# Making Sense of Virtual Heritage

How Immersive Fitness Evokes a Past that Suits the Present

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## Immersive Fitness and The Trip

Immersive fitness is an emerging technology that transforms physical exercise through virtual experiences provided for gym users. Some of these experiences draw on representations of cultural heritage. An illustrative example of this merger between cultural heritage and immersive fitness is the international exercise company Les Mills' *The Trip*, which provides an immersive and multimodal fitness regime where participants ride stationary bicycles in front of a large, domed screen where a road winds through a computer-generated landscape that is projected as a motivational aid. Exercisers ride through alleys of Greek sculptures, around futuristic Egyptian pyramids, or through a pirate ship at the bottom of the ocean, in many cases referencing popular clichés of cultural heritage from around the world.

<sup>1.</sup> The global company Les Mills was named after its 1968 founder in Auckland, New Zealand. The Trip was co-created by Les Mills Jr. and Adam Lazarus, originating from an idea they had in 2012. The films came to be produced by the design studio Darkroom and the ride experience was originally designed by the production company Crossworks Project employing multiple, purpose-built projectors and large screens. For the underlying gym and fitness culture in the company Les Mills, see Jesper Andreasson and Thomas Johansson, "'Doing for Group Exercise What McDonald's Did for Hamburgers': Les Mills, and the Fitness Professional as Global Traveller," Sport, Education and Society 21, no. 2 (2016): 148–165.

Whereas sports and health studies have looked at the relationship between immersive environments and effects on the body, we investigate this new field via two other and related perspectives: one where we focus on how the heritage on display activates different gender and racial politics lodged in a long European history and another where we consider this heritage encounter in relation to a broader sense of time travel experienced by the embodied individual. Our analysis exemplifies how, through the "gamification of exercise" in fitness centers across Sweden and elsewhere, heritage and the past acquire unexpected meaning and significance in the social context of physical exercise.

Immersive fitness is a concept that uses a range of regimes in which different visual and auditory technologies are employed to create the sense that an exercising individual is performing within a virtual environment. Some of the first Nintendo Wii game titles that debuted in 2006 featured virtual environments (winding roads, a tennis court, a boxing gym) used for exercise and physicality. Unique to the Wii console was its spatio-reactive, hand-held controllers which allowed players to virtually exist within and interact with the game environment. Most gaming consoles now offer similar immersive environments where physical movement in the real world translates into virtual movement in computer generated worlds. In commercial gyms, stair step machines and bikes often come equipped with monitors on which an external environment is projected, some allowing the user to compete with actual or computer-generated opponents. This technology, sometimes referred to as "exergames," thus

<sup>2.</sup> Jessica Francombe, "'I Cheer, You Cheer, We Cheer': Physical Technologies and the Normalized Body," *Television & New Media* 11, no. 5 (2010): 350–366; Marie Louise Adams, "Objectified Bodies and Instrumental Movement: What Might Merleau-Ponty Say about Fitness Tracking," in *Sport, Physical Culture, and the Moving Body: Materialism, Technologies, Ecologies*, eds. Joshua L. Newman, Holly Thorpe, and David L Andrews (New Brunswick, NJ: Rutgers University Press, 2020), 69–86.

As one observer put it, according to https://www.cnbc.com/2015/04/19/ how-virtual-reality-will-get-you-in-shape.html.

<sup>4.</sup> Anna Lisa Martin-Niedecken and Elisa D Mekler, "The ExerCube: Participatory Design of an Immersive Fitness Game Environment," *Joint International Conference on Serious Games*, 2018.

creates an immersive and "gamified" fitness experience where users compete against virtual opponents within a virtual landscape. Current trends are toward virtual screens in the home or toward personalized VR headsets solutions.

The Trip is one of the most elaborate examples of gym-based immersive fitness that provides a shared cinematic experience. The films, each about forty minutes long, take the participants across a number of computergenerated, virtual, and themed environments inspired by historical narratives, movies, live concerts, and interactive games. These can be jungle landscapes; undersea vistas with sharks, jellyfish, and pirate ships; science fiction worlds where you race spaceships or flying motorcycles; or impossibly long, steep, and vertigo-inducing bridges reaching up into a starry sky. The journey through these spaces is accompanied by directions from an instructor and by a continuous motivational soundscape—some of it produced specifically for Les Mills and some of it covering existing songs. Through intense intervals shifting between fast pedaling with little resistance and virtual steep climbs with very high resistance, the participants work up their heart rates. By controlling the resistance of the bikes, participants can control how strenuous the session becomes, thus adapting it to their own physical status.

