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SIMULATIONAL REALISM—PLAYING AS TRYING TO REMEMBER

Summary. In this text, I describe a specific way of addressing the past in video games which are set in historical times but at the same time deliberately undermine the facticity of their virtual worlds. By grounding my argument in analyses of two blockbuster productions—*Assassin’s Creed* (Ubisoft, 2007) and *Call of Duty: Black Ops* (Activision, 2010)—I introduce and define the notion of “simulational realism”. Both games belong to best-selling franchises and share an interesting set of features: they relate to historical places, events, and figures, establish counter-factual narratives based around conspiracy theories, and—most importantly—display many formal similarities. Like most AAA games, *Assassin’s Creed* and *Black Ops* intend to immerse the player in the virtual reality and, for this purpose, they naturalize their interfaces as integral elements of reality. However, in the process of naturalizing simulation, objectivity of the past becomes unthinkable.

In my considerations, I situate this problem in two contexts: 1) of a cultural and epistemic shift in perceiving reality which was influenced by dissemination of digital technologies; 2) Vilém Flusser’s prognosis on the effects of computation on human knowledge. According to Flusser’s theory of communication, history—as a specific kind of human knowledge—emerged out of writing that was always linear and referential. Consequently, the crisis of literary culture resulted in the emergence of new aesthetics and forms of representations which—given their digital origin—dictate new ways of understanding reality. As history is now being substituted by timeless post-history, aesthetic conventions of realism are also transformed and replaced by digital equivalents.

Following Flusser’s theory, I assert that we should reflect on the epistemological consequences of presenting the past as simulation, especially if we consider the belief shared by many players that games like *Assassin’s Creed* can be great tools for learning history. I find such statements problematic, if we consider that the historical discourse, grounded on fact, is completely incompatible with the aesthetics of sim-realism which evokes no illusion of objective reality.

Keywords: realism, simulation, counterfactuals, post-history, digital aesthetics.

SIMULATIONAL REALISM—PLAYING AS TRYING TO REMEMBER¹

Back in the 1980s, when the post-hippie generation of young entrepreneurs in Silicon Valley (who exchanged their psychedelics for personal computers) were working on programs and devices for virtual reality,² the image of the electronic worlds they had in mind was strikingly different. The first depictions of virtual realities and cyberspaces—epitomized by the film *Tron* (1982) and William Gibson’s *Sprawl Trilogy* (1984–88)—showed unfamiliar futuristic worlds composed of simple, geometrical blocks in neon, oversaturated colors. To a large extent, these “unnatural” and abstract spaces were defined and determined by the major limitations of

early computer graphics. Individual artistic visions played only a minor role in their creation process. Nonetheless, engineers and theorists of the first simulated realities, like Jaron Lanier or John Perry Barlow, were convinced that, in the future, VR devices would be used to create realities which were not bound by the constraints of representation and referential realism. On the one hand, their dreams were radically revolutionary and techno-enthusiastic, on the other, they also revealed the pessimist escapism of American culture in the 1980s, which is often linked to the onset of economic neoliberalism under Ronald Reagan.

Fortunately—or not—Lanier’s and Barlow’s predictions (and efforts) seem invalid from our

perspective. The most advanced development in VR cyberspace—Facebook’s Oculus project—is based on a fundamentally different logic than they assumed: instead of projecting new worlds, programmers in Facebook work on infrastructures which map and reproduce pre-existing social relations or recreate familiar environments. A similar argument can be made for contemporary video games. Not only is it uncommon to find futurist, absurdist, posthuman, or even cyberpunk imaginaries on the contemporary game market—most of the recent blockbuster games are also surprisingly “realist”: *Call of Duty: WWII*, *Playerunknown’s Battlegrounds*, *Battlefield 1*, and literally every top-selling sports simulator (*FIFA*, *Madden NFL*, etc.) try to represent the existing reality, rather than create new ones. Even the most popular fantasy and science-fiction games are set in familiar universes created decades ago. Among the biggest blockbusters of 2015 were *Witcher 3* (CD Projekt RED), based on a book by Andrzej Sapkowski (1994); *Super Mario Odyssey* (Nintendo), an installment of a video-game franchise founded in 1985; and the retrofuturistic *Fallout 4* (Bethesda), set in a world originally created in 1997 from retro science-fiction imaginaries.

I am not trying to paint an overly critical and pessimist picture of contemporary digital culture—there are many interesting and noteworthy exceptions to this general tendency to use simulation software conservatively (as tools for representation rather than artistic speculation). Yet, as it seems now, game developers generally tend to design virtual realities that resemble familiar worlds. Virtual past(s)—of human history or even popular culture—seem more popular than virtual future(s), so, more often than not, time’s arrow points backwards, not forward. However, even if digital culture is currently obsessed with reconstructing familiar settings and rehashing old ideas, the affordances of new media influence the way familiar histories return in our digital present. The reason for that is simple: the (new) media are not transparent channels for signal transmission, and cultural nostalgia, which compels popular culture to repeat old motives, settings, and stories, still manages to produce oddly alternated simulations and representations. In this text, I would like to

investigate one (medium-)specific way of addressing the past in video games that refer to historical events but, at the same time, deliberately undermine their facticity. My focus will be on two blockbuster productions: *Assassin’s Creed* (Ubisoft, 2007) and *Call of Duty: Black Ops* (Activision, 2010). The first is set in the medieval Middle East during the Third Crusade, and in the latter the player visits numerous locations around the world during the peak of the Cold War in the 1960s. Both productions belong to best-selling franchises and share an interesting set of features: they relate to historical places, events, and figures, establish counter-factual narratives based around conspiracy theories, and—most importantly—display many formal similarities which I will call realist. However, their “simulational” realism (or sim-realism) may seem peculiar at first, because it accentuates the realness of the immersive experience instead of evoking an illusion of factual or objective reality. In both games, the virtual worlds do not disguise themselves as objectively (or even subjectively) real. On the contrary, as technological projections (simulations) they are also probabilistic entities: uncertain, temporary, and elusive.

