Chapter 4

SPACE TOURISM IN CONTEMPORARY CINEMA AND VIDEO GAMES

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Abstract: Contemporary cinema and video games express considerable skepticism toward the colonization of further planets. Contemporary films including *Elysium* and *Passengers* depict space travel as the prolongation of inequalities within human civilization, while others such as *Gravity* and *The Martian* predict a rebirth of the human species through technological advances and space travel limited to a lucky few. Games, meanwhile, explore topics ranging from private spaceflight to the genetic modification required for long-term space habitation, especially in *EVE Online*, which we focus on in this chapter. Although both contemporary films and games celebrate technological advances, these media also show that multiple inequalities lurk behind the celebratory human renewal into a multiplanetary species. **Keywords**: transhumanism; human rebirth; social inequalities; film; video games; simulation

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INTRODUCTION

This book observes a tension between the way private companies envisage space tourism and the social, political, economic, and environmental challenges that come alongside space travel. In films and video games, this tension often brings about ethical and philosophical reflections, while also critiquing or glorifying diverse aspects of space tourism or travel. As films and games offer virtual experiences of space tourism to spectators and players, they produce myths that underlie space tourism as a human undertaking and a business. According to Brent Sherwood (2011), the future of human space flights (to Mars, the Moon, as tourism more generally, or for exploitation of natural resources) builds on various popular myths: the "hero," the notion of jet-setting, the possibility of a green future, and a pioneering spirit. Films and games depict the adventures of humans flying in the Earth's orbit, setting foot or settling upon another planet, and attempting to solve environmental issues through space travel. These representations inevitably feed popular imagination and, as Sherwood (2011, p. 347) points out, can subsequently foment political will and funding.

Through the production and reproduction of the myths that nourish space tourism or travel as an enterprise, film, and games also reinforce the idea of a *human* presence in space as opposed to a *robotic* one. As in road movie and adventure genres, there are many reasons to leave "home": in this case the planet Earth. Whether the quest of the protagonist is to flee a critical situation, or to solve the existing social, environmental, or political problems through settling elsewhere, films and games often question the type of human beings that may be allowed to travel. Super-rich astronauts or half-human half-machine cyborgs appear as characters, which does not leave much hope for ordinary people to be able to settle on another planet. Ordinary humans, it seems, would have to undergo a rebirth at the level of both the body and the body politic if they are to exist beyond the confines of our homeworld.

Films and games feature a recurring tension between humans and technology. Tension also exists between humans' desires to follow their dreams of becoming heroes, pioneers and solving contemporary sociopolitical issues, yet attempting to do so within the limits and consequences of technology on civilization. If the long travel times and lack of atmosphere are immutable obstacles to settling on other planets, the modification of the human body through the so-called nanotechnology, biotechnology, information technology, and cognitive science may offer a chance for this ambitious project to come closer to reality. For transhumanists, the

development of this knowledge would allow a radical change of humanity, a complete redesign of morphology and cognitive powers through technology. In the transhuman view, people would become enhanced cyborgs "indistinguishable from their technology," and perhaps "better at being rational, sensitive and expressive—better at being human" (Roden, 2015, p. 16).

Although transhumanists differ from humanists in their envisioning of "new forms of embodiment" as ways to overcome the constraints of nature and human biology (Roden, 2015, pp. 13–14), both groups share the idea of self-overcoming and humans as a "work in progress" (in the words of the transhumanist philosopher Nick Bostrom, cited in Lemmens, 2015, p. 434). For humanists such as Peter Sloterdijk and Bernard Stiegler, people are technicized creatures in themselves, "fundamentally technological […] right from the very start, being born from technology as […] the effect of the becoming-technical of a primate life-form" (Lemmens, 2015, p. 436). In space travel films and games, technology is tantamount to bring humans into space, both as heroic explorers and as pioneering settlers. If technology is essential to the spatial future of the human species, films and games disagree on whether it will be used as a *tool* or as *intrinsic* to our beings. The uneasy relationship between humans and technology even makes us question the future of the Earth and humanity, and in particular whether becoming a multiplanetary species would solve the social, political, economic, and environmental problems on the Earth or extend them into space instead. These are questions that this chapter explores in both films and video games.

HUMANITY'S SPACE FUTURE IN FILMS AND GAMES

Space Travel Films

Stanley Kubrick's *2001: Space Odyssey* (1968) has often been described as the science-fiction film that determined and defined the specific genre of *space travel* films. While his film came out in an era when the Apollo tests were taking place and as human beings were about to land on the Moon, it was vastly ahead of its time both in the technologies it displayed and in the humane mental expressions that Kubrick gave to HAL, the computer "in charge" of the space mission. The film certainly nourished popular imagination regarding space tourism and led the airline company Pan Am (featured in the film as operator of the aircraft) to sell tickets to space

before having even built the spacecraft (in a comparable manner to Virgin Galactic today). Whereas in 1968, Kubrick presented space travel, technologies, and scientific progress in a ceremonial way—with a soundtrack that has become universally known and used to produce a grandiose effect—the films that came out the next decade, such as *Close Encounters of the Third* Kind (Steven Spielberg, 1977), *Star Wars* (Georges Lucas, 1977), and *Alien* (Ridley Scott, 1979), took space travel for granted.

In the 1970s, space already became a "décor" for getting in touch with other civilizations, for dramatic battles or for scientific work. Similarly, *The Hitchhiker's Guide to the Galaxy* (Garth Jennings, 2005), adapted from Douglas Adams' 1978 BBC radio series and novels (1979–1992), treats space as already well-traveled. *The Hitchhiker's Guide to the Galaxy* figures as the only film (to our knowledge) to thoroughly bring space travel as far as space tourism. From the 1980s onward, however, after government funding for space exploration had decreased, the genre started to question our capacity to live in or travel to space destinations, let alone for pure pleasure.