Research suggests that this format is motivational and that participants exert themselves to a higher degree than they realize. According to a limited study performed by Les Mills on twelve fitness participants, the audio-visual experience and its immersive qualities enhanced the fitness experience of novice exercisers.<sup>6</sup> As the website boasts, "where the mind goes, the body will follow."

<sup>5.</sup> https://www.lesmills.com/workouts/fitness-classes/the-trip/.

<sup>6.</sup> Jinger S. Gottschall and Bryce Hastings, "Immersive Cycling Environment Yields High Intensity Heart Rate Without High Perceived Effort In Novice Exercisers," *Medicine & Science in Sports & Exercise* 49, no. 5S (2017): 223, https://doi.org/10.1249/01.mss.0000517458.24189.cc.

<sup>7.</sup> https://www.lesmills.com/workouts/fitness-classes/the-trip/.

The Trip films take the participants through complex and elaborately designed virtual architecture that mixes strikingly picturesque and sometimes strangely metamorphosing cityscapes with semi-realistic natural vistas. While virtual humans can sometimes be seen, especially during the opening sequences of each session, they are otherwise rare during the actual exercise. The entire class is multimodal and performative in the sense that music and directives from the instructor accompany the visual and bodily experience. The digital technology allows for a precise coordination of the physical exercise with the music and the virtual geography so that drops or rises in the rider's pulse match drops or rises in the musical beat and the virtual landscape, enhancing the immersive experience by building anticipation and motivating the rider to up their heart rate.

A crucial element in many *The Trip* films is cultural heritage connected to past- or futurescapes. In other words, the virtual worlds travelled through are connected to the architecture of actual or imagined past or future periods, especially as this architecture and these periods have been imagined in literature, comics, cinema, and games. *The Trip 15: Amarna* thus takes the participant through Ancient Egyptian architecture and mixes contemporary tourism-related spaces with Egyptomania and futuristic scenery. *The Trip 16* takes place in a modernist American cityscape—complete with skyscrapers, trains, park landscapes, and gardens—while *The Trip 22* is an Orientalist presentation of "Arabian" architecture and North African landscapes mixed with fantasy futurism. In all cases, the films are accompanied by a wide range of modern music including funk, hip-hop, pop, trance, techno, and world music. At times, the soundscape thematically matches the visuals referenced. In *The Trip 23*, a journey through

Jørgen Bruhn and Beate Schirrmacher, "Intermedial Studies," in *Intermedial Studies: An Introduction to Meaning Across Media*, eds. Jørgen Bruhn and B. Schirrmacher (London and New York: Routledge, 2022), 3–27.

 $<sup>9.\</sup> https://www.lesmills.com/nordic/fit-planet/fitness/the-trip-part-2/.$ 

a hilly and verdant landscape with mostly African animals, is accompanied by clearly African-inspired world music. However, as we discuss below, the soundtracks may also furtively problematize normative narratives connected to specific cultural heritages.<sup>10</sup>

#### **Empirical Study**

Our first encounter with the material took place at a gym during an exercise class. At this gym, we were able to study the generated auditory and visual content of this virtual gym space as it was traversed by us and other participants. This participant observation made it possible to consider the relationship between this immersive environment and the collective physical exercise performed within it. This field study was conducted on March 9, 2020 at a gym in Kalmar, Sweden. The makeup of the class was not homogenous, but the majority of the participants were white, between the ages of twenty-five and fifty, and female. The room in which the class took place is purpose-built for this specific format with exercise bikes on a staggered platform facing a large, domed screen. When everyone was seated, the instructor dimmed the lights and began the presentation. The volume of the soundtrack was turned up and the actual exercise session began. Most participants in the class leaned to the right and left when the road meandered downhill, and the instructor encouraged such participatory and immersive behavior. At the end of the class, we were wet with perspiration and experienced the rush that comes from the release of natural endorphins. When the lights were turned up and participants left the studio, there was a sense of "runner's high" in the air from instructor and participants alike.

