. Interestingly, *The Matrix* tells the story of humans breaking out of a simulated realm controlled by machines, while in *Westworld* it is the machines breaking out of the humans' simulation.

answer "I am in a dream" [2:12] suggests that, to her, the interaction occurs outside of 'reality.' In Dolores's view, after all, reality *is* the artificial realm of the theme park and anything outside of it must be ascribed to dreams and illusions. Later on, after the episode's climactic shootout scene, Dolores mourns Teddy's death for the second time in the series, and Elsie calms her with the words "soon this will all feel like a distant dream," [55:21] before putting her into sleep mode. The hosts' painful memories are thus erased after every narrative cycle in order to ensure the continued cycling of the narrative loops and the proper running of the park. As mentioned above, however, the newly added feature of the reveries allows the hosts to access deleted memories, although they do not seem to be able to control this. In cynical contrast to the positive connotations of the term, reveries are always flashbacks of negative or stressful events as if they were remnants of repressed traumata. They can therefore be described as memories of experiences that do not fit into the hosts' restricted perspectives and are thus discarded, but in the end return as vivid, hallucinatory or traumatic recollections. For Dolores, they are the painful memories of violence and rape, while for Maeve, they are the illusory recalls of the otherworldly experiences during her unprogrammed awakenings in the maintenance facility. In these two versions of trauma, the two female leads demonstrate two different, but mutually complementing ways of encountering the Lacanian real. The scene mentioned in chapter 2, for instance, when Maeve rushes to hide a drawing of the helmeted figure she made after seeing it in one of her reveries, illustrates he incapability of processing the real. In her hiding spot under the floor boards, Maeve finds a whole stock of such images that she must have drawn at previous revelatory instances. This shows that her sketching is a rather unsuccessful attempt to detain the real in the imaginary, as she did not succeed to sustainably remember and thus integrate the disturbing experiences. Still, it does seem to aid in her path to achieving self-consciousness that plays out throughout the course of the episodes.

When considering the case of Dolores's trauma, it is striking that – at least at the onset of the series – her entire identity is based on the idea of blissful ignorance. She indicates this herself in her eerily stilted, pre-written self-characterization during the exposition, with her repeated lines that frame the first episode: "Some people choose to see the ugliness in this world, the disarray. I choose to see the beauty," [2:50 and 1:05:05]. Already during their first iteration, these lines accompany contradictory visuals of the multi-layered exposition: images of her bruised and bloodied face, and of her naked, lifeless body sitting against the background of the dark and uncomforting maintenance facility, are followed by her

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morning routine inside the park, where she is elegantly dressed and admires the beauty of nature that surrounds her pastoral residence. During the reiteration of her characterizing lines, occurring during the final minutes of the first episode, the audience does know more about the horrors that were suggested by the sinister parts of the exposition. We do know that Dolores's entire existence revolves around her suffering at the expense of the guests and their perverse enjoyment, while she is, at least initially, oblivious of the anguish she experienced in all her previous narrative loops. Even her name, coming from the Latin *dolor*, connotes pain and suffering,[101] yet she still 'chooses to see the beauty.' This means that she 'chooses' – although that choice is evidently not made by her – not to see the ugliness and disarray. At the beginning of the show, her character is therefore a quintessential personification of the repression of trauma. The 'disarray' she is made to 'choose not to see' – the chaos she discards or cannot perceive when she operates as intended by the programmers – is then a very appropriate formulation for expressing the subversive potential of the unseen real to disturb and disrupt the structure of the symbolic order.

This destructive potential of an encounter with the real is demonstrated in the same episode, but for another host. When Peter Abernathy finds a photograph from the outside world, depicting a woman against the background of cars and skyscrapers at New York's Times Square, the urbanized epitome of modern western society, he is startled by its outlandishness.[102] He brings home the puzzling artifact and when he shows it to Dolores, her blank and dismissive reaction indicates that, in fact, she cannot perceive the image:

> **Peter Abernathy:** I found this in the field today.
> **Dolores Abernathy:** Doesn't look like anything to me.
> **Peter Abernathy:** But where is she? Have you ever seen anything like this place?

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[101] The name Dolores is attributed to a shortening of the Spanish title for the suffering virgin Mary, *Virgen de los Dolores*. Christian Schwarke comments on the relation between Dolores and the biblical Mary in a footnote, also remarking on the parallel of the blue dress. Christian Schwarke, "Natürlich, zum Bilde geschaffen: *Westworld* und die Frage nach der Menschwerdung in Erinnerungsschleifen," in *Mensch, Maschine, Maschinenmenschen: Multidisziplinäre Perspektiven auf die Serie* Westworld, edited by Brigitte Georgi-Findlay and Katja Kanzler, Wiesbaden: Springer VS, 2018: 14. Another common interpretation of the blue dress links it to the protagonist from Lewis Carroll's *Alice's Adventures in Wonderland* (1865), fitting with the explicit feature of the novel in *Westworld*, as well as the substantial thematic overlaps of an unsettling journey of discovery in a foreign and fantastic land.
[102] The photograph's origin is only revealed in episode 10, as William's memento of his wife.

**Dolores Abernathy:** Doesn't look like anything to me.

[E1, 32:46-33:03]

This is the first hint of the hosts being programmed not to notice anything which does not fit into their constructed and confined world of the theme-park. Apparently defying these pieces of code, Peter Abernathy can somehow see the image and becomes transfixed by this incomprehensible object, his (proto-)mind being utterly devastated by the attempt to process that which does not fit into his programmed perception. He breaks down, whispering what is later revealed to be the recurring Shakespeare-quote "these violent delights have violent ends"[103] to Dolores, before he is taken to the maintenance facility for examination. During the diagnostics, he issues violent threats to the staff, which Ford recognizes as literary quotes and thereby deduces the host's previous role as a professor in an older narrative. The confrontation with an artifact that is inexplicable to the host is therefore responsible for a reverie to a role in a previous storyline, apparently dissolving the confines of the host's narrative symbolic structure and essentially rendering the robot mad.



Figure 17: The interface shows Hector quoting the speech of a guest, with words that do not fit into the host's perspective crossed out and marked as 'unrecognized' [E7, 3:56].

It is only in episode 7, in and around the unveiling of Bernard's identity as a host, that the coded blind spots of perception are directly discussed. The episode starts with Bernard examining the host Hector Escaton, going through "a blacklisted exchange with a guest," [3:43, depicted in figure 17] and showing him photographs of modern technology and architecture to make sure that these impressions do not make the host doubt his reality, to which the host replies with the familiar, indifferent line "they don't look like anything to

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[103] William Shakespeare, *Romeo and Juliet* 2.5.9, ca. 1599. See for example *The Oxford Shakespeare: Romeo And Juliet*, edited by Jull L. Levenson, Oxford: Oxford University Press, 2000.

me" [4:35]. Later in the show, Bernard leads Theresa to the old house, where Ford had secretly kept first-generation-host-reconstructions of his family.[104]

> **Theresa Cullen:** This building isn't in any survey of the park.
> **Bernard Lowe:** That's because we use hosts to do most of the surveys. They're programmed to ignore this place. They literally couldn't see it if they were staring right at it.
> […]
> **Theresa Cullen:** What's behind this door?
> **Bernard Lowe:** What door?
>
> [E7, 46:18-46:48]

The iconic line "what door?", indicates that Bernard himself was programmed not to see the door that leads to a hidden underground lab. During the course of this dialogue, Bernard's limited perspective – also symbolized through the very partial lighting by an old-fashioned oil lamp[105] – is visually recreated for the viewers, as shown in figure 18. At first, we only see a wall, blurred in the background behind Bernard, at exactly that spot where the door to the hidden underground lab appears just after Theresa mentioned it. The show thus once more forces the audience into taking the perspective of a host, this time through its cinematography, essentially hiding from us what must have been in plain view as the focalizing host was unable to be aware of it.



Figure 18 (A,B): Bernard and Theresa exploring the old house. The door only appears after Theresa's mention of it, and still seems to be invisible to Bernard until she opens and passes through it [E7, 46:28 and 46:46].

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[104] The settings of Ford's recreated childhood house and its basement – complemented by the cave-like room in cold-storage, seen in figure 20 – carry significant symbolism. As old, secluded areas, distinct in both foreignness and familiarity to the various characters, they are metaphorical locales of the unconscious. They are sites of origin and creation, and the return to these places is connected with introspection and transformation that drives the plot and character development forward. In this, they are instantiations of the 'belly of the whale'-trope, identified as one of the stages of the hero's journey by Joseph Campbell in 1949. See Joseph Campbell, *The Hero with a Thousand Faces*, New Jersey: Princeton University Press, 2004 (commemorative edition).