In a recent book, *Mixed Realism: Videogames and the Violence of Fiction* (2016), Timothy J. Welsch argued that virtuality penetrates the tissue of our reality through numerous devices—mobile phones, PCs, home theaters, games, cash machines, and many others—which change how we perceive what is real.³ From this observation he concluded that the epistemological and ontological transition that is occurring in our digital times poses a serious challenge to the traditional, i.e. “objectivist”, aesthetics of realism, which is founded on the possibility of setting a firm boundary between the real (material or social) and its representation. Many modern video games, like *Call of Duty: Modern Warfare 2* (Activision), include additional forms of mediation, such as drone warfare, in the core gameplay, while, at the same time, the “real” military forces use video games as a part of soldier training. In this way, real war becomes mediated by video games and video games include digital interfaces to keep up with the shifting ontology of modern conflicts. How can we approach realism if one virtual reality simulates

another virtual reality which, in turn, includes the first one? “Mixed reality” leads to the emergence of “mixed realism”.⁴

I would like to examine how this epistemological and aesthetic turn in understanding relations between reality and representation also affects video games that deal with the remote historical past. To keep up with prevailing perception of reality among “digital natives”, *Assassin’s Creed* and *Call of Duty: Black Ops* introduce an additional layer of reality: a simulation in which the past is generated in real time (the present). In both cases, the game worlds are not framed and presented as real but exposed as post-human yet personal projections. As a result, in both games history (the past) is transformed into personal memory that can only be experienced in the present. The additional frame of simulation gets in the way of establishing a sense of realness or facticity. The past simulated in those uncanny hybrid virtualities, constituted by the external technology of a simulator and the internal memory of a user, becomes at once personal and inhuman, tangible and uncertain. In this way, simulational realism expresses the logic of information capitalism, which is built on the shaky foundations of neoliberal fetishization of individuality and technological alienation in the space of endless mediations.

ASSASSIN’S CREED—THE ETERNAL PRESENT OF THE PAST

Assassin’s Creed, an action-adventure stealth video game, was released in 2007 by Ubisoft and evolved into one of the most recognizable and best-selling franchises in video game history. It was followed by eighteen sequels on different gaming platforms (the latest one was released this year) and even received a screen adaptation starring Michael Fassbender (2016, dir. Justin Kurzel). The game’s protagonist is Desmond Miles, a descendant of several lines of prominent assassins, who tries to lead a quiet, ordinary life as a bartender in New York but gets embroiled in action-packed adventures. The game begins as he is kidnapped by the Abstergo corporation which has discovered his ancestral lineage and plans to profit from it. The kidnapers force Desmond to take part in an experimental “genetic

interrogation” and enter a device called Animus. This science-fiction machine enables its user to travel, not in space or time, but into the depths of the ancestral memory stored in his DNA. The user enters the machine, visually resembling an MRI scanner, which transports his consciousness into a virtual reality, where he actively plays, trying to extract hidden data. Thus, by completing quests inside the simulation, Desmond retrieves vital information about remote, historical realities. From a more formal perspective, Animus is a fictional device inserted in the game world which can be accessed and operated by the player. Its function transcends the diegetic because it also frames the game world as a simulation. Animus—a kind of intra- and extra-diegetic portal—lets you switch between two virtual realities: modern-day New York and medieval Middle East, where Desmond’s ancestors lived.

The world of the game is thus broken in half, as are its conventions of realism. Modern New York is presented much as it would be in a blockbuster film. In this world, the player rarely gets to act, and most of the story progresses through dialogue- or action-based cut-scenes. It can be said that the realism of this part of the game is “quotational” or “parasitical”, as it borrows its conventions and aesthetics from blockbusters. The laboratories of Abstergo corporation resemble almost every tech-space depicted in modern cinema, the dramaturgical conflicts are visibly exposed, all characters possess distinctive yet typical traits, etc. Just like John McClane in the *Die Hard* films, Desmond is a white muscular male who lives in a major American metropolis and gets embroiled in a dramatic and action-packed story against his will. There is nothing exceptional and interesting in the way *Assassin’s Creed* portrays the contemporary world. Since at least the beginning of the new millennium, video games have relied on aesthetic conventions, narrative schemes, and even iconic depictions from blockbuster cinema, with the notable examples of *Medal of Honor: Allied Assault* (Electronic Arts, 2002) which copied the famous Omaha beach landing scene from Spielberg’s *Saving Private Ryan* (dir., 1998), or *Max Payne* (Rockstar, 2001) which borrowed the iconic

bullet-time technique from *The Matrix* (dir. Lana & Lily Wachowski, 1999). It has become common practice to employ cinematic realist conventions in AAA games.