<sup>10.</sup> A list of all the music that accompanies the soundscapes in the various *The Trip* releases can be found here: https://seesaawiki.jp/tracklist/d/THE TRIP. *The Trip 14* contains a total of ten songs, but in this chapter we will consider only the first three songs.

To study the virtual and multimodal space in more detail, we also made use of the Les Mills website where *The Trip* films can be accessed online. This made it possible to examine the virtual environments and sound-scapes in considerable detail. The detailed analysis of the images and the music was conducted over a longer period of time, during which we repeatedly watched and listened to the films on the computer screen.

## The Cultural Heritage Aesthetics of Les Mills

All *The Trip* films begin with a relatively slow sequence during which the participants warm up but also get acquainted with the themed environment of the film. In *The Trip 14: Kairos*, this is initially an island with a sprawling abundance of white houses with blue roofs and balconies, red bougainvillea flowers climbing up the walls, and the characteristic bell towers of Greek Orthodox churches. The houses and a bright low sun reflect on the road, and to the participant's right, the sea can be gleaned (see image 3.1).



Image 3.1. Virtual Greece at the beginning of the journey (screenshot from the film).

Most participants will instantly identify the architecture as stereotypically Greek. The virtual environment references postcard depictions of Santorini and romanticized popular culture representations as seen in the film *Mamma Mia* (2008). This initial stage of the journey is accompanied by a sped-up version of Anderson .Paak's laid-back soul pop song "Off The Ground" which opens with the following lyrics:

If it's really what you needed, love
Baby, this right here's a one of one
But you can get this hit whenever you want
So here you are now
And it's on now
And it's on right now<sup>11</sup>

With this encouragement to stay in the moment, the participants travel through this empty, urban space towards a steep, downhill slope where the shining road drops down to ocean level, steering the participants towards another island topped by ruins of Greek temples and surrounded by enormous stone sculptures partially submerged into the sea. The road snakes into an underground cavern where other enormous stone faces can be seen, and, from there, the participants climb up into a landscape of imaginative classical architecture with numerous stone columns. Finally, the riders reach a plateau with revolving Greek statues, some of which are instantly recognizable and reappear throughout the video. They include the Doryphoros of Polykleitos, the Discobolus of Myron, the Apollo Belvedere by Leochares, and the Venus de Milo (see image 3.2).



Image 3.2. Ancient Greek architecture and statues (screenshot from the film).

Further into the ride, participants enter a tunnel-like space where pentagonal walls seem to move and revolve around the road, possibly resembling geometrical shapes induced by psychedelic drugs such as LSD. This transition is accompanied by the irregular rhythms of alt-J's "Fitzpleasure," with absurdist lyrics that match the surreal behavior of the architecture. The tunnel eventually opens up to a built indoor environment with many decorated arches and more sculptures, growing increasingly unreal. When the participants make it out of the tunnel, the soundscape shifts to M.I.A.'s ska-influenced afro-punk "Double Bubble Trouble" whose lyrics tell the participants that, "UH OH you're in trouble." This is a fitting auditory cue since the laws of physics now seem to have been suspended, presenting the participants with an even more surreal virtual world incorporating details of modern Greek architecture (see image 3.3).

<sup>12.</sup> The full lyrics can be found here: https://genius.com/Alt-j-fitzpleasure-lyrics.

<sup>13.</sup> The creators of this refer to such surreal consequences in *The Trip* films as going down "The Rabbit Hole." See: https://www.lesmills.com/nordic/fit-planet/fitness/the-trip-part-2/.

<sup>14.</sup> Full lyrics can be found here: https://genius.com/Mia-double-bubble-trouble-lyrics.



Image 3.3. Traveling through a surreal heritage landscape (screenshot from the film).

Houses now hang or grow from intersecting cobblestone roads, and during recuperative lulls in the exercise, the buildings swerve around their own axes, like clockwork. While still Greek, the environment is also reminiscent of the precise yet surreal and labyrinthine worlds created by Dutch artist M.C. Escher in paintings such as *Relativity* (1953). Eventually, the Greek architecture becomes completely detached from its stone foundations and revolves, free of gravity, in geometrical constellations around the participants.