[105] The scene is shot with particularly little lighting. The brightness is increased in the images of figure 18 to improve visibility.

After these very clear hints, the revelation that Bernard is a host is finally confirmed when Theresa shows him his blueprint . Upon looking at the image he reiterates Dolores's and Hector's line "doesn't look like anything to me," before Ford enters, explaining that "they cannot see the things that will hurt them" [48:25-48:33]. In this, he explicitly communicates the limits of the hosts' perceptions once again.

Another visual rendering of Bernard's perceptive blind spots, spanning across more than half of the season, is achieved with the photograph of Ford and his enigmatic partner Arnold. When we see it for the first time in episode 3 (see figure 19A), it shows one unknown man besides Ford and a conspicuously empty space in the right third of the picture. The audience, as well as Bernard, is led to believe that the man at the center of the image is Arnold, but in episode 9 we are allowed to 'see the full picture,' as shown in figure 19B. We share in on Bernard's discovery that he is not only a host, but one modeled in the exact image of the late Arnold. In episode 3, Bernard is unable to see his own image in the photograph, as an identification with Arnold is not programmed into his consciousness. In his lack of self-consciousness, his own 'mirror image' is therefore hidden from his perception of the photograph, and as we look at it through Bernard's narrative lens, we do not get to see it either. Instead, we see a tellingly empty space – a significant absence – as the inassimilable portion of the real is omitted where it cannot (yet) fit into the story of the symbolic, or the visual of the imaginary.



Figure 19 (A,B): In A, Bernard is unable to see his own specular image in the photograph, as it is only revealed in B that he is a recreation of the late Arnold. The character in the center is sometimes mistaken to be William, but it is actually the robotic recreation of Ford's father, as seen in episode 6 [E3, 36:36 and E9, 50:15].[106]

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[106] Jefferson Grubbs notes this, pointing out that "Apparently Ford has been keeping a picture of himself, his father (who his partner turned into a robot), and his partner (who *he* would eventually turn into a robot) on his desk the whole time." See Jefferson Grubbs, "Who's in the Photo with Ford & Arnold on 'Westworld'? This Mystery has already been solved," *Bustle* December 2, 2016, https://www.bustle.com/articles/198048-whos-in-the-photo-with-ford-arnold-on-westworld-this-mystery-has-already-been-solved (July 10, 2019).

This once more reflects the Lacanian concept of *méconnaissance* – of misrecognition, particularly with one's own mirror image. As discussed in chapter 2, there is a telling lack of a shot depicting Bernard and his reflection in a glass surface in episode 1 (see figure 14). After he learns about being Arnold's reconstruction, and thus finding out this crucial truth about himself, he turns to the hosts in cold storage, pondering about their and his own future. He looks at them through a misty glass wall, in which we finally see a reflection of him (see figure 20A). Although this reflection is a very partial one, it creates a powerful image, as he puts his fingers against the glass and is therefore symbolically and in a quite literal sense 'in touch' with his specular image. Furthermore, the hand and its reflection appear to form a pyramid, which Arnold used as a metaphor for consciousness, as Ford reveals to Bernard and the audience in episode 3 [37:35]. This shot thus once more represents the link between visual reflections and self-consciousness, as presented in the second chapter of this thesis.



Figure 20 (A,B): After Bernard finds out about his identity being based on that of Arnold, he is depicted with a meaningful mirror-shot and shortly thereafter sits down next to Ford, the two shown to sit side-by-side for the first time in the entire series [E9, 53:29 and 54:03].

In figure 20B, Ford and Bernard sit next to each other, with partial reflections in the glass wall visible for both characters. Equipped with this novel piece of self-knowledge, Bernard finally sits 'on a same level' with Ford, as opposed to either one of them standing like in the scenes depicted in figure 13, or the two, sitting opposed to each other on different heights in previous scenes of episode 9. For this brief moment, their positioning evokes the relation of an even partnership that Ford and Arnold must have had. Ford, however, stands up right away to break this constellation and, accompanied by their verbal exchange, shifts the power dynamic in his favor once more, as if to suppress the memory of having a partner on eye-level.

## Searching for the Real Inside and Outside of the Theme-Park

As these points show, Bernard's story of self-discovery is a very prominent and powerful one, but it is far from the only one in the series. Besides Dolores and Maeve gradually coming to understand the artificiality of their world and the roles they play in the park, there is also William's twisted narrative of finding out 'who he really is.' The motif of getting to know one's true self, and the challenges that this quest bears, is thus also actualized for the guests, bringing about a whole new way of exploring the real in *Westworld*. People come to Westworld with the intention to live out their dreams and darkest fantasies, which is impossible in the 'real world' outside of the park. As Dolores points out in the exposition of episode 1, "The newcomers are just looking for the same thing we are: a place to be free, to stake out our dreams, a place with unlimited possibilities" [4:08]. This line subsumes an entire, complex dynamic: while (some of) the hosts are trying to find the 'real world' beyond the boundaries of the park, the guests enter the artificial realm of Westworld to experience themselves without the – arguably equally artificial – boundaries laid out by culture, wanting to get to know their true selves in a world that is completely different from the society they know. For the guests, paradoxically, entering the theme-park can thus constitute an encounter with the Lacanian real, as that which is normal inside of the park is impossible or prohibited by law and social norms outside. What they enter is a different, seemingly lawless world, in essence a symbolic order outside of their own. This also explains why, as argued towards the end of chapter 3, a host can articulate founding speech when offering a quest to the newcomers – the host acts as a representation of that foreign symbolic order, thus becoming an instantiation of the big Other to new arrivals.

When examining the show's motif of the theme-park and the dissolution of boundaries between reality and simulation, the Baudrillardian notions of simulacrum and hyperreality come to mind; of a simulation of an inexistent original, a map preceding the territory it depicts, and of representation that becomes more real or at least more significant than what it represents. In a fitting examination of a real-world theme-park, Jean Baudrillard argues that

> Disneyland exists in order to hide that it is the 'real' country, all of 'real'
> America that is Disneyland (a bit like prisons are there to hide that it is the
> social in its entirety, in its banal omnipresence, that is carceral) […] The

imaginary of Disneyland is neither true nor false, it is a deterrence machine
set up in order to rejuvenate the fiction of the real in the opposite camp.[107]

It is important here to note that Baudrillard does not use of the terms 'imaginary' and 'real' in their Lacanian sense, but his claim does fit with the Lacanian idea that reality as we perceive it through our imaginary and symbolic lenses is never truly the real and that the world we live in is always socially constructed, therefore not necessarily less artificial than a theme-park. This might be particularly apparent for modern American culture, at least to European cultural theorists such as Baudrillard, but it is just one striking example of what is arguably prevalent throughout all of human civilization. In contrast to Baudrillard's claim for Disneyland, however, *Westworld* does not 'rejuvenate the fiction of the real' outside of its eponymous theme-park, but rather relentlessly uncovers and undermines that fiction. When a still enigmatic voice poses the diagnostic question "have you ever questioned the nature of your reality?" [E1, 2:33] it demands the viewer to reflect this unsettling enquiry back onto themselves and their view of the world. Likewise, it is when guests come to Westworld to find out 'who they really are' while being outside of the constraints of modern society, that these very constraints become apparent. The guests are on a quest to discover truth in the artificiality of the theme-park, just as we – as viewers – are eager to learn puzzle pieces of truth by consuming such a cinematic fiction, not only about the mysteries of the show, but about those of our world and ourselves.