If government space agencies have historically showed more interest in scientific exploration and colonization than for tourism, private companies have recently taken up the challenge to build a space tourism sector in order to subsequently fund colonization. In various talks, interviews, commercial videos, and documentaries, the billionaire founders of Virgin Galactic (Richard Branson), Blue Origin (Jeff Bezos), and SpaceX (Elon Musk) assert their goals of developing space tourism as a means to fund space travel, and further exploration and colonization. In the race to make space a touristic destination, Virgin Galactic aims to produce a reusable commercial spaceplane, which would make it affordable to more people and launch satellites at a cheaper price than is feasible now. Jeff Bezos' grand project, beyond bringing tourists into space in Blue Origin's reusable rocket system, is to facilitate the development of space exploration and ultimately relocate heavy industries in outer space (Beard & Cox, 2017). However, while Bezos recognizes that humans are depleting the Earth of its resources while they are abundant in the Solar System, he does not consider the potential damage and contamination that this industrial relocation could cause to near-Earth space (which satellite debris is already causing; Smith, 2000, p. 11). Similarly, SpaceX's founder, Elon Musk, wants to transform humans into a "spacefaring civilization and multiplanet species" (SpaceX, 2017, n.p.). For Musk, it is important for the survival of the human species to settle on other planets and on Mars as a priority.

Looking at the promotional videos of Virgin Galactic (but also at Bezos' and Musk's discourses), it appears that the rhetoric of an almost childlike

dream is at the heart of their projects. While enchanting music produces an atmosphere of a fairytale, the videos on the Virgin Galactic's website and YouTube channel also display a certain (albeit limited) amount of technical and engineering knowledge, giving thus the impression that space tourism will soon be a reality rather than solely a fantasy. Although their marketing strategies consist of a mix of inspiration, impressive engineering, and claims over the protection of the Earth, these companies rarely discuss the environmental impact, psychological consequences, and social and physical selectivity linked to the development of space tourism, or space travel more generally. If in terms of machinery it is Branson's, Bezos', and Musk's big dreams that are driving the space tourism sector forward and potentially bringing the human species closer to multiplanetary life, contemporary cinema still points at the many political, social, ontological, and scientific challenges for the conquest of space to become a reality.

Since *2001*, sci-fi films have tackled many different issues related to space tourism: from the supremacy of machines and vulnerability of the human body, to problems of property, colonization, citizenship, and international politics. They have explored a variety of forms of travel or tourism such as scientific explorations, medical tourism, and interplanetary travel. However, the diverse subgenres and esthetics of these films seem to share the common idea of a "rebirth" through space travel. Traveling to space becomes an opportunity to be reborn as a species, create a new home for humans, and find a replacement for an Earth that has become contaminated, overpopulated, and inhospitable. Starting with Kubrick's film, the image of a reborn or newborn human appears as a motif of space discovery and colonization.

In *The Hitchhiker's Guide to the Galaxy*, it is the Earth itself that is being reborn from a "backup." Everything on the Earth is reconstructed as it was before the Vogons demolished it (the Earth being in the way for the construction of a space highway through the Solar System). As mentioned earlier, the film can be described as the only one of the genres that stages genuine space tourism, that is, travel for the sole purpose of leisure and experiencing other planets' civilizations. Space tourism here serves to have people realize that the Earth is probably the best planet for humans. The film borrows from the "road movie" genre, using the concept of home as the place that one both leaves to start a quest and comes back to as a grown-up individual. Home is what allows the protagonists to preserve their ontological foundations while retaining the privilege of traveling and discovering themselves through remote worlds.

As a comedy, *The Hitchhiker's Guide to the Galaxy* does not take itself nor the science of space exploration seriously. Instead, the characters make

use of teleportation and "magical" hitchhiking to travel in a way that reminds us of the *Star Trek* and *Star Wars* series. What is most notable in the film is the presence of many species—with their own language, customs and culture—and the relative absence of hierarchy between them. This situates humans as a species among many others and puts its supremacy and the very idea of colonization in question. Governments of the different planets must learn to discuss and negotiate in a friendly manner, and individuals traveling to other planets must adopt the humility of tourists and rely on a guidebook to help them decode the habits and languages of other populations. Similarly, robots and computers have a life of their own and are capable to decide whether to help humans. All in all (and this is the take-home message of the film), everything is a matter of point of view and how we perceive home, tourism, and others. While remaining light in tone, the film relativizes the notion of home and planet ownership and insists on the necessity to remain humble before the universe and preserve the diversity of the species on the Earth.

The environmental and social issues that emerge from the idea of colonization in *The Hitchhiker's Guide to the Galaxy* appear throughout the sci-fi genre of space travel; traveling to space often amounts to an ontological and/or sociopolitical rebirth of the human species. In one way or another, all films that tackle space travel or colonization reimagine Kubrick's final images of the dying and newborn human in *2001*. As film theorist Michel Chion writes about *2001*, *la mort est renaissance* (2008, p. 217): in order to successfully establish a life in space, human civilization as we know it must be reborn, learn from its past mistake and build anew. In an attempt to understand this motif of rebirth in cinema and games in light of the current space tourism aspirations, we will deal with two groups of recent "serious" films (as Chion, 2008, calls them), that is films that display a certain degree of realism and scientific plausibility. While the first group of films (including *Gattaca*, *Elysium*, and *Passengers*) situates the rebirth of the human species in the social, political, and ontological transformations "needed" before settling in space, the second group of films (including *Moon, Gravity, Interstellar*, and *The Martian*) each feature single protagonists who are "reborn" in space and must learn to handle its various practical challenges.

Gattaca (Andrew Niccol, 1997), *Elysium* (Neill Blomkamp, 2013) and, to a lesser extent, *Passengers* (Morten Tyldum, 2016) all present space travel as a dystopia by exaggerating several sociopolitical aspects of human civilization. In these films, the rebirth metaphor posits the drastic transformations needed before expanding human life into space. In his excellent

history of the sci-fi genre, Chion (2008, p. 222) suggests that recent space travel films express the impossibility of both leaving and remaining on, the Earth. In addition to their sci-fi characteristics (which the second body of films entirely rely on), these three films borrow filmic forms from other genres, namely the 1930s American *noir* (*Gattaca*), the war genre (*Elysium*), and Hollywoodian romantic comedies (*Passengers*). By blending cinematic genres, these films place space travel at the margins (contrary to the films of the second group) while bringing forward other aspects of human society.