However, players spend most of their game time not in New York but in the Holy Land, where the protagonist “travels.” We might note here that, most of the time, Desmond’s avatar does not even appear on screen, and, after launching a previously saved game, the player is put directly into the simulation. To avoid ontological confusion, the interface of *Animus* (in-game) corresponds aesthetically with the game menu. This aesthetic solution frames the extra-diegetic space of the game menu as an intra-diegetic interface of the fictional machine. Therefore, the player who launches the game is automatically framed as Desmond (who is, in fact, a virtual player himself) even before he loads the game. This narrows the ontological gap between the (virtual) game world and the (actual) world of the gamer. Moreover, both the menu and other elements of the interface become integral parts of the fictional simulation. For example, the health bar, an element of most action games, appears in *Assassin’s Creed* as a “level of synchronization” between Desmond’s actions and Altaïr’s memories; if the avatar suffers an injury, receiving a blow from the enemies or failing a jump from one rooftop to another, this event is represented not as physical damage but as a deviation from the source code (DNA memory). When synchronization is lost—which corresponds to death in other games—Desmond simply returns to the last checkpoint, that is, to the last stable memory. And when a player makes no mistakes and maintains synchronization at “full capacity”, she receives an additional perk and can take advantage of a special mode called “Eagle Vision”, allowing her to highlight all visible enemies. Moreover, as the world of Altaïr is not real but only a computer simulation, the player can experience unexpected “glitches”—digital noise caused by *Animus* software malfunctions and illegibility of DNA. Finally, during the transition from in-game menu to virtual reality—when map files are loading to temporary working memory (RAM)—the player can practice moving his avatar. The training ground is

represented as a boundless and milky-white space, which resembles the famous training program depicted by the Wachowski sisters in *The Matrix*. All these design traits not only intentionally expose that game world as a digital simulation—a virtual world inside a virtual world—but also accustom the player to the interface as an integral part of this simulated reality.

Yet it is still not clear how we can conceive of such deliberate virtualization of the game world as realist. First of all, classifying the entanglements of the interface and different levels of simulation in *Assassin’s Creed* as realist is not possible within a representational framework. I argue—perhaps somewhat paradoxically—that the game can be labeled as “realist” because it manages to integrate the interface with the game world. As a result, all the “unrealistic” elements on the screen are familiarized and explained by the narrative. The frame, which often occludes sight, disappears as it blends with the image. My reasoning corresponds with the structuralist account of realism provided by Roland Barthes. In *S/Z* he compared realist novelists to painters who “frame” reality only to present the ready picture as a truthful representation of the world.⁵ What Barthes meant by this metaphor was that the basic tenet of every realist aesthetics is the disappearance of the frame—that is, all artistic conventions and stylistic markers—from the viewer’s sight. The means to reach this goal may vary historically, but the reality-effect always lies in such a deception. In my understanding of simulational realism, I want to follow Barthes’ critical intuition and assert that realism, in the case of video games like *Assassin’s Creed*, can be understood as a set of operative conventions and techniques that affect the user, acting upon her/his expectations and “naturalizing” the view. Although it may seem that an added layer of reality introduced by a fictional VR device can produce estranging or, at least, perplexing sensations in the player, it is quite the opposite. Sim-realism is an aesthetic of “Internet natives” who see no opposition between reality and simulation because they experience the world through many different media.

It also worth noting here that the ways of generating realism and their functions in video games must

differ from non-interactive forms of representation.⁶ In novels or films, the function of realism is to suspend the reader's doubts and immerse him in the reality depicted. The realist writers of the 19th century provided their readers with numerous details of the characters' material and social environment, but the overabundance of detailed information, while seeming to reveal, served to veil the artificiality of a story. By contrast, video games do not need to create a convincing picture of reality to immerse players, because the most important factor of immersion in games is simple interaction. When a player acts in virtual reality, her actions are rewarded on screen through feedback: if she presses an arrow, the avatar moves, if she clicks the left mouse button, her character fires her weapon, etc. In this way—by providing consequences for my actions—the game fools me into thinking that the virtual reality exists. For this simple reason, game realism does not have to create the illusion of a transparent and objective image of the world. Its role and specificity lie elsewhere—in integrating virtual reality and interface into a coherent whole. At least until augmented reality devices are widely used, on-screen interfaces which interfere with the view must be considered unrealistic. And these “annoyances” cannot disappear from games altogether: health bars, mini-maps, ammunition counters, and equipment menus are defining elements of every game and provide the player with key information. It follows that the task of realism in games is to find a way to integrate the frame and the image.

Yet game interfaces rarely receive a narrative (realistic) explanation, so, the frame stands out and impedes immersion. Therefore, a relative integration of the interface and virtuality becomes very important. Immersion—also called “spatial presence”—is an experience of relocation that occurs when a person develops a secondary frame of spatial reference and “forgets” the surrounding space. Besides the aforementioned interactivity, there are many factors that play a role in this process.⁷ In visual media, the most simple and important is contrast, which allows you to see edges of objects and establish relationships between them. The second factor is the relative integration of incoming stimuli:

consistency between sounds and images, homogeneous aesthetics, coherent rules governing the world, etc. The third one is meaning or, to be more exact, the possibility to attach meaning to events and objects in a simulation. If a virtual reality is coherent, realistic, and meaningful, it will be easier for the user to remain in the state of “suspended disbelief”. Consistency is so important because, in purely technical terms, immersion is a continuous process of creating and confirming perceptual hypotheses (models of virtual space in the brain). Realism—as aesthetics of the “disappearing frame”—operates simultaneously on the level of coherence and meaning. However, the means of “suspending disbelief” differ, depending on the medium. As I said, in video games, the role of interactivity in producing and confirming perceptual hypotheses is so great that the need for a realistic representation (of the world that seems familiar or plausible) is comparatively reduced. It is precisely this characteristic of video games that allows us to approach their realism differently: as a non-representational aesthetic that secures coherence of the player's experience by integrating interface with virtual space.