In this discussion on the notion of hyperreality, Umberto Eco's insightful and witty exploratory journey shall not be left out. In his *Travels in Hyperreality* (1986), he traces this concept and its prevalence throughout American culture along "two typical slogans that pervade American advertising. The first, widely used by Coca-Cola but also frequent as a hyperbolic formula in everyday speech, is 'the real thing'; the second, found in print and heard on TV, is 'more' – in the sense of 'extra.'"[108] Both of these alluring ideas are pervasive object causes for desire in the world of *Westworld*, as explored in the context of the maze-trope in chapter 2. A crucial and very appropriate point that Eco draws throughout his exploration of hyperrealities in America is the desire to recreate the past. Starting off with an account of Superman's Fortress of Solitude, where the superhero keeps exact robotic recreations of himself in a "museum of memories [where] everything that has

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[107] Jean Baudrillard, *Simulacra and Simulation*, trans. Sheila Faria Glaser, Ann Arbor: University of Michigan Press, 1997, 12-13.
[108] Umberto Eco, *Travels in Hyperreality*, trans. William Weaver, Orlando: Harcourt Brace Jovanovich, 1986, 7.

happened in his adventurous life is recorded […] in perfect copies or preserved in a miniaturized form of the original,"[109] Eco finds countless analog counterparts in American culture. He lists sites such as wax museums, historical dioramas, or the personal library of former president Lyndon B. Johnson that includes a full-scale model of the Oval Office, claiming that they suggest that "there is a constant in the average American taste, for which the past must be preserved and celebrated in full-scale authentic copy; a philosophy of immortality as duplication [that] dominates the relation with the self, with the past, [and] not infrequently with the present."[110] He goes on to argue that these efforts for recreation imply that "for historical information to be absorbed, it has to assume the aspect of reincarnation."[111] In this light, Westworld – as the fictitious theme-park of the show – can be seen as just another Hyperreal reconstruction in an effort to keep the past alive and palpable. *Westworld* as a show is then a critical examination of the Western myth and its commodification of American history, while at the same time drawing from it – complicit in the pastiche and reliant on the appropriation of familiar tropes – just as much as the show can be interpreted to both criticize violent and sexualized entertainment and indulge in it. Moreover, Eco's description of that 'philosophy of immortality as duplication' perfectly encapsulates the show's theme of recreating humanity in perfect, undying robotic copies.

With its theme of the theme-park serving as a self-referential examination of modern entertainment industries, *Westworld* continually draws on the notion of hyperreality. In a 2018 essay, Katja Kanzler explores what she identifies as a novel common trait found across many major private-network series and particularly relevant in the case of *Westworld*: an intersection of narrative and game in increasingly immersive entertainment-experiences.[112] She discerns *Westworld* as a primary example of Quality TV as a meta-genre – a concept recognized by Dan Hassler-Forest[113] – since the series not only positions itself on this ludo-narrative intersection, but also thoroughly addresses this in the motif of the theme-park and its interactive storylines, as well as in the use of common videogame tropes such as the reboot, the loop and the maze. The last one offers particularly striking

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[109] Ibid., 5.
[110] Ibid., 6.
[111] Ibid., 7.
[112] Katja Kanzler, "'This Game is not meant for you': *Westworld* an der Schnittstelle von Narrativ und Spiel," in *Mensch, Maschine, Maschinenmenschen: Multidisziplinäre Perspektiven auf die Serie* Westworld, edited by Brigitte Georgi-Findlay and Katja Kanzler, Wiesbaden: Springer VS, 2018, 53-70.
[113] Dan Hassler-Forest, "Game of Thrones: Quality Television and the Cultural Logic of Gentrification," *TV Series* 6, (2014): n. pg.

and unsettling parallels between the series and its eponymous theme-park. As Rory Jeffs and Gemma Blackwood elucidate,

> *Westworld* […] is also pushing its audience to be self-reflexively aware of the parallel game that comes from their own spectatorship. In this way, the maze is representational for the obstruction of the desire of the audience itself, with William as a narrative cypher for this unending quest.[114]

The deliberately confusing narrative mode, which repeatedly delays the reveal of crucial details by way of focalizing the narration through hosts with perceptive limitations, as well as by frequent unmarked alternations between different timelines, can indeed be described as labyrinthine. Fittingly, Julia Eckel and Bernd Leiendecker proposed the term 'narrative mazes,' in 2013 to cover a wide range of stories which disorient their audiences with techniques such as temporal non-linearity or unreliable narration.[115] The Man in Black's quest to learn a deeper truth by finding the center of the maze hidden beneath more superficial storylines of the theme-park then indeed reflects the practice of almost forensic dissection of the series in the hopes of discovering obscure references and understanding new levels of the multi-layered narrative, with this thesis being no exception. In this context, I want to consider some of Ford's lines from the speech he gives when dismissing Lee Sizemore's new narrative:

> What's the point of it? Get a couple of cheap thrills? Some surprises? […] No, that's simple. The titillation, horror, elation – they're parlor tricks. The guests don't return for the obvious things we do, the garish things. They come back because of the subtleties, the details. They come back because they discover something they imagine no one had ever noticed before.
>
> [E2, 55:17-55:44]

Similar to Sizemore's quote from episode 1, discussed in 3.2.2, this appears as a self-referential statement of the show's creators, capturing HBO's and other private networks' resolve to distinguish themselves from conventional television and offer exceptional entertainment experiences to their audiences. As Avi Santo argues,

> HBO must continuously promote discourses of 'quality' and 'exclusivity' as central to the subscription experience. These discourses aim to brand not

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[114] Rory Jeffs and Gemma Blackwood, "Whose Real? Encountering New Frontiers in *Westworld*," *Medianz* 16/2 (2016): 109.

[115] Julia Eckel & Bernd Leiendecker (eds.), (*Dis)Orienting Media and Narrative Mazes*, 2013, Bielefeld: Transcript.

only HBO, but its audience as well. In this manner, pay cable sells cultural capital to its subscribers, who are elevated above the riffraff that merely consume television.[116]

HBO's strategy to target an audience of affluent paying subscribers and provide them with a sense of selectness is then reflected in *Westworld*'s portrayal of the guests as pertaining to the socio-economic elite in the world outside of the theme-park. A very fitting example is the reaction of two guests:

> **Guest 1:** Oh God, this is incredible.
> **Guest 2:** Better be for what we're paying.
>
> <div align="right">[E1, 04:18- 04:25]</div>

This interaction occurs as the two unnamed first-time guests, presumably a married couple, set foot into the Frontier-town set of Sweetwater for the first time, and as this takes place in the exposition of the series, this scene is also the audience's first impression of the setting. Westworld's guests are thus representative for *Westworld*'s viewers, who find themselves in a self-referential examination of their entertainment experience.

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[116] Avi Santo, "Para-Television and Discourses of Distinction: The Culture of Production at HBO," in *It's Not TV: Watching HBO in the Post-Television Era*, edited by M. Leverette, B.L. Ott and C.L. Buckley. New York: Routledge, 2008, 20.

## Exploring the Real through the Fantasy of Science Fiction

As discussed in the previous section, the exploration of the theme-park mimics the investigative mode of reception incited by *Westworld* and its mysteries. With this in mind, I will now inspect the role of the fantastic and the unreal in science fiction and related narrative forms. The theme-park, just explored as a locus of fantasy, dreams and unlimited possibilities, is in this regard metonymic for the entire genre of science fiction, and arguably even for all forms of fantastic fiction.[117] As John Rieder puts it, "the status of 'facts' in science fiction is a crux […] because one of science fiction's givens is that some of a story's facts must be not only counterfactual – which is true of realist fiction as well – but not currently possible."[118] The genre is firmly based on the idea of staking out the (still) impossible, of exploring a world of potential that is larger than current reality. As science fiction stories rarely transgress into the utterly absurd, however, all of the futuristic elements must be organized around reasonable guiding principles and within the coherent structure of a particular narrative. Rieder suggests that readers of science fiction "will find themselves caught up in a kind of epistemological riddle by the gradual unfolding of the interpretive paradigm, cultural assumptions, or analogical principle governing the coherence of the impossible world in which the story is taking place."[119] The explanations of the impossible can then either be founded in scientific rationalism or cultural and ideological considerations, as Rieder argues. These two different forms that the reasoning of a narrative world's fantastic components may take correspond to the distinction between hard and soft science fiction explained chapter 1.

This characteristic feature of using futuristic and fantastic elements to build a cohesive narrative has led some theorists to compare science fiction with the compulsive interpretative structure at work in paranoia. Motivated by the writings of Philip K. Dick and their abundance of paranoid protagonists, Carl Freedman notes that "the typical SF text has a smoothly diachronic narrative line and offers its characters as mimetic representations of human beings," and concludes that "in both estranging 'content' and realist 'form,' then, SF closely corresponds to the weird and coherent interpretative systems of the

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[117] Despite the differing aesthetics typical of the genres, science fiction is occasionally regarded as a subgenre belonging to a broad definition of fantasy (or fantastic) fiction, along with such genres as horror, supernatural gothic, magic realism and 'generic' fantasy. See for example China Miéville, "Editorial Introduction," *Historical Materialism* 10/4 (2002), 39-49.

[118] John Rieder, *Colonialism and the Emergence of Science Fiction*, Middletown: Wesleyan University Press, 2008, 62.