In spite of their very different filmic aesthetics, *Gattaca*, *Elysium*, and *Passengers* link space tourism to three main social concerns: the environmental-medical (what are the consequences of environmental degradation on health, and how can machines solve them?), the socioeconomic (who can travel, and is health the future commodity and determining factor for space tourism?), and the political (is space tourism dependent on the merging of private and public sectors?). This last question is particularly interesting in the current context where the private is overtaking the public sector in the conquest of space, with SpaceX's extravagant launch of its reusable rocket Falcon Heavy at the beginning of 2018. The political aspect of a possible future in space is also the least challenged in these three films, which preserves capitalism and patriarchy as the dominant ideologies.

We wish to concentrate here on the medical, social, and political issues of space tourism through the blockbuster *Elysium*, which is thematically and esthetically the closest to the video game *EVE Online*, which will be discussed in the second part of this chapter. In 2154, as the Earth has become overpopulated and polluted to the extreme, the richest in society have constructed Elysium, an orbiting open "green" space station, in order to preserve their lifestyle. The difference between the two habitats (the Earth and Elysium) is primarily racial and economic. Blomkamp's film plays on stereotypes to easily convey its message; while the richest (of mostly French descent) enjoy a luxurious, safe, and healthy lifestyle, the poorest (of Spanish and South American descent) are left on the Earth to work for the profit of the former and die of poor health and unhealthy living conditions. The dystopic narrative of the film is based on a hyperbole of current immigration policies, social, and racial discriminations and seems to point to the profound revisions needed in order to give the Earth a fresh start.

While playing on popular fears (overpopulation, robots in control of the administration and the police, and no human and social rights), the film

suggests that space tourism or interplanetary colonization would not generate a rebirth of the species (or the Earth itself) as other space travel films seem to suggest (such as *Interstellar* or *The Martian*). In Elysium, both the overpopulation of the Earth and its subsequent dreadful environmental conditions and disparities between people appear inevitable (a dystopic situation that is presented at the outset of the film). Rather than ensuring a renewal, delocalizing some of the Earth's inhabitants on the orbiting habitat Elysium while leaving the heavy industries (and the poorest people) on the Earth (contrary to what Jeff Bezos suggests) prompts a state of war: the orbiting station becoming thus the ultimate expression of social injustices and political abuse.

The excessive violence of the film and its gray and dirty *mise-en-scène*, with narrow dark corridors and dangers lurking around every corner of Los Angeles, situate it in the war genre. The genre calls for a dichotomy opposing allies on the Earth against enemies on Elysium, the poor versus the rich. To change the order of things (while pushed by an individual motivation to stay alive), Max (Matt Damon) transforms into a cyborg, half-human half-machine (a name and situation that resonate heavily with the injustice-fighter and main characters of the *Mad Max* series of films). This transformation allows him to defeat the robots in charge of the protection of Elysium's citizens and the subjugations of the citizens on the Earth. As in *EVE* and other video games, the protagonist requires this ontological transformation to engage in a fair combat. While machines in the sci-fi genre tend to allow humans to travel to or settle on other planets, they also often reinforce and protect the fragile human body, or even ensure the (almost) infinite prolongation of human life through cloning (in *EVE* and in the film *Moon*) or a regenerating capsule (in *Elysium*, *Passengers*, and *EVE*).

Although technology in *Elysium* is to remain at a machine stage maintained under human control (such as the police robots), it also integrates and benefits humans both physically and cognitively. If the film celebrates transhumanist ideas, such as the technological enhancement of humans' physical force, life-span, and cerebral capabilities, it also warns against the severe social inequalities that technology would intensify in the process. Similar to *Gattaca, Elysium* suggests that a transhumanist future in space would intensify social-class divisions and create a planetary divide between "enhanced" and "unenhanced" humans. Pure robots are devoid of emotions and free will and form a third category, which is subjected to the power and will of enhanced humans (the citizens of Elysium). This anthropocentric division opposing humans to nonhumans highlights the film's failure to formulate a thorough critique of the dualisms (of gender, race, and social class) within which humanity is currently trapped.

Elysium, *Passengers* and *Gattaca* take technology and space travel for granted, and feature political and medical, rather than scientific challenges, facing humanity. In Elysium, space travel occurs mostly as "medical tourism." While the high social class—who generally benefit from medical treatment in foreign lands—already lives on Elysium and has unlimited access to regenerating capsules, the sick lower-class Earth's citizens need to go on an illegal and very expensive journey in order to reach a regenerating capsule before being killed or forcefully repatriated to the Earth. As Max and the "allies" defeat the "enemies" on *Elysium* at the end of the film, however, the social and political system is reborn through a communist kind of health care. What is most paradoxical about the film is that the act of converting all the Earth's inhabitants into citizens of Elysium, giving them thus the same unlimited access to health care (and potentially an infinite prolongation of their lives by regenerating machines), aggravates—rather than solving—the problem (the overpopulation of the Earth) on which the whole narrative is founded. *Elysium* reinforces the pioneer myth, which Sherwood recognizes as supporting the idea that human beings could settle the Moon and become a two-world species. In spite of Max's social victory against the elitism of *Elysium*, the film neither eradicates nor deeply challenges the capitalist and patriarchal status quo. In *Elysium*, as well as in *Gattaca* and *Passengers*, citizens remain divided between social class, ethnicity, or health condition, and women are either mothers or victims to be seduced, saved, and protected, or abusive and unsympathetic characters.

If traveling to or settling in space offered a potential renewal (by alleviating the Earth of some of its population and contamination), it fails to transform the social and political organization of the human species. Rather, *Elysium, Gattaca*, and *Passengers* suggest that only the fit and healthy would be able to travel into space. While the technological modification of bodies (through hibernation, healing, resurrection, or genetic selection) may ensure an ontological rebirth for the human species, it may also exacerbate social dysfunctions. For these films, the development of space tourism and the technologies linked to it are intrinsically dependent on current social, medical, and political issues, which must be addressed for space travel to become a renewal rather than a site of potential destruction.