I will try to demonstrate how this works in the case of *Assassin's Creed*. For example, substituting the “health” bar with “synchronization status”—which explains the player's death as memory failure—resolves the problem of virtual death which haunts every game. The death of the main character—which happens often—and his eventual resurrection hardly ever receives a plausible explanation (with the notable exception of the *Darks Souls* saga). Of course, players get accustomed to this glaring inconsistency, though virtual deaths still disturb the game flow. Quite uniquely, if a player in *Assassin's Creed* fails during a mission, the consequences of his failure are presented not as a real death, followed by a miraculous resurrection, but are explained more “realistically” and coherently in sim-realistic terms: they are presented as an inability to reach a certain point in the game's / Desmond's source code. From this point of view, we can see that video games cannot be made realistic by simply mimicking the rules of the real world, as in reality death is irreversible. The act of replaying after losing—a crucial part of

the gaming experience⁸—can make sense only if the game reveals itself as a game, thus establishing a semblance between virtual reality (Desmond playing in *Animus*) and actual reality (me playing on my personal computer). Therefore, sim-realism is autoreferential—the game does not simulate a real world but familiarizes us with the simulation as real, that is generated in real-time. This auto-referential nature of *Assassin's Creed's* design points towards the act of gaming, which always happens in the present, determining how the past is conceptualized by the game.

REALISM WITHOUT HISTORY

Before delving further into theoretical considerations about aesthetics and epistemology, I want to begin by noticing that Ubisoft studio has always prepared *Assassin's Creed* games with a team of academic consultants, specialists in their respective fields—medieval history, the Italian Renaissance, the French Revolution etc. Similarly, game's map designers always build their virtual cities using historical materials: old maps, literature, municipal documents, paintings, etc. In one interview, the game's creative director, Alex Hutchinson, who worked on the third installment of the series, stated that the team's aim was to create historical fiction which would balance playability and historical accuracy: "the official tagline is 'history is our playground' and we take it very, very seriously. We do a lot of research; we have historical advisors on staff."⁹ But even if all the *Assassin's Creed* games are situated in a fairly accurate historical setting—full of references to historical facts, places, and figures—they do not try to immerse the player in the past by convincing him that their worlds are, were, or even could be real. In other words, their realism does not pertain to reality—factual, counterfactual, real, or fictitious. It is not simply a case of narrative fiction that blends facts and speculation to create an alternative account of a past in which conspiracy theory supplements and dramatizes historical knowledge. In *Assassin's Creed*, the past is replaced by computer-generated virtual space, and facts are substituted by algorithms and scripts. The representational dualism of falsity and truth is not relevant for the player immersed and acting in the virtual space. We are constantly

reminded that the ancient world is being digitally created in front of our eyes not as a real world.

So, if a game's realism depends on autoreferentiality, and not representation—as in *Assassin's Creed*—then the past evaporates in a timeless virtuality. Within such aesthetic frames, we cannot think of the past as a linear succession of "world-states". Sim-realist design effectively annihilates the objectivity of the past as a "reality that has been", though the game can still refer to historical data. This abstract assumption can be explained with a simple comparison. Let me contrast *Animus*—a memory machine—with the conventional time machines that appear frequently in science-fiction stories. The concept of time machine assumes that the past exists as something spatially real. No matter where time travelers arrive (the time distance) and what makes their journey possible (the concept of time), one must assume that there is a destination, for instance, in an alternate reality. That is why classical science-fiction stories (for example, Connie Willis' novels) do not contradict scientific historiography, which grounds historical knowledge on the concept of fact and—as Hayden White ironically commented—on an outdated "correspondence theory of truth."¹⁰ Of course, historians are not obliged to believe in the persistent realness of the past, yet only by assuming the reality and objectivity of historical events can they speak of facticity (and attempt to verify facts as true). In contrast to such conventional notions of the past, the world of *Assassin's Creed* is based on an ontological assumption which differs significantly. Although Desmond—and the player, for that matter—can almost touch and experience realities remote in space and time, these realities are (1) always happening in the present and (2) intimately private. Only Desmond can enter and make use of these memories. Thus, even if the traces of the old world are still here, they exist in a form of non-referential information for private use. *Assassin's Creed* replaces the past as a bygone reality, with virtual space calculated and emulated by a machine. The past becomes ontologically dependent on the present (and not the other way around). All that matters is the data needed for the simulator to work and obtained through its operations.

This view of the past corresponds with Vilém Flusser's prognosis on the effects of computation on human knowledge. He believes that, as a specific kind of knowledge, history emerged out of writing that is always linear and referential. History, as a way of understanding the past (and producing it in the present), reflects the logic of narrative, which, as a communication technology, imposes strict rules of temporal succession of events and representation (signs relate to things and historical knowledge relates to reality as it once was) on human thought. Flusser states: "With the invention of writing, history begins, not because writing keeps a firm hold on processes, but because it transforms scenes into processes: it generates historical consciousness."¹¹ What follows from his speculations is that technical images and computer programs will come to endanger the literary culture of Western humanism and fundamentally revolutionize how people refer to the past. In the post-historical universe of digital images (computation), it will only be possible to think about reality in the present tense. For those whose mind was shaped by computers, "only the moment is real; it is a node in the surrounding field of possibilities. This field is structured like a game of dice: its possibilities create accidental combinations, so that, as the game continues, even the most improbable combinations become accidentally necessary."¹² Flusser's remarks allow us to see a direct connection between notions of realism and our conceptions of the past. Literary realism—as the aesthetics of objectification and temporality—is now being replaced with simulational (digital) realism, in which the past is tangible only as a simulation in the present. In my opinion, *Assassin's Creed* is one of the first symptoms in popular culture of this epistemological shift: history becomes just one game among many, and its reality can only be conceived in terms of probability.