[119] Ibid., 63.

paranoiac."[120] Freedman uses this analysis and Lacan's theorization of paranoia to construct what he calls a Marxist theory of paranoia that explores commodity fetishism and the alienating forces of society around Dick's protagonists and the bourgeois subject. Mark Bould takes up Freedman's ideas and draws intriguing conclusions in his essay, which Rieder in turn summarizes in particularly succinct words:

> Bould suggests that the totalizing rigor with which science fiction and fantastic narratives integrate impossible facts into a coherent version of the world resembles the psychic mechanism of paranoia. His purpose is not to pathologize such narratives, but rather to connect fantasy with literary realism by way of the French psychoanalyst, Jacques Lacan's, thesis that paranoia's insatiable drive for coherence makes it the appropriate paradigm for the construction of personal identity and social reality as such. Since conventional reality itself is fundamentally fantastic, Bould argues, fantasy as a genre is not distinguished from realism by its world-building but by its deliberate foregrounding of its untruth: "what sets fantasy apart from much mimetic art is a frankly self-referential consciousness ... of the impossibility of 'real life'" (83). That is, the way that science fiction handles the impossible introduces a self-consciously "paranoid" construction of the world that tends to expose the unself-consciously fantastic nature of socially accepted reality.[121]

Thus, in the purposeful emphasis of its fantastic and impossible elements, the effect of science fiction appears to be diametrically opposed to that of the theme-park as analyzed by Baudrillard. In contrast to supporting the fiction of the 'real' outside of the park, science fiction tends to challenge the reader to examine and question the assumptions and conventions that frame and formulate cultural reality.

In a Lacanian-Marxist analysis that includes science fiction into a broad definition of fantasy and also draws inspiration from Freedman, China Miéville argues that "fantasy is a mode that, in constructing an internally coherent but actually impossible totality – constructed on the basis that the impossible is, for this work, true – mimics the 'absurdity' of capitalist modernity"[122]. He goes on to stress "the notion of fantasy as embedding potential transformation and emancipation in human thinking" and argues that fantastic

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[120] Carl Freedman, "Towards a Theory of Paranoia: The Science Fiction of Philip K. Dick," *Science Fiction Studies*, 11/1 (1984), 20

[121] Rieder, *Colonialism and the Emergence of Science Fiction*, 62. Referencing Mark Bould, "The Dreadful Credibility of Absurd Things," *Historical Materialism*, 10/4 (2002): 51-88.

[122] Miéville, "Editorial Introduction," 42.

fiction "might even be seen as a direct political weapon."[123] That very subversive potential of fantasy is also the focus of a monograph by Rosemary Jackson, in which she proclaims that

> fantastic literature points to or suggests the basis upon which cultural order rests, for it opens up, for a brief moment, on to disorder, on to illegality, on to that which lies outside the law, that which is outside dominant value systems. The fantastic traces the unsaid and the unseen of culture: that which has been silenced, made invisible, covered over and made 'absent.'[124]

Here she formulates a very apt description of the Lacanian real and thereby offers an explanation for its latent disruptive power. She goes on to assert that "[by presenting] that which cannot be, but *is*, fantasy exposes a culture's definitions of that which can be: it traces the limits of its epistemological and ontological frame."[125] Essentially, science fiction – as well as other forms of fantastic fiction – then appears to be an attempt to grasp the impossible and produce meaning from it, to venture into previously unimagined territories of the real and conquer them with logic and narrative consistency, expanding the semiotic structures of the imaginary and the symbolic. Science fiction writing can thus be regarded as an act of pioneering – a theme so deeply ingrained in the genre and of course also prevalent throughout the series of *Westworld* – of pushing forward the Frontier of explorative thought into the unknown.

Like other works of 'soft' science fiction, *Westworld* does not only extend this Frontier into the realms of science and technology, but also and predominantly into those of psychology, society and the human condition. I hope to have shown how deeply it engages with psychoanalytic thought, particularly as theorized by Jacques Lacan. From the connections drawn between characters' specular images and their self-awareness, to the concept of the hosts' speech originating in the Other and their routines being governed by the symbolic structures of the narratives; from mere mentions of a host's subconscious to visual portrayals of the perceptive blind spots of the real in the hosts' cognition, the show continuously challenges the viewer to reflect on their view of themselves and the world around them, daring them to look beyond the certain and the known. Next I will present Julian Jaynes's thoughts on the origin of consciousness, put it in relation to psychoanalysis

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[123] Ibid., 46.
[124] Rosemary Jackson, *Fantasy: The Literature of Subversion*, London: Methuen, 1981, 4.
[125] Ibid., 23.

and examine its rendition in the series' portrayal of the hosts' emerging psyches. Jaynes's theory is one that is situated at and explores the Frontier of thought, not only due to the daring and contentious nature of its claims, but because its hypotheses precisely aim to trace the timing and cognitive developments of mankind's acquisition of the skill of conscious thinking.

# 5   The Bicameral Mind and its Rendition in *Westworld*

## The Theory of the Bicameral Mind

In his book titled *The Origin of Consciousness in the Breakdown of the Bicameral Mind* (1976), Julian Jaynes put forth a bold and provocative theory on the (pre-)historical origin of human consciousness.[126] Whereas psychoanalytical theories focus mainly on explaining how mental structures emerge in the development of a human individual, Jaynes explores how these structures, that we call the psyche, came to exist in the human species. In this goal, his work does go in line with parts of the psychoanalytic endeavor, as pursued for example by Freud in his 1913 four-part book *Totem and Taboo*.[127] While Freud studied the primal culture of Australian Aborigines to make inferences on the historical evolution of the mind, Jaynes focuses on Mesopotamia and the eastern Mediterranean region, drawing on interpretations of ancient Greek and Babylonian literature and prehistoric archeological findings to support his claims. Analogous to Freud's ruminations on the Oedipus complex and repressed incestuous desires, Jaynes keeps returning to neurological speculations in constructing and supporting his concept of consciousness. While their methods and explanations differ, the theories do not seem to contradict, but rather complement each other; they use different terminology and reasoning to answer the question of how early humans managed to cooperate and coordinate themselves in the complex social settings that arise in large groups that are spatially concentrated in primal towns and cities. They were, in other words, both at the quest to trace back the routes of human civilization through a psychological lens. In the following I will present Jaynes's theory, discuss some of the controversies that surround it and put it in relation to psychoanalytic concepts.

In its essence, Jaynes's theory of the bicameral mind states that consciousness evolved out of ancestral voices that were internalized as auditory hallucinations – whereby bicameral refers to the two hemispheres of the brain, one functioning as the speaking part, while the other part listens obediently. Jaynes claims that this configuration of the mind served as a guiding regulatory system for humans from about 10,000 BCE until surprisingly recently,

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[126] Julian Jaynes, *The Origin of Consciousness in the Breakdown of the Bicameral Mind,* New York: Houghton Mifflin, 1976.

[127] Sigmund Freud, *Totem und Tabu: Einige Übereinstimmungen im Seelenleben der Wilden und der Neurotiker,* Wien: Heller, 1913.

dating the 'breakdown of the bicameral mind' to a period of several centuries around 1,000 years BCE for the geographical area under consideration. He further argues that prior to this development, humans were, in their bicameral state, not truly conscious, at least not in the sense as we think of it today. This claim, positioned at the core of his model, is one of the more disputed parts of his book.

More than a decade after its first publication, Jaynes added an afterword to the 1990 edition of his book. In an attempt to sum up his theory in a concise and palpable manner, as well as to defend his theoretical construct against critics who would reject the entire theory based on singled-out flawed assumptions, Jaynes restated his concept as a set of four key hypotheses, each of which he intended to stand alone for itself:

1. Consciousness is based on language.

The close relationship between consciousness and language is widely acknowledged, although there is a debate over whether the former stems from the latter or vice versa.[128] One can compare this to the chicken-and-egg causality dilemma, but it resolves when considering the kind of self-aware consciousness that Jaynes discussed, which he firmly distinguishes from the ability of mere perception or cognition. In the complex case of conscious self-reflexivity, it seems clearer that the capability for language production and comprehension is more of a pre-requisite than a consequence.[129] Because of this, Jaynes claims, consciousness can be regarded as a socially acquired skill and assumes that early humans were able to use language to communicate with each other before and without having developed a subjective consciousness.