In opposition to the dystopia presented in *Elysium*, other films of the last decade, such as *Moon* (Duncan Jones, 2009), *Gravity* (Alfonso Cuarón, 2013), *Interstellar* (Christopher Nolan, 2014), and *The Martian* (Ridley Scott, 2015), aim at scientific accuracy (while also retaining narrative appeal) and focus on the scientific practicalities of living in space. Perhaps, the most interesting aspect of these four films is the solitary travel of their

skilled protagonists; these films place emphasis on the very ability to live in, or even deal with, space. This seems at odds with the discourses of Richard Branson, Jeff Bezos, and Elon Musk, according to whom space tourism would soon become available to the general public (as discussed in Chapter 5, this discrepancy is also present in the current use of virtual reality, as possibly the only "travel" accessible to the masses). Whereas this chapter does not allow the thorough analysis that these films deserve, we want to note the touristic experience that they offer and their presentation of space travel as a rebirth. As spectators of these films, we travel into a poetic and artistic vision of space. Viewers sit in awe of majestic landscapes, natural phenomena, and expansive human knowledge and technology, all serving a narrative, touristic, and educational purpose. While these four films portray the fragility and insignificance of human beings in front of the immensity of space, they point to the scientific and technological progress that might, one day, help humans to settle in space.

In contrast to the first body of films considered, *Moon, Gravity, Interstellar*, and *The Martian* return to a more realistic and humanist depiction of space travel that does not merge cinematic genres. While in *Gattaca*, *Elysium*, and *Passengers* private companies (or states functioning like private companies, such as in *Elysium*) initiate and ensure space travel, in the second group of films, governmental agencies are the ones that lead space expeditions. Whereas the first group somehow warns against the economic and political supremacy of private companies over state agencies, the second group of films tends to express a reserved admiration toward governmental (and more generally human) progress with regard to space exploration. As "realistic" films of science fiction (albeit somewhat an oxymoron), *Moon, Gravity, Interstellar*, and *The Martian* demonstrate great interest in the practicalities of space travel and in the human desire and power to make it a reality, which subsequently foment a continual public interest in aeronautics and astrophysics. Some aspects of their aesthetics in fact remind us of the grandeur of *2001: A Space Odyssey*, and of the utopia and rhetoric of the childhood dream used in the promotional videos of Virgin Galactic, Blue Origin, and SpaceX. Contrary to *Elysium, Passengers*, or *Gattaca*, in these films, the rebirth of the species is about to occur *through* space travel and colonization, not prior to it.

The image of the reborn human appears in different forms: through cloning and mental programing (in *Moon*), as a presence in several time-space dimensions (in *Interstellar*), and as near-death experiences and learning processes (in *Gravity* and *The Martian*). In *Gravity* (Alfonso Cuarón, 2013), images of the fetus and newborn are omnipresent, both as

individuals and as a species. When Dr Stone (Sandra Bullock) imagines the death of her colleague Kowalsky (George Clooney) disappearing into orbit with his detached (umbilical) cord through the window of the spaceship, it is the death of her own child that replays in front of her eyes while she remains helpless at the wheel of the spaceship (similar to how she was driving her car when she got the news of her child's death). In spite of the many obstacles that Dr Stone encounters (among them a fire, space debris, and loss of communication), she lands safely back on the Earth, crawling out of the ocean to the beach and remaining in a fetal position (like several times in the film) before getting back on her feet. This ending acts out both the evolution of the human species from aquatic to terrestrial stage, and her own physical and psychological rebirth as a human being coming back from a difficult journey in zero-gravity. The film alludes to various questions that arise regarding space travel, namely complicated communication and transport, the extreme solitude (explored in *Moon* to a further extent), the physical unsuitability of the human body to live in space, and the (inter)national aspects of colonization and responsibility with regard to the spatial environment.

In contemporary cinema (and contrary to space companies' promotional videos), life in space often manifests as a distant dream that is not yet ready to be fulfilled. Among recent films, *The Martian* (Ridley Scott, 2015) considers space travel in the most optimistic light. The "resurrection" of the protagonist Mark Watney (Matt Damon again)—thought dead and left alone on Mars—gives a unique opportunity to test long-term life on the planet. In spite of Mars' thin atmosphere and natural disasters (albeit fictitious, see Gibney, 2015), the film argues that colonization is possible as long as we can grow crops in a protected environment. In opposition to most sci-fi films, nobody dies in *The Martian*, and Mark Watney, the crew that left him behind, and NASA ground crew solve the challenges that arise step by step in a Cartesian manner rather than through successive destructions such as in *Gravity*. Human knowledge in fact becomes the main character of the film.

Contrary to the transhumanism of *Elysium, The Martian* celebrates the potential of humans to grow and reach their objectives of exploration and conquest thanks to their own capabilities of mastering technology. Instead of a physiological transformation of the human body through technology, determination becomes the key to space travel. *The Martian* in fact overemphasizes the humanist ideals of reason, progress, and individualism (although for the supposedly common "good" of colonizing Mars), at the cost of a renewal of humans' ethics and social relation. The determination

to save the stranded astronaut (and arguably the project to explore Mars) even crosses national borders as the Chinese space agency unexpectedly shares their technologies with NASA, perhaps in view of building a path for future collaboration and joint imperial conquest of space. Whereas this element of the narrative could be seen as a necessity for international collaboration to explore Mars, Ridley Scott decided to replace two Asian-American characters of the book from which the film was adapted by black British actor Chiwetel Ejiofor and white blonde actress Mackenzie Davis, which brought upon him the accusation of whitewashing (Davé, 2017). As the sci-fi genre (including the selection of films in this chapter) and the companies forming the space tourism sector today demonstrate, the conquest of space remains very much, and often uncritically so, white, patriarchal, and American centric.