The participants make their way through this imaginary environment and begin to climb a road into the sky, surrounded by flower garlands and balloons. The path meanders through another village and more revolving geometrical shapes, followed by a passage through abstract tunnels submerged under water, until the participants eventually again encounter enormous Greek sculptures, this time projected onto a shifting, pulsating, night-time universe (see image 3.4).

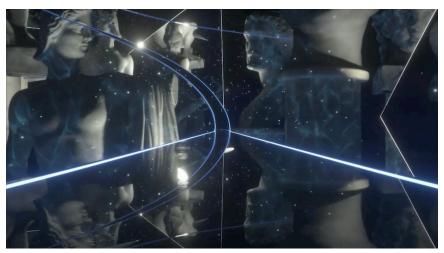


Image 3.4. Greek statues in space (screenshot from the film).

Toward the end of the session, after some more stretches dominated by moving geometrical patterns, the participants enter a free-floating, miles-long road constructed out of fantastical Classical architecture with many arches and pillars, flanked by hundreds of the same sculptures as seen before (see image 3.5).



Image 3.5. Framed by ancient Greek statues depicting Aphrodite (screenshot from the film).

Some of the same themes and shapes reoccur until the participants reach another assemblage of fanciful Classical architecture intermixed with sculptures and some olive trees before, at the very end, the world reshapes into something very similar to what the participants traveled through at the beginning of the class.

## Traveling the Politics of Cultural Heritage

The idea of including Classical art and architecture as part of the scenery of a Greek island provides the participants with visual cues capable of distracting them from the sense of increasing exhaustion, thus continue the strenuous exercise. Even so, the imagery, like the lyrics of the songs playing in the background, does locate the participants in relation to specific cultural heritages and allows them to identify narratives related to this heritage. It can thus be argued that when the participants travel virtually through the Greek landscape, Ancient Greek architecture, and rows of animate buildings and sculptures, they also move through a series of widely admired and normative representations of the human body and through a similarly celebrated, if highly problematic and complex, ancient history.

While contemporary fitness culture emphasizes health and often tries to make such exercise fun, <sup>15</sup> physical appearance remains a primary pursuit. Indeed, as Roberta Sassatelli argues, modern fitness gyms are essentially institutions that commodify the pursuit of a fit body. When *The Trip* is viewed as an element designed to assist in the creation of this body image, the representation of bodies within the virtual world comes into focus. The way that bodies are imagined and produced in modern gym culture has been the focus of significant scholarship, from Kenneth R. Dutton and Alan Klein's studies of masculinity and body building to Jesper Andreasson, Thomas Johansson, Anne Bolin, and Jane Granskog's more recent investigations of gender in the modern gym. <sup>17</sup> Much of this work understands the gym as a "venue for the construction of particular

Christina Hedblom, "'The Body is Made to Move': Gym and Fitness Culture in Sweden" (PhD diss., University of Stockholm, 2009).

Roberta Sassatelli, Fitness Culture: Gyms and the Commercialisation of Discipline and Fun (New York: Springer, 2010).

<sup>17.</sup> See Kenneth R. Dutton, Perfectible Body: The Western Ideal of Male Physical Development (New York: Continuum, 1995); Alan M. Klein, Little Big Men: Bodybuilding Subculture and Gender Construction (New York: State University of New York Press, 1993); Jesper Andreasson and Thomas Johansson, The Global Gym: Gender, Health and Pedagogies (Basingstoke: Palgrave Macmillan, 2014); and Anne Bolin and Jane Granskog, Athletic Intruders: Ethnographic Research on Women, Culture, and Exercise (New York: State University of New York Press, 2003).

gender identities."<sup>18</sup> In *The Trip 14*, the sculptures of three men and one woman are present throughout the visual experience. The digital nature of this world allows these sculptures to be reproduced ad infinitum. This means that they can be made to surround the participants and become moving walls, or they can be scaled-up into enormous entities that appear like towers. In this way, the sculptures can be said to merge with the architecture.