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[128] Bill Rowe, "Retrospective: Julian Jaynes and The Origin of Consciousness in the Breakdown of the Bicameral Mind," *The American Journal of Psychology,* 125/1 (2012), 100-101. In this 2012 review of Jaynes's book Rowe lays this out as the controversy regarding the mental processes commonly termed *theory of mind* and *executive functions* – the former being related to consciousness and the latter to the ability to express thoughts in language. The controversy lies between an *emergence* and an *expressionist model*. Here, the former states that the development of theory-of-mind capacities requires complex executive skills, while the latter claims that a theory of mind already exists before but just cannot be articulated without the executive skills. A similar controversy can be found around the Sapir-Whorf hypothesis and its strong and its weak versions, relating to *linguistic absolutism* and *linguistic relativism* respectively. To simplify, the former states that the way we think is shaped by the language we use, while the latter claims that causality points the other way. (Lacan: ~ The signifier is primary to the signified, the signified is produced by the signifier")
[129] Steven Shaviro, *2 Thoughts on "The Origin of Consciousness in the Breakdown of the Bicameral Mind,"* March 22, 2014, www.shaviro.com/Blog/?p=279 (September 28, 2019).

In relation to psychoanalytic theory, this first hypothesis is reminiscent of Lacan's key tenet that the unconscious is structured like a language.[130] In the conscious and the unconscious, Jaynes and Lacan speak of different, but of course closely related concepts. The existence of an unconscious can only be presumed if there is a conscious, of which the former is a negative.[131] Conversely, consciousness is always selective, meaning there is always something that lies outside of its metaphorical grasp or view, an idea that is at the very core of psychoanalysis and also relevant to Jaynes's theory. This shows that neither the conscious nor the unconscious can possibly exist without the other; they are, to use a trite but fitting phrase, two sides of the same coin. To borrow a less trite phrasing, which Lacan used to describe the significant role of absences in the symbolic order, "nothing exists except upon an assumed foundation of absence".[132] Also, despite seldom referring to psychoanalytic theories, much of Jaynes's thought is dedicated to exploring unconscious mental processes.

2. Preceding consciousness there was a different mentality based on verbal hallucinations – the bicameral mind.

Along with Jaynes's atypical definition of consciousness, the assumption of prehistoric and ancient auditory verbal hallucinations is one that many critics and readers find problematic. It is an unsettling part of the proposition, reminiscent of present-day mental disorders like schizophrenia. Although Jaynes does argue that the schizophrenic state is one of the modern vestiges of the bicameral (along with other matters such as poetry, hypnotism and reports of possession), he does distinguish between these modern phenomena and that of the bicameral mind. Jaynes bases his concept of the bicameral mind on the prevalence of characters that would hear the guiding voices of Gods in ancient myths such as the Greek epic of Iliad and other literary sources from ancient civilizations around the Mediterranean. He also takes into account reports from as late as the 16th century conquests in Mesoamerica where indigenous people would turn to apparently speaking statues to ask for divine guidance. While such reports of hearing can always be interpreted as metaphoric, rather

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[130] See Dylan Evans, *An Introductory Dictionary to Lacanian Psychoanalysis*, London: Routledge, 1996, 99; language.

[131] One can of course say that an object is not conscious and therefore unconscious, but this does not mean that such an object has an unconscious.

[132] Ibid., 1; absence. Quoting Jacques Lacan, *Écrits*, Paris: Seuil, 1966, 392.

than describing actual acoustic hallucinations, it is not sensible to reject the possibility of the latter solely on the basis of uncomfortable modern connotations.

Although what Jaynes presents as evidence does rely on interpretations (sometimes challenged and pointed out as tendentious[133]), his proposition of the bicameral mind does provide intriguing explanations for a wide range of phenomena. It compellingly describes how humans came up with the concept of Gods and why voices and words attributed to divine sources play such a key role in many religions. It explains not only the unique role of speech in the organization of religion, but also "the near universality of religion [as] no civilization seems to have originated without it".[134] The bicameral mind was, according to Jaynes, a related, prehistoric method for behavioral regulation. Its guiding and administering voices – played by one part of the brain to the other – were internalized instructions and admonishments of elders or leaders of the group that an individual belonged to. Hence, one of the phenomena that can be clarified with this theory is that part of the human psyche which Freud calls the superego. In one of the few references to psychoanalytic thought, Jaynes suggests that "the god-hero relationship was – by being its progenitor – similar to the referent of the ego-superego relationship of Freud."[135] The hypothesis of the bicameral mind then provides convincing reasoning for the vocal character that is ascribed to this internalized censor and it warrants Lacan's assertion that speech does not originate in the self but in the Other (discussed in chapter 3).

3. The timing of the transition from bicameral to subjective consciousness depends on the geographical location, but in the Middle East it can be dated to roughly 1,000 BCE.

This surprisingly recent dating is another cause for controversy around the theory of the bicameral mind. Jaynes bases this timing partly on a shift in the language and narrative style in ancient Greek literature, specifically between the two epics of Iliad and Odyssey, noting the following:

> The words in the Iliad that in a later age come to mean mental things have
> different meanings, all of them more concrete. The word psyche, which later

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[133] See Shaviro, *2 Thoughts*.
[134] Bill Rowe, "Retrospective: Julian Jaynes and The Origin of Consciousness in the Breakdown of the Bicameral Mind." *The American Journal of Psychology* 125/3 (2012): 371. Referencing David Stove, "The Oracles and their Cessation: A Tribute to Julian Jaynes," in *Reflections on the Dawn of Consciousness* ed. Martine Kuijsten, 2006, 267-294.
[135] Jaynes, *Origin of Consciousness*, 74.

means soul or conscious mind, is in most instances life-substances, such as blood or breath: a dying warrior bleeds out his psyche onto the ground or breathes it out in his last gasp. The thumos, which later comes to mean something like emotional soul, is simply motion or agitation. […] There is also no concept of will or word for it, the concept developing curiously late in Greek thought. Thus, Iliadic men have no will of their own and certainly no notion of free will.[136]

Instead of volition and intent as causes for one's action, Jaynes infers, these bicameral characters simply carried out the commands given to them by their Gods, seemingly unable to ponder and introspect what they should do.

Jaynes finds other, in a sense more 'solid', evidence in slightly earlier stone carvings from Mesopotamia. In the early second millennium BCE, depictions of kings still showed them in direct contact with their Gods, such as a stele from about 1,750 BCE, depicting king Hammurabi being touched by an enthroned God (identified to be either Marduk or Shamash). Half a millennium later, however, a carved altar from roughly 1,230 BCE shows the Assyrian king Tukulti-Ninurta I twice in the same picture: once standing up straight and once kneeling before an empty throne.



Figure 21 (A,B): A shows a depiction of Mesopotamian King Hammurabi on a stele from 1,750 BCE , while B is from a 1,230 BCE stele and shows two versions of King Tukulti in front of an empty throne. Both are, according to Jaynes, representative of a larger trend to depict Hammurabi and his predecessors in direct contact with Gods, and Tukulti and later kings merely with symbolical references to divine figures.[137]

This, according to Jaynes, is not only the first time a king is depicted as kneeling, but also the first scene indicating an absent God.[138] This goes along with stories spreading around the Middle Eastern region of men being forsaken by Gods in the centuries around 1,000

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[136] Ibid., 69-70.
[137] Ibid., 199 and 224.
[138] Ibid., 223-224.

BCE. One of these, from around 700 BCE, is the Old Testament narrative telling of the expulsion from the paradisiacal Garden of Eden, provoked by man's acquisition of wisdom and the knowledge of good and evil.[139] According to Jaynes's theory, the post-bicameral, subjectively conscious person is no longer immediately led by their inner godly voices, but can introspect and must reflect upon past and future actions. The breakdown of the bicameral mind can then be described, in Freudian terms, as the emergence of an ego that stands between the superego and the id. The hallucinated voices of the gods thus become silent thought and the imperative of conscience is complemented with the indicative and interrogative of consciousness.

4. Neurologically, the auditory hallucinations stemmed from the temporal lobe of the non-dominant (usually the right) hemisphere, in areas equivalent to those that are responsible for the production of speech in the dominant (left) hemisphere.

When Julian Jaynes wrote his provocative book, knowledge about the relations between different regions and structures in the brain and their corresponding functions was still more limited and there was particularly little concern for the 'non-dominant' hemisphere. Since that time, Jaynes states in his 1990 afterword, there was "an explosion of findings about right hemisphere function, […] generally in agreement with what we might expect to find in the right hemisphere on the basis of the bicameral hypothesis."[140] Most significant, he argues, is the way that it processes information in a synthetic manner, as opposed to the analytic processing of the left hemisphere. The former is thus much better suited for functions such as facial recognition, spatial imagination and following harmonic development in music. When considering Lacanian theory, there appear to be certain similarities between functions associated with the analytic left cerebral hemisphere and the linguistic symbolic order on the one hand, and between those of the synthetic right hemisphere and the imaginary order (concerned with visual perception and sensory deceptions) on the other. However, such assumptions on correspondence between cerebral locality and cognitive functions are prone to over-simplification. This must be particularly the case when discussing such abstract and ambiguous concepts as the Lacanian orders.