Without much deviation from normative Hollywoodian happy-ending films, the white male protagonist of *The Martian* Mark Watney undergoes a twofold rebirth: first as a stranded astronaut and a botanist learning how to ensure his own survival with the least possible means and, when returned to the Earth, as a university professor encouraging students in astrophysics to pursue the conquest of space. By offering solutions to transport and international collaboration, the film appears as a response to those like *Moon* and *Gravity*. *The Martian* intentionally positions itself as an optimistic scientific exploration of the technological resources available for multiplanetary life. Rather than fighting all the dangers that space presents like Dr Stone in *Gravity*, Mark Watney builds a self-contained greenhouse in order to grow potatoes on Mars and survive, makes small videos of himself to endure solitude, and restores an old machine to establish communication with the Earth. More than machines like in *Elysium* or *EVE*, human skills and ingenuity are above all at the core of success in *The Martian*. If *Elysium* and *EVE* consider that machines and cyborg transformations are a prerequisite for space travel, *The Martian* (like *Gravity*) places emphasis on human reasoning, machines remaining mere tools created and controlled by humans in order to achieve their goals. Historical headlines and the ideal of a fresh start on a new territory provide the rationale for a human (as opposed to a robotic) spaceflight in *The Martian*. Astronauts who put their lives in danger build upon and reinforce the myths of the hero and the pioneer that Sherwood (2011) identifies regarding human space flights. The bright and warm orange and green colors create optimism and emphasize the positive (almost utopian) attitude of the characters in *The Martian*. When watching Scott's film, it seems that Enlightenment values such as reasoning, determination, and confidence (similar to the ones displayed by the

leaders of the space tourism sector) form the recipe to convert human beings into a multiplanetary species.

While films like *Elysium* and *Gattaca* represent space travel as a potential cause of further social and political issues, both *Gravity* and *The Martian* depict it (almost purely) as a scientific challenge, which is either hardly or highly feasible. Although they portray space travel as requiring cross-border collaboration, *Gravity* and *The Martian* in fact ignore the political issues that are likely to arise, and only tackle indirectly the environmental impact of space colonization (by alluding to the nuclear waste left on Mars in *The Martian* and the dangerous orbiting of debris in *Gravity*). Similarly, very few films, except *Moon* and perhaps *Passengers*, deal with psychological disorders such as the profound and problematic solitude of astronauts and future space tourists. Compared to earlier space travel films (such as *2001: A Space Odyssey*) and video games (as we will see below), the narratives of contemporary space travel cinema have left behind depictions of long-lasting trade and leisure in space, and now mostly focus on the capabilities and problems of space travel. What a number of space travel films, such as *Gravity* and *The Martian*, offer to the space tourism sector, however, is to go along their dream rhetoric by creating esthetic and touristic experiences that both inspire and reinforce belief in the renewal that space travel would bring to the human species.

Video Games and Interactive Media

We turn now to considering space tourism, and space travel more broadly, within video games. As a growing and increasingly dominant medium of media production, video games are a major site at which future visions of space tourism can be displayed and directly interacted with, allowing players to experiment with modalities of extraplanetary transit. Virtual worlds offer the ability to teach us about new and possible-future intersections between society and technology (Boellstorff, 2015); they let designers release immense digital spaces, ranging across planets, solar systems, and even galaxies, limited only by imagination and technical constraints. In turn, with the continuing improvement of computing hardware specifications and the refinement of programing methodologies, the virtual universes we will be able to explore are likely only to expand in their size, scope, and detail. This is a valuable moment to take stock of the kinds of space tourism that games have so far offered their players and what imaginaries of the industry's future are being directly *experienced* by millions of gamers every day.

A complete list of video games involving space tourism or space travel is far too lengthy to analyze in a single chapter, but we can identify a small number of major titles in this area: games that have achieved international popular and critical recognition and also offer the most detailed and comprehensive perspectives on how space travel might emerge. The first major release that attempted to deal seriously with the topic of space travel is perhaps *Elite* (1984). This was a space-based combat and trading game set in eight galaxies of 256-star systems, each of which was navigable through a range of spacefaring vessels. During the player's travels they would encounter alien species, interstellar police and enforcement personnel, and a range of natural resources and potential in-game activities.

In the more recent *Mass Effect* (2007–2012) series, players captain the *Normandy*, a top-secret military-exploration vessel, in an epic space-opera narrative that takes place across years, uncountable solar systems and planets, and around a dozen fully developed alien races with their own cultures, societies, and religions. Space travel here expresses the cosmopolitanism of the imagined universe, trade and cultural exchange, and also military power. In the *Dead Space* series (2008–2013), immense spacefaring mining vehicles with little interest in comfort or leisure dominate the game's aesthetic scope, with interiors and exteriors that ruminate on the pragmatics of spaceflight, the challenges of surviving in zero-gravity, and the struggle of humanity to become a multiplanetary species. Alternatively, a game such as *No Man's Sky* (2016) is about the emancipatory beauty of privatized space travel, in which one controls a character able to explore a staggeringly vast algorithmically generated universe (with stars numbering in the billions); but the variety of the worlds that can be explored, not the means that allow this exploration, is the focus.

All of these games display detailed futures of space travel, but there is one game that stands above all others for the depth of its interstellar imagination and its focus on a "rebirth" of the human race heralded by affordable space travel. In this section, we will focus on one of the most striking, famous, and often controversial depictions of the future of space travel, both for leisure and for other purposes, to be found in video games: that of *EVE Online* (2003–present). In *EVE*, players control a human character, normally within a spacecraft, as they carry out whatever actions interest them in a vast virtual universe with several hundred solar systems, thousands of planets, tens of thousands of moons, and hundreds of thousands of players. In contrast to many other games which portray solar systems and the stars, planets and other structures or natural features that occur within them, the solar systems one explores in *EVE* are truly immense in scale.

New pilots find themselves flying smaller vessels, such as "frigates" or "cruisers" which, although still significant in size (the smallest being the size of a commercial airliner) are dwarfed by the vessels more experienced players can pilot, such as "titans," which stretch to around 20 kilometers in length. The player is able to equip their ship with a tremendous range of "modules" that enhance or alter its abilities and capacities in various ways: one can boost its speed, its offensive or defensive capabilities, cargo capacity, or any number of other parameters. All of these serve to protect and assist the player's actual human character, known as a "capsuleer," who is buried deep within each ship they pilot; as we will show shortly, the human individual whom the player controls, is otherwise both harmless and defenseless, and it is this state that creates one part of the space tourism interest that *EVE* has to offer.