BOUNDLESS MEMORY AND SIMULATIONAL WARFARE

What makes *Assassin's Creed* unique among games and films that renounce a representational approach to the past is that its formal structure does not confuse the player or viewer but, rather, fills the gaps which normally interfere with immersion. The

added layer of reality neither estranges (in a Brechtian sense) nor perplexes—it absorbs attention and channels it into a smooth flow of experience. However, the significance of the game and of "simulational realism" can be better understood if situated within the wider pop-culture trend to portray the past from a disturbed and personal perspective, haunted by uncertainties, inherently unstable and fragmentary. Many "mind-game" (Elsaesser) films of the last two decades fit into this description: *eXistenZ* (dir. David Cronenberg, 1999), *Fight Club* (dir. David Fincher, 2000), *Eternal Sunshine of the Spotless Mind* (dir. Michel Gondry, 2004), *Inception* (dir. Christopher Nolan, 2010), or *Source Code* (dir., Duncan Jones, 2011). All these films show complex realities from deeply personal yet disturbed points of view, and in all these cases the issue of trauma intertwines with philosophical speculation on the psychological effects of communication technologies and digital simulations. Additionally, while thriving on cultural technophobia, they expose the volatility of memory and its susceptibility to manipulation and programming in the digital age. The emergence of video games as a major force in popular culture also played a part in this ontological vertigo at the turn of century. It is no coincidence that Thomas Elsaesser used the term "mind-game cinema" to describe films like *eXistenZ* or *Fight Club*:

[M]ind-game films could be seen as indicative of a "crisis" in the spectator–film relation, in the sense that the traditional "suspension of disbelief" or the classical spectator positions of "voyeur," "witness," "observer" and their related cinematic regimes or techniques (...) are no longer deemed appropriate, compelling, or challenging enough.¹³

The popularity of mind-game films was a direct response to video games: a classic case of media convergence creating a new aesthetic. But this new cinema, centered on themes of delusion, schizophrenia, brainwashing, or trauma, also represented an epistemological crisis and the beginning of a distrust toward classical—that is, objective—realism.

In turn, mind-game cinema clearly influenced *Call of Duty: Black Ops*, another blockbuster video game set in the counter-factual past and using sim-realist

aesthetics. It is the seventh part of a best-selling franchise of First Person Shooters that take place during various military conflicts in the twentieth and twenty-first centuries. In this one, the main character is Alex Mason who, like Desmond Miles, finds himself in the hands of hijackers who interrogate him in a top-secret government facility. As with *Assassin's Creed*, in *Black Ops*, the act of playing is also framed as an act of trying to remember. The game is set in the 1960s, when the USA and the USSR are on the brink of nuclear war. Although the plot may seem utterly fictitious, the creators of the game claimed their intention was to create an appealing yet authentic spectacle. That is why *Black Ops* is filled with dozens of references to historical events, characters, and places. On this virtual stage, we stumble across John F. Kennedy, Fidel Castro, and Robert McNamara, secretary of defense of the USA in 1960s, among many others. In his memories, the main character travels to actual places in Vietnam and Laos, is held captive in the Vorkuta gulag, and, in the later stages of the game, finds himself in the Pentagon. The game's visuals are also full of references to American culture of the 1960s. After action-packed missions, the game shows cut-scene animations which visually resemble newsreels from the Vietnam War. In a text about the presentation of the Cold War in the game, Clemens Reisner concludes that history in the game "is interpreted as a form of simulation that includes authenticating elements and places the player in a specific way within a historically charged space. The ensuing logic turns out to resemble that of a theme park ride."¹⁴ Yet, the game remains coherent, despite its aesthetic discrepancies. Through sim-realist framework animations, fake documentaries and the often-overblown spectacle of violence become integrated into a consistent whole.

Every mission begins in the interrogation room, where Alex is forced to delve into his memories and reveal crucial details about his complex and blurred past. It turns out quite soon that the ontological stability of this past is dubious. During these "memory-trips," disturbing visual effects and uncanny echoing sounds from the interrogation room bleed into the world of Alex's recollections, blending the two worlds and setting a tone of ontological uncertainty.

Moreover, just as in *Assassin's Creed*, the game's menu is projected onto the 3D space of the interrogation room where Mason is held hostage. Thus, even before launching the actual game, the player is positioned as the main character and chooses between multiple game options from his perspective. Consequently, every interface command—to start the game, change graphic settings, or check the controls—is framed as the protagonist's action. The distinction between the virtual world and its interface, between the real and the virtual, becomes blurred. And although Alex's position is quite miserable, we can think of him as a "serious gamer", playing for his life on a virtual battlefield. Furthermore, almost at the end of the game, Mason discovers that most of his memories were manipulated: he was captured, traumatized, brainwashed, and re-programmed by a group of Soviet terrorists who planned to put global superpowers at odds. Many details that he seemed to remember well turn out to be fake—most crucially, his friendship with Victor Reznov who accompanied the player on many missions. The player thus realizes that what he mistook for accurate representations of the past in memory actually turns out to be just another variant of virtual space, created through brainwashing. Alex Mason is a true symbol of the 1960s—a brainwashed subject who, like a hippy on LSD, discovers that his mind has the capabilities of a simulation machine. It is not a coincidence that LSD, a mind-altering substance, was studied by American Intelligence in the 1950s for interrogation purposes and inspired programmers in the 1970s, after the dawn of counter-culture.