When the statues become part of the architecture of this virtual space, they also gender and politicize this architecture in ways that need to be considered. Two of the male sculptures are involved in athletic pursuits and the third is the god Apollo, standing erect with one arm raised. The female sculpture is of Aphrodite, the goddess of love and fertility, but unlike the male sculptures, this statue lacks arms and her posture does not signal strength or determination. Her physical appearance is, as a result, much less radiant and motivational in physical terms. 19 The comparative marginal presence of the female figure centers the white and athletic male sculptures and the idealized masculinity they represent. This masculinity, in turn, has a specific political and affective cultural heritage. These sculptures of athletic and powerful male figures have been embraced by a series of cultures and societies and they have been used to invest these cultures with certain content. The Romans were the first to admire the portrayal of the human body as it appeared in Greek sculptures. Indeed, most of these sculptures exist today only as Roman copies. In Renaissance Italy, sculptors produced bodies very similar to the Greek ideal, with Michelangelo's David as one of the most admired examples. As George Mosse<sup>20</sup> has shown, these sculptures were also central to the invention of what he refers to as "modern masculinity" that began to take form in Europe during the eighteenth and nineteenth cen-

<sup>18.</sup> Thomas Johansson, "Gendered Spaces: The Gym Culture and the Construction of Gender," *Young* 4. no. 3 (1996), 32.

<sup>19.</sup> The use of the armless Aphrodite as the single female figure does raise questions, especially as there are Greek statues of Athena that could have been used instead. Also, because the world of *The Trip* is virtual, it would have been possible to provide the statue of Aphrodite with arms and legs, just like how the architecture is restored in some of the spaces the participants move through.

<sup>20.</sup> George L. Mosse, *The Image of Man: The Creation of Modern Masculinity* (Oxford: Oxford University Press, 1998).

turies. In the early twentieth century, this white, muscular, and modern masculinity became part of a larger body cult in many European nations and in parts of the world controlled by European nation states. The most studied example from the 1920s and 1930s is perhaps in Germany where these statues were central to the construction of an imagined white, Aryan body against which a similarly imagined Jewish body could be produced. However, the same type of body also became central to masculinity in many other nations. The point here is that when the participants move—in the pursuit of a fitter and better body—past row upon row of Greek statues, they also move through an idealized masculinity and across the specific heritage informed by it that has been shaping the fitness movement to the present day. Early cultivates which is a larger body cult in many European nation states.

The strange appearance of Ancient Greek art and architecture in *The Trip* 14 is a visualization of this cultural heritage, of the idealized masculinities associated with it, and perhaps even of the types of statehood it has been used to legitimize. By moving through this virtual world, the participants thus also move through a complex and multilayered gendered and politicized context. This does not necessarily mean that participants internalize this landscape. While the sculptures are treated with a certain respect—they are copied, multiplied, enlarged, and made to revolve around their own axes, yet their bodies are never changed—their movement, like the movement of all architecture in the virtual workout experience, is absurd. The appearance of thousands of copies revolving like clockwork dismantles some of their iconic status and thus their potential and meaning as works of arts and as gendered and politicized icons. Frequently removed from the pedestal, they often appear more like bricks in a strange and moving wall than as objects of a normative artistic tradition.

<sup>21.</sup> Daniel Wildmann, "Desired Bodies: Leni Riefenstahl's Olympia, Aryan Masculinity and the Classical Body," In *Brill's Companion to the Classics, Fascist Italy and Nazi Germany*, eds. Helen Roche and Kyriakos N. Demetriou (Leiden: Brill, 2017), 60–81.

<sup>22.</sup> Ronny Trachsel, "Fitness und Körperkult. Entwicklungen des Körperbewusstseins im 20. Jahrhundert," In Fitness. Schönheit kommt von aussen, eds. Andreas Schwab and Ronny Trachsel (Bern: Palma-3-Verlag, 2003), 13–34.