When remaining in the central or "high-sec" (high security) solar systems of the game universe, players are generally protected by an AI-controlled police force, who pilot powerful vessels, enforce the game's very few rules, and cannot be evaded or prevented from carrying out their jobs. However, the further out from these core systems the player ventures, the less this police force protect them, until upon reaching "null-sec" (no security) systems the player is entirely on their own, and at the mercy of vast player-controlled corporations who continually vie for dominance in these wild, uncontrolled areas of the virtual universe. Owing to this freedom *EVE* is also noteworthy as an "unbounded" game (Carter & Gibbs, 2013, p. 47), which is to say a game where an unusually broad set of activities are permitted for players. Players are actively allowed to lie, cheat, and deceive others, as well as take actions that will fundamentally shift the play experiences of others, which in most massively multiplayer games would be frowned upon or entirely prevented. Although only a brief summary, it should be clear from this description that *EVE* is unique, vast in scope, deep in complexity, and concerned with both gameplay and the creation of a convincing universe where space travel has become *de rigueur* and accessible to many.

Within this unusual and often brutal universe, there are two elements of space travel (which, in *EVE*, is closely interwoven with present notions of space tourism) which we think are valuable to consider. Both of these elements, as with our previous analysis of cinema, point toward an emphasis on the role of "rebirth" in contemporary media depictions of space tourism. The first involves the portrayal of the lives of space pilots in *EVE's* universe, and the sacrifices and compromises—mechanical, cybernetic, biological—they must be willing to make in order to explore the universe.

This element foreshadows the possibility of a profound ontological rebirth for the human race, wherein people become *something* quite new in order to take advantage of space travel. The second is the profound shift *EVE* hypothesizes will take place in human society, economies, and politics as a result of affordable space travel, shown through the mutual constitution of *EVE's* politics, social structures, and technologies of spaceflight. In this second case, a rebirth of human society is promised with the advent of widespread public space travel, of which space tourism is a central element, and suggests a deep relationship between space technology and the sociopolitical dynamics of human civilization. As such, space travel in *EVE* shows a rebirth of both the body, and the body politic, in both cases leading to quite profound shifts in human experience.

We now turn to the role of the human in *EVE*. Although almost all of one's time as a player entails controlling spacecraft, strictly speaking the player is controlling a human character, who is in turn controlling the vessel. The characters one plays as in *EVE* are what we might call symbiotic humans. Although a player's character is able to get up, walk around, and perform many of the functions we would normally associate with the baseline human condition, characters are paired fundamentally with two other technologies. The first is the "capsule," a small, minimalist spacecraft resembling an "escape pod" which is devoid of any leisure or luxury and serves, effectively, as nothing but a self-contained life-support system for space travel.

The second is a cloning technology, which enables the player's characters, if (or far more likely in *EVE*, when) killed, to return to life at a space station where their cloned body has been stored. This has led to a range of behaviors by players to manipulate their capsules and to the possibility of multiple clones to be used in different contexts; because human bodies can also be enhanced, different cloned *copies* of the player character can be developed by the player, possessing various strengths and weaknesses. However, all of this, in a narrative sense, is contingent on being comfortable with the reproduction of one's body and memories, and the synthesis between these bodies and the capsule hardware supporting it, making spacefaring humans functionally immortal but at the cost of the uniqueness and distinctiveness of the single, once-lived life. As a vital part of the viability of personalized individual space travel, in *EVE* the human race has to undergo a rebirth from individual living forms into something perhaps like a *hydra* (a functionally immortal microscopic organism) or a fungus, able to produce perfect copies of themselves in order to weather disaster, expand its reach, and survive in the space environment. Although

EVE does not explore the psychological or social implications of this shift much outside of the game's background fictional detail, which few players actually engage with, it suggests a form of biological rebirth appropriate to space travel which would no doubt bring with it profound social implications.

EVE, therefore, emphasizes an interesting dichotomy: the tremendous potency and technological sophistication of the vessels the player flies around in against the almost complete defenselessness of the capsule, and the human within, once a ship is destroyed. When a ship is destroyed, the capsule's only "move," so to speak, is to flee the site; the capsule is slow, lacking in weapons, and its armor paper-thin; it is consequently easy prey for those who might wish the player's character harm unless it successfully flees. In turn, *EVE* also suggests that this fundamental frailty of humans in the face of extraplanetary space will necessitate some of the less-than-appealing compromises with technology.

Within the capsule, one's human character is shown as being hooked up to pipes, tubes, consoles, and numerous other technological devices that allow for indefinite survival; additionally, because it is so likely that the character *will* be slain, cloning technology has been developed to replace the physical form of the daring space traveler. *EVE* thus suggests that, unlike air travel, space travel will *always* be dangerous, due to both the inherent threats of the environment and the political structure that has been mutually constituted alongside normalized spaceflight (more on this shortly). This challenges claims that space tourism or private spaceflight will eventually be akin to air travel, arguing instead that despite human mastery of technology, the dangers of the two environments (and the political and economic models associated with them) are profoundly different. *EVE* also implies that the pressures on the human body in space travel are not just qualitatively distinct from other modes of transportation (which we know to be true), but also that these pressures can only be overcome through the fusion of human and machine. This, once more, challenges the techno-utopian assertion that all challenges of the extraplanetary environment (on bone density, blood pressure, and the like) will eventually be fixed through non-invasive technological means. *EVE* suggests that these can be fixed, but only through a level of cybernetic melding likely unacceptable to the majority of humans walking around today.

The second element in this rebirth is the shift in sociopolitical formations depicted in *EVE* as a result of affordable space travel. The shift is manifested in numerous ways—a new form of democratized space exploration, a distinctive economic system, and new dominant political structures that

have emerged (without deliberate intervention from the game's developers) within this "unbounded" virtual simulation. We begin by considering the democratization of space exploration; there are numerous examples in the game of this process, but a most striking one came from an addition implemented into *EVE* almost a decade ago. In the *Apocrypha* update in 2009, the universe of *EVE Online* was expanded by the arrival of a new range of solar systems for players to explore, known as "wormhole systems" or "W-space."