The *Black Ops*' aesthetic, quite disconcerting for a blockbuster video game, is not only an insightful comment on the 1960s psychedelia, blending war images and hallucinatory visions, but also turns out to serve a very practical purpose. First, by framing experience as memory, the programmers make sense of the game's linear structure: in *Black Ops*, player movement is restricted only to a single route, with no straying off the path. Secondly, as I have already pointed out, in doing so, the designers were able to integrate the layers of interface and virtual reality. Thirdly, the game performs a mind-trick on the player not to distance him from the virtual world but,

on the contrary, to immerse him even further. The moment of revelation, when Alex discovers that his past was fabricated, only reaffirms the reality of the interrogation room in which he now finds himself.

Purposefully or not, *Call of Duty* also addresses important and very real issues concerning war, memory, and representation, namely: 1) the elusive memories of soldiers who suffer from posttraumatic stress disorder; 2) the uncertain ontology of modern warfare. In this sense, the game's realism is not only autoreferential but also relates to the "real" reality of modern warfare. This phenomenon was taken up and illustrated by a German filmmaker Harun Farocki in one of his recent works, titled *Serious Games* (2009). In this multimedia installation, composed of four documentary films, Farocki presented how various VR technologies encompass and infiltrate the daily routines of American soldiers. For example, in the first film, *Watson is Down*, Farocki investigated how simulators are being used in military training. At least since the Gulf War in 1990, the US army has used virtual reality devices, and, in the last two decades, even adapted commercial games for professional purposes. On top of this, in 2002, the American Army released a very popular online game intended for the recruitment of new soldiers (for example, drone pilots) and as a tool for learning strategic communication. The current entanglement of entertainment industry and military is even more profound because video games also play other minor roles in modern conflicts. In his third documentary, with the significant title *Immersion*, Farocki presented a most surprising case. During his visit to the Institute for Creative Technologies in Southern California, a research center for virtual reality and computer-simulations, he took part in and filmed an experimental treatment project for army veterans. It involved developing simulation-based therapy for soldiers returning home from Iraq and Afghanistan with Posttraumatic Stress Disorder (PTSD). This film depicted how VR devices are used in these experimental therapies to recreate and reenact traumatic events. As the neuroscientists behind the project explained, the basic idea behind therapeutic VR is to immerse patients, turning them into active participants or, in other words, players

in the virtual scene of trauma. In the first stage of the therapy, doctors with programmers and patients reenact the traumatic scene: the death of a friend on a battlefield, an ambush by an enemy guerrilla, etc. After directing this virtual theater, the patient immerses himself in the simulation, reliving the traumatic event and re-organizing his wobbly and uncertain account of the past. It may seem dubious that game playing can resolve serious psychological issues, but this experimental therapy is grounded in a neurological understanding of trauma. From this perspective, trauma is a condition that occurs when a person finds herself under intense stress and cannot correctly process external stimuli¹⁵. Numerous feelings and sensations that occur during such unpleasant events can potentially blend and bind with the memory, causing anxiety attacks in later life. In other words, trauma, an inflicted wound, is not a memory so vivid that one cannot be rid of it. On the contrary, it is a memory failure which compels the neurological system to trigger false alarms in safe environments. From a philosophical point of view, this experimental therapy reveals that traumatic memories can be treated as malfunctioning simulations to be fixed with external technology. Simulation treatment is used to correct the memory, and not, for instance, to relive the real experience and take revenge for the loss. It thus falsifies the idea that personal memories carry accurate representations of past experiences. To treat PTSD, one must assume that a person's account of the past is no more than a simulation, which can be healthy or broken.

All in all, Farocki's artistic (and philosophical) investigation exposes the paradoxical nature of war experience—shaped by a long period of training in battlefield simulators and recreated in another simulator in a medical research center.¹⁶ The German artist convincingly argued that the reality of contemporary warfare expands in modern times to include experiences inside virtual realities that are now an integral part of war. His conclusions agreed with an intuition expressed by Gilles Deleuze and Felix Guattari back in the early 1970s in *Anti-Oedipus*, when they argued that new technologies of simulation do not negate the real and thus should not be understood in terms of representations of

the world. On the contrary, a simulation extends human reality, leading to its overabundance: “It carries the real beyond its principle to the point where it is effectively produced.”¹⁷ As such, virtual realities do not annul or distort the reality of war but, rather, create new battlefields and means of conflict. Modern-day warfare stretches into digital realms to encompass times of peace. If anything is lost in this process, it is only faith in the realness of objective past, which, as in posttraumatic stress disorder therapy, is addressed and reprogrammed through virtual reality. And this fleeting, unstable nature of war experiences—anticipated by simulators, shattered by traumatic events, and eventually re-assembled by other simulators—is indirectly captured in *Black Ops*. The game does not represent the sheer materiality and brutality of the battlefield. Instead, it frames the experience as a journey into a virtual memory, playing itself out in real time. After all, the game needs to convince the player of her agency.

GAMES, COUNTER-FACTUALS, AND PROBLEMS WITH THE PAST

To conclude, I argued that, in modern video games, the mechanisms of individualizing the past through metaphors of simulation and posttraumatic memory can be interpreted as realist. In *Black Ops*, new sim-realist form responded to the shifting reality of modern warfare, and in *Assassin’s Creed* it was used to create a modern-looking digital aesthetic to present a very remote, historical reality. Significantly, in both cases the past was addressed and experienced through private and technologically modified memory. Therefore, the “realness” was situated not in the fictional world but elsewhere—in the simulational present, established and framed for the private user of the game who wants to be convinced that he is an active agent in the story. In a way, as Jean Baudrillard might have had it, this can be read as an irreversible loss of the referential real—the backbone of facticity and historical, objectifying knowledge¹⁸. But from a Deleuzian perspective, the past becomes a virtual domain that allows for endless reinvention: pure data for creation and entertainment, over and over again. For programmers who make games, facticity and history are either a sales pitch or an optional limitation.