The role that the music plays further problematizes any easy identification by the participants with the potentially conservative messages of the heritage portrayed in the film. While the cultural heritage that *The Trip 14* displays has in the past been folded into a politics where masculinity and whiteness are central, many of the songs that are part of the soundscape critically interrogate precisely these hegemonic categories. The best, but not only, example of this is British Sri-Lankan M.I.A.'s "Double Bubble Trouble." This is a fundamentally subversive song that, as the artist's own music video makes clear, explores friendships, drugs, gang violence, 3D printed guns, and the surveillance state as experienced by young people of color in the margins of UK society.<sup>23</sup> While the casual fitness participant unfamiliar with M.I.A.'s music may not pick up on the subversive nature of the lyrics, those who know her songs and who are aware of her politically radical position will likely be struck by the collision between the visual imagery and this particular soundscape. In this way, the normative and potentially conservative Greek cultural heritage presented in, but also manipulated by, the visual component of The Trip collides and merges with disruptive and agitational music associated with critical thinking and political engagement. Thus, this *The Trip* experience can be said to furtively explore the critical and democratic aspects that are also a heritage of classical antiquity.

## Time Traveling in The Trip

While it is important to note the political dimension that the multimodal journey through a surreal ancient Greece in a modern soundscape activates, *The Trip 14*'s potential subversion of the heritage it employs in order to build motivation facilitates a different yet complementary experience. Whereas our earlier discussion related specifically to *The Trip 14* and connotations of certain themes of Classical Antiquity—with other trips having different themes and connotations that might deserve a

<sup>23.</sup> This self-directed video was initially censored by M.I.A.'s record label: https://www.theguardian.com/music/2014/may/20/mia-the-partysquad-double-bubble-trouble-video-watch.

critical discussion elsewhere—the following discussion can be related to all virtual workout experiences that immerse riders into environments incorporating cultural heritage, whether this is Ancient Egypt (*The Trip 15*), Arab North Africa (*The Trip 22*), or modern America (*The Trip 16*).

The immersive fitness regime of *The Trip* offers the rider a kind of time traveling experience that can be understood in relation to existing scholarship on the *Experience Economy* and various contemporary practices of engaging with the past.<sup>24</sup> Whereas the past has long been studied in cerebral ways, whether in its own right (for example on the historical significance of Classical Antiquity) or with the aim of political critique in contemporary society (for example on the consequences of some perceptions of Classical Antiquity), different forms of time traveling that abound in popular culture offer a fundamental alternative. They provide the participating individuals with embodied and sensual engagements with the past that supplement more established knowledge-oriented and critical approaches.<sup>25</sup>

Time travel experiences are most commonly directed "backwards" rather than "forwards" along the commonly imagined arrow of time stretching from the past to the future. Ranging from living history and historical re-enactment to movies, computer games, and themed environments set in the past, such time travels can be analyzed along different axes (see image 3.6). One dimension is the degree of lived experience and sincere transformation as opposed to playfulness and enjoyable imitation, the other the degree of collectivity versus individuality involved in practice. Most forms of time travel combine different aspects. Immersive fitness rides, as discussed in the present chapter, combine the realms of playful imitation and sensual stimuli affecting some degree of transformation

<sup>24.</sup> See B. Joseph Pine II and James Gilmore, *The Experience Economy*, 2nd ed. (Boston: Harvard Business Review Press, 2011); Bodil Petersson and Cornelius Holtorf, eds., *The Archaeology of Time Travel: Experiencing the Past in the 21st Century* (Oxford: Archaeopress, 2017); and Cornelius Holtorf, "The Past as Carnival," review of *Die Stämme von Köln*, directed by A. Dreschke, 2010, *Time and Mind* 5, no. 2 (2012): 195–202.

Cornelius Holtorf, "Introduction: The Meaning of Time Travel," in *The Archaeology of Time Travel: Experiencing the Past in the 21st Century*, eds. Bodil Petersson and Cornelius Holtorf, (Oxford: Archaeopress, 2017), 4–9.

<sup>26.</sup> Holtorf, "Introduction: The Meaning of Time Travel," 12-13.

with a strong emphasis on individual enjoyment, albeit they assemble in a group. The riders consume the past (and occasionally the future) as a joyful but superficial backdrop of their trip, drawing on well-known clichés rather than on much (if any) historical research and scholarship (see image 3.6).

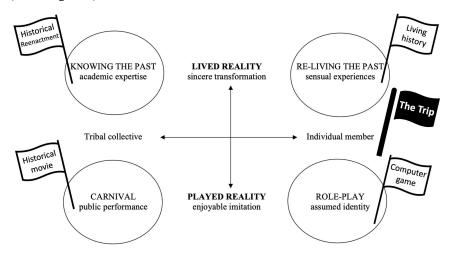


Image 3.6. A framework for understanding contemporary time travel and its various dimensions. Credit: Cornelius Holtorf, adapted from Holtorf, "Past as Carnival."