Until the appearance of wormhole space, players existed in what was retrospectively known as "known space" or "K-space." These were solar systems linked across a complex and expansive nodal grid, and as described earlier, they ranged from safe systems to systems where only one's allegiance to the ruling corporation is sufficient to (generally) keep one's ship intact. By contrast, wormhole space came with a set of interesting characteristics. It could only be entered or exited through wormholes, which would regularly appear and disappear outside of player control; these would sometimes link to other W-space systems, and sometimes to K-space systems, profoundly upsetting the fixed topology of the in-game universe and creating an ever-changing network of potential travel routes. Whereas players visiting systems in K-space were always told how many other players were inhabiting that system (although not their locations), visitors to W-space were left entirely in the dark; one could be the only capsuleer in a certain system, or there could be a vast fleet of battleships waiting around the next moon. Lastly, a number of locations in W-space were replete with rare and unusual items, connected deeply to the game's overarching mythos, and could only be located through the use of the game's "exploration" system: the deploying of sensors and the triangulation of points of potential interest. This can be done by any player who equips their ship appropriately; the resources needed for exploration are strikingly cheap. It requires some level of understanding about coordinate systems and a level of spatial reasoning, but it is nothing a player could not quickly master.

These elements of exploration indicate *EVE's* understanding of the place of the individual in the outer space of the future (space tourism), and the role of corporations and larger bodies (space travel more generally). In exploration in *EVE*—foremost in wormholes—the game speculates about how space travel will intersect with space exploration. To date, space *exploration* (and space science as a whole) has remained profoundly divorced from space *travel*. Space exploration and space science are domains of national agencies and carried out in the pursuit of globally relevant scientific discoveries, while space travel and space tourism are understood

primarily as being something for use by individuals who would pursue these space activities for the purposes of leisure and personal enjoyment (or rapid transport) rather than a greater intellectual benefit for the human race. In *EVE*, however, space exploration and space tourism become unified into a single whole, foreshadowing the possibility of a future where the lowering of costs for space technology leads to exploration and science conducted by a wider public. This could be seen as a sustained, concentrated task, or even as a passing, trivial interest, a distraction, something to be done by the wealthy amateur (akin to much of the travel performed by Western Europeans during the "age of exploration"). *EVE* thus combines these two forms of the present real-world space industry into one, suggesting that space exploration and space science might undergo profound democratization in the future, reshaping how knowledge is acquired.

Next, we consider the roles of trade and business in the *EVE* universe, what these can show us about space travel, space tourism, and the role of the individual in the space environment. As noted previously, one of *EVE's* defining features is its complex and dynamic in-game marketplace. Players are able to buy and trade a wide number of goods; set up "buy orders" and "sell orders" as one would in real-world markets; view graphs and charts that relay to the viewer the progression of the prices, demand, and the geographical purchasing patterns, of particular commodities; and the like. A central part of the market is the moving of items within the space of the game world. Unlike many massively multiplayer games where commodities are, in essence, intangible, and in many cases can simply be "sent" to a player (wherein that item magically finds its way to the other player), in *EVE* items and resources must actually be shipped from one system to another.

In order to do this, players utilize vessels ranging from small cargo ships up to vast and monolithic freighters that ferry huge volumes of cargo slowly, gradually across the galaxy. CCP Games, that produced *EVE*, boasts a professional economist on their staff who assists with studying and refining the in-game economy (Schiesel, 2007), so this element is central to the game's overall presentation, and its depiction of space. Just as the aesthetic and thematic elements of the spacecraft emphasize industrial pragmatism, the possibility of space-based trade focuses on the difficulty of trade, the everyday requirements of such exchanges, and the expansion of contemporary capitalist forms into a space environment.

The third element that shows us the rebirth of human society afforded by regular personal space travel, on both the macro- and the microscale, is the political–economic climate depicted in *EVE*. This climate is

simultaneously enabled by the form of space travel imagined within the game but also shapes the kinds of space travel that are available to players and, in a fictional sense, what kinds of space travel are understood as being the most valuable or the most viable. Numerous scholars have noted that *EVE* can be readily understood as a "neoliberal project" (Carter, Bergstrom, & Woodford, 2016; Johnson & Mejia, 2017; Taylor, Bergstrom, Jenson, & de Castell, 2015); its powerful economic simulation, complete with a set of game mechanics that encourage an almost anarchocapitalist approach to business, loyalty, territorial acquisition, and military conflict, have become some of the game's more famous and defining features. *EVE* is a game that rewards and praises "unfettered capitalism and the pleasures and powers of/in accumulation" (Taylor et al., 2015, p. 380). This is performed through the use of spacecraft traveling around a spatial structure (the extraplanetary environment) that enables a profound freedom. The expansionist push of the games' politics is well reflected by this means of travel, while the scarcity of boundaries or borders that can be easily imposed around "space" suggest a political structure which emphasizes individual achievement, competition, and the striving for the accumulation of wealth, territory, and other symbolic markers of possession.

To summarize, *EVE* posits a reciprocal determination between spaceflight and the social structure that surrounds, enables, and is constructed by it. Space travel of the sort depicted in *EVE* seems ideally suited to a competitive universe of extreme, unfettered capitalism, while such a tacit political consensus encourages the construction of military and trade vessels, the constant expansion of human reach, and routine contests for supremacy. *EVE* thus assumes existing neoliberal forms and explores their potential future conflation and entanglement with personalized space travel, resulting in a future both recognizable and more intense than the neoliberal world we presently inhabit.

In this section, we have examined the depiction of space tourism, and space travel more generally, through *EVE Online*, a massively multiplayer video game. *EVE* offers, perhaps, the most detailed vision of space travel to be found in any video game. In a tremendously complex virtual universe with hundreds of thousands of players, spacecraft are used for battle, for trade, for exploration and science, and much else besides. Although in many cases these purposes require very different vessels used in very different contexts, *EVE* also addresses the convergence or synergy between domains of space activity that are currently distinct, such as the nascent space tourism sector and the well-established domain of space science. It posits a world where space tourism does not just entail the notions

presently being imagined by its supporters, which is to say a domain of pure leisure, frivolity, and sightseeing, but also entails a number of other possible activities (exploration, trade, etc.), all contingent upon a considerable growth in the availability of space travel as a whole. Nevertheless, despite the excitement and possibilities of space tourism (imagined broadly) that *EVE* displays, an emphasis on the *pragmatics* of space travel shines through, a far cry from utopian imaginaries of space travel that are ubiquitous in the promises presently surrounding space tourism (as noted at the start of this chapter).