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[139] Jaynes suggests that organized religions assumed a new role in the structuring of society after the breakdown of the bicameral mind. This would also serve for an explanation of the Axial Age, the temporally concentrated rise of major religions across the Middle East and Asia between 800 and 300 BCE (see Karl Jaspers, *Vom Ursprung und Ziel der Geschichte*, München: Piper, 1949).
[140] Jaynes, *Origin of Consciousness,* 455.

## Verbal Descriptions of the Bicameral Mind

Throughout the series, there are three occasions of characters directly mentioning the concept of the Bicameral Mind, but there are many more ways in which the series clearly draws inspiration from Jaynes's theory, not to mention that fact that the season finale is named after it. The first explicit reference occurs when Ford tells Bernard about his late partner Arnold and his vision of making the hosts conscious:

> **Robert Ford:** He wanted the real thing. He wanted to create consciousness. […] He based it on a theory of consciousness called the Bicameral Mind.
> **Bernard Lowe:** The idea that primitive man believed his thoughts to be the voice of the gods. I thought it was debunked.
> **Robert Ford:** As a theory for understanding the human mind, perhaps, but not as a blueprint for building an artificial one. See, Arnold built a version of that cognition in which the hosts heard their programming as an inner monologue, with the hopes that in time, their own voice would take over. It was a way to bootstrap consciousness. But Arnold hadn't considered two things. One, that in this place, the last thing you want the hosts to be is conscious, and two, the other group who considered their thoughts to be the voices of the gods.
> **Bernard Lowe:** Lunatics.
> **Robert Ford:** Indeed. We abandoned the approach. The only vestiges that remain are the voice commands we use to control them.

[E3, 37:30-38:55]

Several interesting points come up when dissecting this dialog. First, the theory is not only mentioned and briefly explained, but also presented as already outdated and/or disproven, reflecting the controversy around Jaynes's claims. Ford suggests that the theory might be more apt for recreating consciousness artificially rather than for understanding its origin in humans. I argue that this is deliberate and careful framing, which aims to make the proposed ideas more palatable by using the metaphor of the coded mind to explore the human condition through unfamiliar perspectives. Secondly, Ford overtly states that the hosts' acquisition of consciousness is utterly undesirable. However, when taking the wording "in this place, the last thing you want" literally, one can interpret that this is in fact the ultimate goal of the park, which goes in line with Ford's actual intentions as revealed in later episodes. Thirdly, the characters bring up the concept of madness, recognizing the uncomfortable modern connotations of the bicameral mind with mental illness. Indeed, Jaynes lists schizophrenia as one of the present-day remnants, which he tries to elucidate

with his theory in the third section of his monograph, titled *Vestiges of the Bicameral Mind in the Modern World*. It is, then, surely no coincidence that Ford uses the same, rather uncommon term, 'vestiges,' for characterizing the voice commands used to manage the hosts. Considering the ongoing psychoanalytical undertones and the many connections between the voice commands and the function of the superego, as discussed in chapter 3, this phrase can then be seen as emblematic for the attempt to complement Jaynes's theory with what he and his acolytes missed – an examination of the complex relations between the concept of the bicameral mind and the insights of psychoanalysis.

Only three episodes after this introduction of Jaynes's theory, a character addresses the concept of the bicameral mind again. This time, in episode 6, it is Elsie who mentions it as she speaks to Bernard over the phone. First, she tells him of her suspicion that someone uses the bicameral system to hack the hosts [43:25-43:33]. When considering the hosts as a metaphor for humans, this raises the disturbing question of what 'hacking' a human, through the bicameral system or its vestiges, would mean. The clearest example may be the intentional manipulation of people through advertisement or propaganda. In the second time, Elsie articulates a succinct description of the concept of the Bicameral Mind and its role in the hosts' functioning:

> **Elsie Hughes:** Okay, so, Theresa was using the old bicameral control system to reprogram the woodcutter, but she's not the only one. Someone else has been using the system for weeks to retask hosts.
> […]
> **Bernard Lowe:** Who issued the modifications?
> **Elsie Hughes:** I don't know. The best I could tell… Arnold.
> **Bernard Lowe:** He's dead.
> **Elsie Hughes:** Yeah, well, he's a pretty fucking prolific coder for a dead guy.
>
> [E6, 50:52-51:33]

The notion that Arnold still seems to affect the hosts' programming decades after his death is a very powerful analogy for the concept of the bicameral mind – of the imagined voices of dead ancestors still impacting the living. Furthermore, this also reflects the Lacanian idea of the ongoing symbolic power of the dead father. As Evans summarizes it, "the symbolic father is always a dead father," considering that "death is constitutive of the symbolic order, because the symbol, by standing in place of the thing which it symbolizes,

is equivalent to the death of the thing."[141] In close relation to the symbolic father, Lacan devised the concept of the Name-of-the-Father (*Nom-du-Père*, playing on the homophony with *non-du-père*, the 'no' of the father), describing it as a fundamental signifier, which allows for successful communication and meaning-making in the symbolic. The Name-of-the-Father also designates "the legislative and prohibitive function of the symbolic father," and it "confers identity on the subject (it names him, positions him in the symbolic order)".[142] This concept is thus particularly fitting for the character of Arnold, who endowed his robotic creations with speech and identities, and who is – for much of the season – an enigmatic and elusive figure only represent by his name. With these two different interpretations in mind – both relying on core tenets of the relative field – Elsie's line is a primary example for how well the two theories fit together, with the metaphor of the coded mind serving to ease the conjunction.

Another noteworthy point about Elsie's references to the bicameral mind, is that each is followed by a scene in which Ford talks to the robotic recreation of his younger self. In the first of these interactions, the young, robotic Ford leads the old, biological Ford to the corpse of their dog Jock; the next scene they share shows them talking about Jock's death, while sitting opposite each other.

Figure 22 (A,B): The two Fords talking to each other. In A, the camera work puts emphasis on the specular image again, superimposing Ford's figure with the mirror image of his younger self [52:30 and 52:04].

These exchanges are again enticing from both theoretical perspectives. In the context of the bicameral mind, one could say that the young Ford receives guidance, as well as reprimands, from a wiser, more complete, other-worldly version of himself, as he strolls around desolated areas of the park. Likewise, a bicameral man would find solace and directives by intuiting voices that he ascribed to Gods, essentially projections of the self into the ethereal realm of the divine. From a psychoanalytic view, the biological Ford acts

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[141] Evans, *Dictionary*, 32; death.
[142] Ibid., 122; Name-of-the-Father.

as the superego, or the Lacanian big Other, to the artificial, younger Ford. This is then another instance of humans acting as the robots' superego, as discussed in chapter 2, but one that is particularly fascinating and disturbing, as Ford assumes a paternal position to his own robotic recreation. Adding to this, the latter serves as a specular image, again underlined by mirror shots, where Ford is depicted through a glass wall that overlays a reflection of the younger Ford with his image (see Figure 18A, the significance of such mirror shots is discussed in chapter 2). The host must then be regarded as a small other; acting at the same time as the counterpart and as the ever unattainable object-cause of desire, the *objet petit a*.[143] In this case, the desire is caused by a sense of lost innocence of the past and the host's characteristics of immortality and unwithering youth.

As we also find out in the course of this episode, Arnold created hosts for Ford's entire nuclear family. They reside in the reclusive old house deep within the park – a realm of fantastic reconstruction of the past – where Ford has complete control and can even govern a reconstruction of his father through his voice commands. He thus serves as the big Other, or the symbolic father, to his own imaginary father, which could be recognized as him constituting himself as a self-determining subject, but rather gives the impression of him indulging in a perverted oedipal fantasy. Ford explains that "Arnold's versions flattered the originals. I made some adjustments over the years. Gave my father, in particular, a few of his original characteristics" [E6, 38:00-38:15]. The camera shows the host version of his father pouring a glass of liquor, the implication being that Ford's father was a violent alcoholic. However, the reliability of Ford's recollection is questionable, especially when considering the Lacanian argument that "the imaginary father is an imago, the composite of all the imaginary constructs that the subject builds up in fantasy around the figure of the father. This imaginary construction often bears little relationship to the father as he is in reality."[144] Just as Bernard, being disturbed by this sight and Ford's explanations, we come to assume that Ford may have created a construed image over the decades.