Many time traveling experiences, such as those provided by *The Trip*, are very accessible and do not rely on particular mental abilities or educational achievements. This is because, from the perspective of the participants, such experiences are fully embodied, witnessed with various senses, and generally multimodal. In the case of *The Trip*, the perception of traveling through different times and spaces is visceral because, as you are exercising, you are in motion and fully focused on sensual impressions. Evidently, these perceptions impact riders and enhance their fitness experience by making the workout more enjoyable and reducing the perceived intensity of the exercise session.<sup>27</sup> As we see it, this is not so much a stimulated mind pulling along a reluctant body as it is the combined outcome of mind, senses, and body stimulating each other.

A central aspect of many time travels and the key for effective immersion in any context is successful storytelling. As Scott Lukas puts it, "story is what holds a space together by linking elements, creating situations, establishing moods, and involving guests." In fitness rides, the story is minimalistic, inviting participants on a solo bicycle trip through space and time. But the screen provides only the scenery for the real storyline that unfolds on each stationary bike where the rider is the hero fighting against a lack of motivation to exercise and their growing fatigue, eventually reaching the goal successfully and returning home with glory. In that sense, successful time travel and immersion can lead to physical and mental well-being. Arguably, through time travel experiences seemingly offering transportation to another time period, participants find health, purpose, and satisfaction in their present lives, and thus a bit of themselves they previously found they were lacking.<sup>29</sup>

From a cultural heritage perspective, it is worth adding that such transportation and time travel experiences are enabled by the presence of pastness, i.e., the perceived quality of something to be of the past (assuming the travel went "backwards" in time). Perceived pastness relies on several factors including the participants meeting their expectations about the past and the existence of a plausible storyline connecting then and now. What people may or may not expect of the past or consider a plausible storyline is influenced by many social factors including upbringing, formal education, and popular culture. It is also possibly contentious, and therefore a legitimate object of critique (as exemplified in our earlier analysis of *The Trip 14*). Immersive fitness environments let us appreciate the power that lies in perceived pastness.

Scott A. Lukas, The Immersive Worlds Handbook: Designing Theme Parks and Consumer Spaces (New York and London: Focal, 2013), 155.

<sup>29.</sup> Holtorf, "Past as Carnival."

<sup>30.</sup> Cornelius Holtorf, "The Presence of Pastness: Themed Environments and Beyond," in Staging the Past: Themed Environments in Transcultural Perspectives, eds. Judith Schlehe, Michiko Uike-Bormann, Carolyn Oesterle, and Wolfgang Hochbruck (Bielefeld: Transcript, 2010), 23–40; Cornelius Holtorf, "Changing Concepts of Temporality in Cultural Heritage and Themed Environments," in Time and Temporality in Theme Parks, eds. Filippo Carlà-Uhink, Florian Freitag, Sabrina Mittermeier, and Ariane Schwarz (Hannover: Wehrhahn, 2017), 115–130.

## Cultural Heritage and Immersive Fitness

In this chapter, we have discussed how cultural heritage transforms and operates within an immersive physical exercise workout. This transformation affects the individual riding a stationary bike through imaginary scenarios, but it also has larger ramifications in society. Whereas many healthy individuals are good for society as well, there is a collective dimension in which some underlying issues and values need to be problematized.

We noted first that immersive fitness, like cultural heritage, has both tangible and intangible dimensions. It relies on our senses, emotions, and perceptions while inherently relating to a stationary bike in a purpose-built fitness room, bodily effort, and increasing exhaustion. While enhancing physical and mental well-being, experiencing *The Trip* at a gym may also affect our values. Virtual heritage and heritage IRL are intimately connected, both in the perceptions of the individual, where sometimes they may be difficult to distinguish, and in their impact on society. With this in mind, it must be noted that *The Trip* uses various stereotypical representations of cultural heritage warranting a critical analysis of its ethics and politics. The way that ancient art and architecture are leveraged in *The Trip* may seem naïve and inconsequential, but it is hardly without consequence. In particular, the evocation, in a performative fitness context, of a certain (male) white body as represented and immortalized by Greek sculptures locates the participants in relation to a certain cultural heritage, and thus also to the way that this cultural heritage has been negotiated by more than 2,000 years of European and global history. By traveling through a virtual and immersive world made up of Greek cultural artifacts and architecture, the participants are also moving through ingrained and idealized ideas about masculinity and race. This does not mean, as we have argued, that these ideas are automatically internalized by the participants. The often-surreal playfulness of the visual experience and the sometimes-subversive music that accompanies the images can