In the game, one can take it upon oneself to explore the uncharted reaches of space as a private citizen, but doing so is dangerous and risky, due to both the particular natural challenges of the extraterrestrial environment and the decisions and actions of other human pilots who occupy the same territory. One can travel the universe to see its more distinctive sights and spectacles, but one must still pay for one's spacecraft and for appropriate defenses, even as the unwary pilot remains under the existential threat of the airless outer space environment. Humans in *EVE* have gone to the far reaches of this galaxy and colonized those distant corners, yet they remain continually fought over, uncontrolled by any central authority, and are hence some of the most dangerous places to live.

In turn, the vision of space travel presented in *EVE* is intricately tied to the vision of the surrounding wider political–economic climate (colonization, conflict, politics, and espionage). *EVE* posits that a far-future space-faring civilization will be structured along political lines which are indistinguishable from, and intricately interwoven with, the technologies with which its citizens travel, do business, do battle, and explore. *EVE Online* thus reproduces the axiomatic sociological precept that all new technologies do not exist independently but are rather constituted by, and constitute, political and social relations. Therefore, the future of space travel and space tourism will be contingent not just upon technology, but how that technology becomes embedded in society and for which purposes it will be used.

CONCLUSION

In both cinema and video games we have explored some of the prominent depictions of space travel and tourism, and the technological, social, and political entanglements they show. Although their visions share some commonalities, they also demonstrate important distinctions, especially when we compare them to the media output of the space tourism sector. If it

considers technology as a means to achieve economic prosperity, in *EVE, Elysium* and *Gattaca*, among others, technology is at the heart of political and social relations. Not only does technology allow humans to travel to and settle in space, but also allow the development of new or additional mechanisms of control. The enhanced humans or cyborgs that technology engenders remain within an anthropocentric and dualistic system of values. As such, transhumans are rational, generally male, from a Western origin, abiding by capitalists and patriarchal ideas, and opposed to nonhumans.

In *Elysium*, the (apparent) final victory of the citizens of the Earth over the government of it is above all a victory of human beings over machines, of a social system over a computerized one. As Dónal O'Mathúna writes, "the portrayal of enhanced humans in many movies is of those who are missing something deeply human" (2014, p. 294), such as the minister of foreign affair on *Elysium* and the director of the factory where Max works, or in *Gattaca* the man selling his "superior" DNA to the unenhanced protagonist, allowing him thus to go into space. In both *Elysium* and *Gattaca*, ordinary human characters end up winning over the enhanced ones, which seems to be a symptom of the lack of readiness of humans to become posthuman cyborgs in the sense intended by Donna Haraway (1985), namely as "creatures in [a] post-gender world," that have transgressed the boundaries of the animal, machine, and physical realms. Similar to space tourism entrepreneurs, *EVE, Gattaca*, and *Elysium* fail to situate humans as social and historical figures and refuse to integrate transhumans within their original embodied and material network of political, social, and biological relations as promoted by posthumanists (Ferrando, 2013, p. 32).

EVE and space tourism enthusiasts suggest that affordable space travel will lead to transformations in human society, economics, and politics, whereas it seems that space travel cinema sees it differently. Genuine touristic opportunities in space (travel for leisure and novel experiences) would only take place after social and political concerns such as gender and human/non-human divides have been addressed. While *Passengers* promised a kind of (idyllic) space tourism, both technological failures and social issues (such as isolation, medical condition, and social class) hinder the protagonists' exploratory journey. In opposition to the space tourism sector, it seems that serious sci-fi films still doubt that space tourism can become a reality in the near future. Developing a kind of posthumanist world, *The Hitchhiker's Guide to the Galaxy* points to the political, ethical, and environmental transformations that the human species needs to undergo before harmonious space tourism can be envisaged. According to O'Mathúna, to prevent the enhancement of humans inevitably leading to new social

inequalities and discrimination—a recurrent outcome in the film—humanity would need to "develop a powerful ethic of defending the vulnerable" (2014, pp. 292–293), a moral standpoint noticeably absent from our history.

Throughout this book and in the literature of space travel, we observe how space travel often appears torn between being a solution to and an extension of humanity's problems. While films such as *EVE*, *Gattaca, Elysium*, and *Passengers* suggest that space exploration, settlement, and tourism will be interwoven with deeply problematic dynamics, *The Martian* reinforces the myth of the hero. For Sherwood (2011), the option of possible-future human spaceflight exploring Mars is deeply linked to the myth of the Hero in a way, similar to the Apollo missions when humankind first landed on the Moon. Myths, Sherwood writes, are essential for creating the political will to develop human space flight. *The Martian* appears as an ode to the Enlightenment and to human beings as reasoning and "technicized creatures" (Lemmens, 2015, p. 3), who escape the material reality of their world and environment. In a striking moment that supports Sherwood's idea of the hero myth, people all around the planet are awaiting the return of the American astronaut. The production of the film even created an interactive marketing campaign for the film, encouraging potential viewers to "Save Mark Watney."

In *The Martian*, the astronaut is in fact reborn within the ideals, and anthropocentric and sexist flaws, of this Enlightenment humanism. By denying his embodiment as a mortal being that is embedded in an intricate network of social, political, historical, economic, environmental, and technological relations, Mark Watney refuses to become a posthuman cyborg (Haraway, 1985). Nowhere in popular media do we see the idealistic image of space tourism, outlined earlier in this paper, repeated—such an image appears either naïve or possible but with deep political repercussions. Examining these media depictions allows us to both consider the different kinds of regenerations that space travel could bring to the human race and imagine what future space tourism might (or might not) look like, beyond its portrayal by enthusiasts.

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