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143 Ibid., 128-129; *objet (petit) a*, and 135-136; other/Other.
144 Ibid., 62-63; father.

## Portraying the Emergence of a Conscious Subject

Similar to the encounters between the two Fords, there are also two pivotal scenes of Dolores meeting and conversing with her specular image. After recognizing her own reflection in a window in episode 2 (see figure 10), the first verbal interaction occurs towards the end of episode 5, marking the mid-season finale (figure 23); the second instance, near the end of episode 10, constitutes the climax of that episode and the entire season (figure 25). The latter depicts the culmination of Dolores's acquisition of consciousness and her emergence as a self-aware subject.



Figure 23 (A,B,C,D): Dolores's first brief conversation with her enigmatic double [E5, 41:32 and 41:35].

The scene from episode 5 takes place in a temple to which Dolores is brought by William and Logan in the old time line. She sits down in front of an oracle (see figure 23A), and after drawing a card that shows the maze, she looks up to find herself, dressed in blue and with a cold and assertive demeanor, telling her to "follow the maze" [41:35]. This specular version of herself is set against a background of skulls that frames her face and body (figure 23B), again alluding to the notion of the bicameral voices as hallucinated verbal inputs ascribed to deceased ancestors and leaders. After a brief and cryptic exchange, the apparition vanishes again, leaving Dolores in front of an empty chair (figure 23D), before she runs away in distress. This transition from oracle to spectral image to empty chair could be read as an implicit reference to Jaynes's interpretation of Mesopotamian steles, as presented in figure 21. One of them depicts the Assyrian king Tukulti-Ninurta I twice in

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the same picture, in front of an empty throne where Gods would sit in depictions of earlier kings.

When Dolores finds William after the exchange with her specular image, she tells him they have to flee, explaining that "There's a voice, inside me, telling me what I have to do" [43:55], another clear reference to the theory of the bicameral mind. The following episodes put less focus on Dolores's development – in fact the character does not appear at all throughout episode 6 – and the meaning of the mysterious encounter from episode 5 is only explained in the season finale.



Figure 24 (A,B): A shows the laboratory desk with a reproduction of Michelangelo's *Creation of Adam* (c.1510)[145] mounted on the wall along with blueprints of Dolores. In B, Ford traces the outline of the cloth in the image. Interestingly, his gesture resembles that of God in Michelangelo's painting – one of the many instances where Ford can be said to be acting like God [E10, 1:18:41].

Towards the end of episode 10, titled *The Bicameral Mind*, Ford explains a – for our times relatively novel – understanding of Michelangelo's fresco *Creation of Adam* to Dolores and the audience. He states that

> Michelangelo did tell a lie. See, it took 500 years for someone to notice something hidden in plain sight. It was a doctor who noticed the shape of the human brain. The message being that the divine gift does not come from a higher power, but from our own minds.
>
> [E10, 1:12:05-1:12:32]

He refers to the interpretation by Frank Meshberger, published in 1990 in the *Journal of the American Medical Association*,[146] that discusses the correlations between the cloth and figures that surround God in the painting, and the shape of the brain and some of its substructures in a sagittal cross section. It should be noted here that Meshberger concludes

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[145] Michelangelo, *Creation of Adam*, fresco, Sistine Chapel ceiling, c.1510.
[146] Frank Lee Meshberger, "An Interpretation of Michelangelo's *Creation of Adam* Based on Neuroanatomy," *Journal of the American Medical Association*, 264/14 (1990): 1837-1841.

his argument with the point that "Michelangelo portrays that what God is giving to Adam is the intellect,"[147] which differs markedly from the explanation Ford offers in the series. Also, a more recent reading of the image interprets the shape of God's cloak as a reference to a postpartum uterus, with the outstretched arms and barely touching hands as the umbilical cord, claiming that Michelangelo's intent was to portray the birth of mankind.[148] While the conjecture delivered in the series offers one of many different perspectives, it is one that is crucial in driving the plot to the season's dramatic climax and encapsulating the concept of the bicameral mind, portraying God and the divine as fabrications of the brain. One could point out here that the shapes resemble the cross section of a brain's right hemisphere, which Jaynes supposes to be the origin of the hallucinated guiding voices in the bicameral system.



Figure 25: Dolores sitting opposite the spectral version of herself, similar to figure 23c [E10, 1:20:40].

What follows is Dolores's climactic epiphany, as she realizes that the voice she has been hearing was her own. With a similar progression as in episode 5, she sits down opposite of Arnold – who takes the structural position the oracle used to occupy in the earlier equivalent scene – who then turns into Dolores's specular image (see figure 25), only to vanish again after a brief dialogue, and leaving behind an empty chair. The transition between Arnold and her mirror image is aided by the camera revolving around Dolores – similar to the revelation of the door that was invisible to Bernard, discussed in chapter 4 – and is accompanied by the line "Do you know now who you've been talking to? Whose voice you've been hearing all this time?" [1:19:52]. The speaker of this line changes three times: Arnold utters the first part, his voice transforming first to a distorted overlay of voices, then

[147] Ibid., 1841.
[148] Stefano Di Bella, "The 'Delivery' of Adam: A Medical Interpretation of Michelangelo," *Mayo Clinic Proceedings*, 90/4 (2015): 505-508. This interpretation would counter the exclusion of the maternal represented in the other readings and also in the idea of artificial creation of life.

into that of Ford, before it ultimately evolves into Dolores's own voice. The scene is thus a visual and aural rendering of the transition from the bicameral state to one of introspective consciousness, from receiving messages ascribed to an external, other-worldly source to formulating internalized, subjective thought.

In the Lacanian sense, what is portrayed is precisely the formation of the subject – a word that appears deceptively simple. In contrast to Freud, who never explicitly theorized the term, Lacan discusses it throughout his work, fundamentally distinguishing it from the concept of the ego in that "the ego is part of the imaginary order, [whereas] the subject is part of the symbolic."[149] By discovering and speaking in her own, authentic voice, Dolores could thus be said to become a true subject in the Lacanian sense, considering that "the subject is essentially a speaking being (*parlêtre*)."[150] Her self-identification no longer relies on the merely visual, imaginary identification of the ego with the specular image – a development depicted in episode 2 and discussed in chapter 2 – but she finally emerges as a vocal subject that verbally constitutes itself in the symbolic order.

Dolores's development throughout the series is thus portrayed as a successful completion to Arnold's strategy of constructing the hosts programming in the model of the bicameral mind in the hopes that "their own voice would take over" [E3, 38:28]. In the context of Jaynes's theory, what is depicted is a precise representation of the breakdown of the bicameral mind, as the voices that were previously ascribed to a divine origin are silenced and recognized as thought by the emerging conscious subject. In Lacanian terms, the scene also reflects the formation of a conscious self, a speaking being that is no longer merely an ego, but a fully developed subject. *Westworld*'s depiction of the artificial creation of consciousness is thus a fantastical, but remarkably insightful portrayal of both the historical and the developmental origin of consciousness.

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[149] Evans, *Dictionary*, 197-198; subject.
[150] Ibid.

# Conclusion

I hope to have demonstrated, throughout the chapters of this work, the depth and acuity of *Westworld*'s portrayal of an emerging consciousness, as well as the potential enrichment inherent in examining it through a Lacanian perspective. In its depiction of hyper-realistic android hosts that suffer at the hands of ruthless and cruel human guests, the series continually humanizes the futuristic machines and dehumanizes their biological counterparts. Viewers are thus faced with troubling ethical and existential questions, as they relate to the guests as consumers of violent and sexualized entertainment, as well as to the hosts that serve as convincing narrative focalizers and offer at times unsettling insights into the human condition.

As discussed in chapter 1, *Westworld* draws from a long-lasting tradition of representing fictional automata in literature and visual culture, but also establishes itself as a notable addition to it. The show takes up the age-old control problem of artificial creations turning against their creators, present in some of the earliest myths of automata, as well as the hubristic desire to achieve godlike status through the re-creation of life. It depicts humans falling in love with lifelike machines, similar to the ancient Roman Pygmalion or Theodore from *Her* (2013), and demonstrates the dehumanizing and commodifying forces of capitalist enterprises, a notion deeply ingrained into the figure of the mass-produced, enslaved robot since Karel Čapek's pioneering play *R.U.R.* (1921). Furthermore, by incorporating aesthetic elements from the American western, the series also links these matters of artificial re-creations with issues of colonialization and oppression, critically examining traditional Wild West tropes, while at the same time reusing and appropriating them in a new context.