potentially inspire participants to question these ideals and the role they have played for different national and imperial histories. To determine this precise effect, a much more substantial and empirical study than the one we conducted is needed.

We also propose that time traveling experiences evoking, for example, Ancient Greece and relying on pastness transform the experience of individual participants in fitness workouts. This can be related to fast-emerging multimodal technologies that revolutionize how cultural heritage affects people's experiences. For example, the Atelier des Lumières—an immersive art center which opened in 2018—uses a large number of projectors and powerful speakers in a largely empty, formerly industrial space in central Paris to surround freely-wandering visitors with imagery, music, and narration about artists such as Van Gogh, Gaudí, and Dalí. These exhibitions do not use any original artifacts, but they succeed in providing large audiences with sensually mind-blowing experiences about art and heritage deriving from fast-emerging digital technologies. Although the approach is populistic and commodifies the fame of celebrity artists, it also provides feel-good experiences for many people—even without any physical workout.

These kinds of experiences have some profound implications and potential in the context of cultural heritage, a field now widely aspiring to be people-centered.<sup>52</sup> In particular, it may be that for cultural heritage to make a transformative impact on people and their life-worlds in the age of VR, we need to rethink key heritage concepts such as age-value and authenticity. Maybe the point of taking care of cultural heritage today is not to facilitate mental reconstructions of the past, drawing on original fabric appreciated for its age. Maybe it is to bring about powerful stories using state-of-the-art, multimodal techniques, to touch and inspire peo-

<sup>31.</sup> https://www.atelier-lumieres.com/en/home.

<sup>32.</sup> Sarah Court and Gamini Wijesuriya, "People-Centred Approaches to the Conservation of Cultural Heritage: Living Heritage," *ICCROM* (2015): 1–9, https://www.iccrom.org/sites/default/files/ PCA Annexe-2.pdf.

ple in the present. However we turn and twist it, the fact remains that when we "see" the past, we see something that is not actually there. The interesting question is therefore not which pasts we may have lost, but which pasts can be brought to life and what that means to us.<sup>33</sup>

It is evident that immersive fitness evoking cultural heritage and the past is not simply a curious and historically (somewhat) misinformed kind of escapism but rather the manifestation of an increasingly widespread and powerful cultural trend facilitated by emerging technologies. Different kinds of themed environments are challenging habits and assumptions about the world we inhabit. These environments are increasingly virtual in one way or another, and they deserve thorough attention. Such attention should consider the perspective of individuals who navigate through imaginary pasts that impact on their well-being and their thinking about the present, and how new ways of being a citizen emerges out of the risks and opportunities connected to these different pasts. In all these ways, uses of cultural heritage and the creation of time travel experiences in emerging multimodal contexts ask us to navigate through ancient land-scapes that are ultimately not about the past but about the future.

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<sup>33.</sup> See Holtorf, "Presence of Pastness," 26; Holtorf, "Changing Concepts," 125–127; and Cornelius Holtorf, "Perceiving the Past: From Age Value to Pastness," *International Journal of Cultural Property* 24, no. 4 (2017): 497–515.

<sup>34.</sup> See Judith Schlehe, Michiko Uike-Bormann, Carolyn Oesterle, and Wolfgang Hochbruck, eds., Staging the Past: Themed Environments in Transcultural Perspective (Bielefeld: Transcript, 2010); Filippo Carlà-Uhink, Florian Freitag, Sabrina Mittermeier, and Ariane Schwarz, eds., Time and Temporality in Theme Parks (Hannover: Werhahn, 2017); and Petersson and Holtorf, "Time Travel."

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