However, it is maybe worth speculating on the epistemological consequences of presenting the past as simulation, especially if we take into account the belief shared by many players that games like *Assassin’s Creed* can be great tools for learning history.¹⁹ This seems problematic if we consider that historical discourse, grounded on fact, is completely incompatible with the aesthetics of sim-realism, which evokes no illusion of objective reality. However, even if games and other forms of simulation are incompatible with representational (referential) knowledge, they can be used differently by historians. The editors of *Playing with the Past: Digital Games and the Simulation of History* go as far to suggest that, given their interactivity, games as such can never present history: “While commercial simulation video games fail to act as genuine historical representation, we argue that they successfully model the conceptual frameworks necessary to understand and construct historical representation better than alternate media.”²⁰ In other words, games allow players to better understand the notion of agency in human history and to root out a deterministic image of the past. Games can also have a very practical role for historians who, like Niall Ferguson, study virtual, i.e. probabilistic, history. Ferguson wrote in *Virtual History* that counter-factual history does not have to rely only literary fantasy alone; it can be founded on simulation software and calculations using probability calculus:

In short, by narrowing down the historical alternatives we consider those which are plausible—and hence by replacing the enigma of ‘chance’ with the calculation of probabilities we solve the dilemma of choosing between a single deterministic past and an unmanageably infinite number of possible pasts. The counterfactual scenarios we therefore need to construct are not mere fantasy: they are simulations based on calculations about the relative probability of plausible outcomes in a chaotic world (hence ‘Virtual history’).²¹

While a book may be an appropriate medium for presenting the results of counter-factual reasoning, performing counter-factual experiments requires

other media (virtual spaces). For example, we can imagine an experiment involving virtual systems in which players take on the role of historical characters and make choices at decisive historical moments. Historians would then be able to investigate what decisions people usually make in such situations and determine how typical (and likely) the actual decision was. Video games also provide an opportunity to envision and trace the development of states, kingdoms, and other historical subjects in alternative timelines. Different paths of evolution could be assigned various probabilities. In this sense, games can undoubtedly be useful or perhaps even indispensable tools for “counter-historians”. Speculating on the potential impact of video games on culture and our conceptions of the past is something else. If games cannot be classified as representations and, as I tried to prove here, their realism does not establish an objective account of the past, it seems reasonable to suspect that it will prove difficult to reconcile the two epistemologies. As most media theorists in the twentieth century argued, the dawn of literary culture—founded on the medium of text and the rational subject—will also affect historical consciousness, which only fully developed 200 years ago through public education and popularization of the printing press. From this perspective, a game like *Assassin’s Creed* can be considered an expression of the ongoing transition process from linear historical knowledge to timeless simulations. There are, of course, other prognoses. The bleakest scenario would probably be persistent epistemological crisis, reinforcing historical mythologies with digital tools. In such a virtual future, “counter-factual” games could be used to universalize historical events, ways of life, and values. VR technologies would then become tools for a postmodern conservative turn, allowing us to celebrate the past as a myth, isolated from historical contexts (political, social, moral, etc.). However things work out, humanists should acknowledge the existence of the epistemological gap between technologies of simulation and technologies of representation.

Those who write history cannot do without stories. It goes without saying that the boundary between historiography and poetics was never explicit,

because, as Aristotle has remarked, both historians and poets must share the same palette of literary means of expression.²² Moreover, as noticed by Michel de Certeau, members of both professions hold the same assumption about the facticity of past events depicted by them: “Historiography (that is ‘history’ and ‘writing’) bears within its own name the paradox—almost an oxymoron—of a relation established between two antinomic terms, between the real and discourse. Its task is one of connecting them and, at the point where this link cannot be imagined, of working as if the two were being joined.”²³ It is thus doubly interesting to keep track of new forms of realism, as these aesthetic shifts in mainstream entertainment may as well be reflective of more profound cultural changes. Even if—on the surface of things—players around the globe seem to be performing the good old history, in fact, they are taking part in a mourning ritual.

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- ¹¹ Vilém Flusser, *Writings*, transl. Erik Eisel, (Minneapolis: University of Minnesota Press, 2002), 39.
- ¹² Flusser, 18.
- ¹³ Thomas Elsaesser, "The Mind-Game Film," in *Puzzle Films: Complex Storytelling in Contemporary Cinema*, ed. Warren Buckland (Hoboken: Wiley-Blackwell, 2009), 16.
- ¹⁴ Clemens Reisner, "'The Reality Behind It All Is Very True': Call of Duty: Black Ops and the Remembrance of the Cold War" in *Playing with the Past...*, 248.
- ¹⁵ James Lake, "Virtual Reality Exposure Therapy for PTSD in the military," *Psychology Today*, <https://www.psychologytoday.com/us/blog/integrative-mental-health-care/201702/virtual-reality-exposure-therapy-ptsd-in-the-military> (04.10.2018).
- ¹⁶ For a detailed analysis of Farocki's project, see: Anders Engberg-Pedersen, "Technologies of Experience: Harun Farocki's *Serious Games* and Military Aesthetics," *boundary 2*, 44 (2017).
- ¹⁷ Gilles Deleuze, Felix Guattari, *Anti-Oedipus*, trans. Robert Hurley et al. (London: Continuum 2004), 96.
- ¹⁸ Jean Baudrillard, *Simulation and Simulacra*, transl. Shelia Faria Glaser (Ann Arbor: University of Michigan Press, 1994), 1–3.
- ¹⁹ Some examples can be found at: http://www.gamelogs.org/feature/Assassins_Creed_is_Better_Than_Your_History_Teacher.html (22.02.2018); <https://kotaku.com/assassins-creed-can-actually-teach-you-a-thing-or-two-1576446550> (22.02.2018); <https://www.gamesradar.com/assassins-creed-origins-is-about-to-make-history-class-legit-cool/> (22.02.2018); <https://www.fastcompany.com/3037212/the-fun-violent-history-lesson-inside-assassins-creed-unity> (22.02.2018); Kevin O'Neill and Bill Feenstra ("Honestly, I Would Stick with the Books: Young Adults' Ideas About a Videogame as a Source of Historical Knowledge," *Games Studies* 16 [2016]) seem to suggest otherwise, though their empirical study is based on a limited group of participants sharing similar social background (university students), making it impossible to draw any conclusions.
- ²⁰ *Playing with the Past...*, 38.
- ²¹ Niall Ferguson, "Virtual History: Towards a 'chaotic' theory of the past" In *Virtual History: Alternatives and Counterfactuals*, ed. Niall Ferguson (New York: Basic Books, 1999), 85.
- ²² Aristotle, *On the Art of Poetry*, transl. Ingram Bywater, https://www.gutenberg.org/files/6763/6763-h/6763-h.htm#link2H_4_0027 (24.08.2018), ch. IX.
- ²³ Michel de Certeau, *The Writing of History* (New York: Columbia University Press, 1988, XXVII). See also: Freddie Rokem, *Performing History* (Iowa City: University of Iowa Press, 2000, 9–12).