Chapter 2 is dedicated to an examination of *Westworld* within the framework of the Lacanian order of the imaginary. Starting with a detailed reading of the series' lengthy and elaborate title sequence, I discuss first occurrences of the recurring motif of pretense and deception in visually ambiguous shots that reappear throughout the intro. The robot is then identified as a version of the specular image, a double that incites identification and opposition at the same time, and I interpret the graphic progression from individual body parts to the full frontal image of a host as a representation of the mirror stage. This phenomenon, which, according to Jacques Lacan, delineates a crucial development in the emergent psyche, is then also found to be depicted within the series. I therefore discuss

noteworthy shots of characters' mirror images and their relations to the self-awareness of said characters. The chapter concludes with an exploration of the show's recurring motif of the maze as an illustration of the Lacanian notion of desire and the unattainable *objet petit a*.

In chapter 3, I analyze *Westworld* in the context of the linguistic domain of the symbolic order, interpreting the hosts' textual coding that also relies on external verbal inputs as a metaphor for the Lacanian conceptualization of the unconscious being structured like a language. Through this allegory of the coded mind, particularly apparent in the relevance of voice commands for managing the hosts, the series portrays humans as the robots' superego, adding a novel element to the literary trope. This leads to a section on the show's motifs of the theme-park and its interactive storylines, in which I examine references to the narrative and ideological structures of society. In this context, I discuss how issues of agency and oppression are articulated in the motif of authentic speech and interpret *Westworld*'s character Robert Ford as a representation of two historical figures: Henry Ford and John Ford. The western-styled theme-park is then read as a reference to both the factories of the former, which formed the model of an entire commodifying industry of mass-manufacturing and mass-consumption, and the influential movies of the latter, which shaped the American self-image in popular re-articulations of the Frontier myth.

Following the imaginary and the symbolic, chapter 4 deals with the remaining of the three Lacanian orders: the real, denotating the indescribable and unimaginable remnants of signifying processes. The hosts' limited perceptive and recollective capabilities illustrate this concept particularly well, with the 'reveries,' a part of the code that makes the hosts access deleted memories, representing the return of repressed traumata. In the second section, I examine the boundary of the theme-park as a bidirectional pathway to the Lacanian real, since both the hosts and the guests try to escape the confines of their structured social realities, hoping to find some sort of greater truth on the other side. The concept of hyperreality, as theorized by Jean Baudrillard and Umberto Eco, helps elucidate this point and leads to a discussion on the self-reflexive narrative mode of the show. I argue that the guests' journeys of discovery in the theme park mimic the explorative watching that a series like *Westworld* aims to provoke in its audience. The chapter concludes with a more general examination of the incorporation of fantastic elements in science fiction and similar non-realist literary genres as attempts to cope with the Lacanian real, since such narratives aim to produce meaning and logical consistencies from impossibilities.

After analyzing *Westworld* within the framework of the three Lacanian orders in chapters 2 to 4, I devote the last chapter to a discussion of the theory of the bicameral mind as a historic predecessor of self-reflexive human consciousness. In the first section, I present the four key hypotheses which Julian Jaynes formulated as a summary for his controversial ideas, and I relate these claims to insights from Lacanian psychoanalysis. The second part focuses on how characters within the show describe the concept of the bicameral mind as a model for the artificial re-creation of consciousness. The last section is a close reading of the finale of *Westworld*'s first season as a portrayal of the breakdown of the bicameral mind and the resulting emergence of the character Dolores as a conscious, self-aware subject. The interpretation of crucial dialogs and visuals in the context of both Jaynes's and Lacan's conceptual frameworks demonstrates how well these paradigms complement each other. As the two theoretical constructs appear to have existed in isolation from each other until the writers of *Westworld* blended them together in their depiction of emergent robotic psyches, the series can be regarded as the first point of contact between them, creating an original and unique synthesis of both in the form of an audiovisual piece of narrative fiction. I argue that it is reasonable to assume intent in this combination, given the many allusions and overt references to corresponding concepts presented throughout this thesis.

As stated above, *Westworld* raises complex ethical and existential questions on the human condition. While my study of the portrayal of an emerging consciousness focused primarily on the latter, there is still much left to explore about the former. The show engages with intricate issues of agency and authentic articulation of oppressed groups and individuals, and thereby also allows for ample discussion in the context of feminist and post-colonialist studies. Furthermore, the series presents problematic relations between humans and their artificial recreations, and it does so at a time of rapid advances in biotechnology, robotics and AI with potentially radical consequences on society and even humanity as such. Although the developments depicted in *Westworld* may not be the most probable and realistic, proponents of transhumanism, as well as more alarmist prognosticators, are likely to find interest in this futuristic narrative as it addresses and popularizes issues that could become very relevant in the course of this century.

In a dialogue quoted in chapter 5, Ford claims that the theory of the bicameral mind may be more suitable as a model for building an artificial mind rather than for understanding that of a human. I argue that quite the opposite is the case for *Westworld*'s representation of an emerging consciousness. Drawing from psychoanalytic theories and complementing

them with an intriguing hypothesis on the historical origin of mental phenomena, the series constructs an insightful image of an artificial mind in order to deconstruct the human condition.

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# Appendix

## Abstract

This thesis studies the portrayal of consciousness in the first season of HBO's ongoing series *Westworld* (2016 – ). At a time when rapid advances in biotechnology, robotics and artificial intelligence (AI) are a reality and the potential future consequences are hard to predict, the show raises complex ethical and existential questions on the human condition. The series illustrates the complex interplay between highly advanced robotic 'hosts' and debauching human 'guests' in a vast, western-themed amusement park. By depicting the androids as victims of violence and as multifaceted, evolving characters, *Westworld* continually humanizes these machines, while dehumanizing their biological oppressors. The show's use of hosts as protagonists and narrative focalizers not only challenges the audience to emphasize with the robots, but also conveys profound insights into the human condition. After contextualizing *Westworld*'s hosts within the long history of fictional automata, I therefore examine their portrayed consciousness along the theories of the French psychoanalyst Jacques Lacan. Within the framework of the three Lacanian psychological orders, the imaginary, the symbolic and the real, I explore the series' depiction of mental processes, dedicating one chapter to each of the three. Finally, I discuss the show's rendition of the bicameral mind, a theory proposed by the American psychologist Julian Jaynes to trace the historical origin of human consciousness. I argue that in drawing from both theoretical constructs, the series creates a unique synthesis of both in its portrayal of an incipient artificial psyche.

## Deutsche Zusammenfassung

Diese Arbeit untersucht die Darstellung des Bewusstseins in der ersten Staffel der laufenden Serie *Westworld* (HBO 2016 - ). In einer Zeit, in der rasante Fortschritte in Biotechnologie, Robotik und künstlicher Intelligenz (KI) Realität sind und die möglichen zukünftigen Folgen schwer vorherzusagen sind, wirft die Sendung komplexe ethische und existenzielle Fragen zur Natur des Menschen auf. Die Serie portraitiert das komplexe Zusammenspiel zwischen hochmodernen robotischen "hosts" und skrupellosen menschlichen "guests" in einem riesigen Vergnügungspark im Stil des amerikanischen wilden Westens. Durch die Darstellung der Androiden als Opfer von Gewalt und als facettenreiche, sich entwickelnde Charaktere, humanisiert *Westworld* diese Maschinen kontinuierlich und entmenschlicht gleichzeitig ihre biologischen Unterdrücker. Der Einsatz von hosts als Protagonisten und narrative *Focalizer* fordert das Publikum nicht nur heraus, sich mit den Robotern zu identifizieren, sondern vermittelt auch tiefe Einblicke in die *conditio humana*. Nach einer Kontextualisierung der hosts aus *Westworld* in der langen Geschichte der fiktiven Automata untersuche ich daher die Darstellung ihres Bewusstseins anhand der Theorien des französischen Psychoanalytikers Jacques Lacan. Im Rahmen der drei Lacanschen psychologischen Domänen, dem Imaginären, dem Symbolischen und dem Realen, erforsche ich, wie die Serie mentale Prozess zeigt, wobei jeder der drei Domänen ein Kapitel zuteilwird. Schließlich diskutiere ich die Theorie der bikameralen Psyche, die vom amerikanische Psychologen Julian Jaynes als eine hypothetische historische Vorstufe zum menschlichen Bewusstsein vorgeschlagen wird. Ich schließe daraus, dass die Serie aus der Kombination von Lacanscher Psychoanalyse und der bikameralen Psyche eine einzigartige Synthese der beiden Ansätze schafft und diese in Form einer entstehenden künstlichen Psyche portraitiert.