Notes

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² John Markoff, *What the Dormouse Said: How the Sixties Counterculture Shaped the Personal Computer Industry* (London: Penguin, 2005).

³ Timothy J. Welsch, *Mixed Realism: Videogames and the Violence of Fiction*, (Minneapolis: University of Minnesota Press, 2016).

⁴ Mark B. N. Hansen, *Bodies in Code* (New York: Routledge, 2006, 1–14).

⁵ Roland Barthes, *S/Z*, transl. Richard Miller (Hoboken: Blackwell, 2002), 54.

⁶ For a seminal text about differences between video games and other media see: Markku Eskelinen, "The Gaming Situation," *Games Studies* 1 (2001).

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⁸ Jesper Juul, *The Art of Failure: An Essay on the Pain of Playing Video Games* (Boston: MIT Press, 2013).

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SIMULIACINIS REALIZMAS – ŽAIDIMAS KAIP BANDYMAS PRISIMINTI

Santrauka

Straipsnyje gilinamasi į specifinį būdą grįžti į praeitį per vaizdo žaidimus, nukeliančius į istorinius laikotarpius, bet kartu sąmoningai ardančius virtualių pasaulių tikroviškumą. Straipsnyje pateikiamo argumento pagrindu tampa dviejų itin populiarių vaizdo žaidimų – *Assassin's Creed* („Žudikų brolija“, Ubisoft, 2007) ir *Call of Duty: Black Ops* („Pareigos šauksmas: slaptosios operacijos“, Activision, 2010) analizės, kuriose pristatoma ir apibrėžiama simuliacinio realizmo sąvoka. Pažymėtina, kad abu žaidimai yra vieni geriausiai parduodamų, jiems būdingos sąsajos su istorinėmis vietomis, įvykiais ir asmenybėmis, reprezentuojami kontr(a)faktiniai naratyvai, konspiracinių teorijų daugis ir, visų svarbiausia, akivaizdūs formos panašumai. Kaip dauguma AAA klasės žaidimų, *Assassin's Creed* ir *Black Ops* bando įtraukti žaidėją į virtualiąją realybę, o kūrėjai, siekdami šio tikslo, natūralizuoja žaidėjų sąveikas tarsi neatskiriamus tikrovės elementus. Vis dėlto pažymėtina, kad šiame simuliacijos procese yra sudėtinga ar net neįmanoma mąstyti ir įvertinti praeitį objektyviai.

Pabrėžiamą problemą autorius aptaria remdamasis dviem kontekstais: 1) kultūrinis ir episteminis pokytis suvokiant realybę, kuriai neišvengiamą įtaką turėjo skaitmeninių technologijų diseminacija; 2) Vilėmo Flusserio prognozė apie skaičiavimo poveikį žmogaus žinioms. Remiantis Flusserio komunikacijos teorija, istorija kaip specifinė žmonijos pažinimo forma, išskylanti kaip rašymas, užrašyta istorija, visada buvo ir yra linijinė bei referencinė. Būtent dėl šios priežasties literatūrinės kultūros krizė paskatino naujos estetikos ir reprezentacijų formų, kilusių iš skaitmeninio šaltinio, genezę. Pažymėtina, kad šios formos yra naujų esamos realybės suvokimo principų ir iššūkių atsiradimo pagrindas. Kadangi istoriją pakeitė nesibaigianti postistorija, estetinės realizmo koncepcijos taip pat buvo transformuotos ir pakeistos skaitmeniniais analogais.

Aptariant Flusserio teoriją, straipsnyje teigiama, kad realybės pristatymas kaip simuliacija gali daryti įtaką epistemologiniam tikrovės pažinimui. Tad ypatingą reikšmę reikėtų skirti žaidėjų teiginiui, kad tokie vaizdo žaidimai, kaip *Assassin's Creed*, gali tapti puikia istorijos mokymo priemone. Šie teiginiai yra problemiški, jei atsižvelgiama į tai, kad faktais grindžiamas istorinis diskursas yra visiškai nesuderinamas su simuliacinio realizmo estetika, kuri nesukuria jokios objektyvios realybės iliuzijos.

Reikšminiai žodžiai: realizmas, simuliacija, kontr(a)faktai, postistorija, skaitmeninė estetika.

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