
ARTÍCULOS

**GAMIFYING ANTHROPOLOGICAL THEORY TEACHING. CRITIQUE,
LEARNING AND THE VIDEO GAME *CIVILIZATION***

**GAMIFICACIÓN EN LA ENSEÑANZA DE TEORÍAS ANTROPOLÓGICAS. CRÍTICA,
APRENDIZAJE Y EL VIDEOJUEGO *CIVILIZATION***

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ABSTRACT: *Civilization* is frequently considered among the all-time most influential video game series. In this paper, I contribute an exhaustive updated discussion of academic literature on *Civilization*, written mainly by US historians, teachers, political and educational scientists. Empirically, I add an unpublished anthropology classroom report from Europe to the debate, discussing methodological problems in using *Civilization* as a teaching tool in social theory courses, and analysing essays written by Spanish undergraduate students. Comparing scholarly literature with student essays, I make the case for a more balanced view on *Civilization*, between cultural critique and its learning potentials. In the domain of teaching anthropology, I argue that considering computer games for training theoretical sensibilities could complement the current focus on virtual worlds and roleplay on the one hand, and on traditional text and film formats on the other.

KEYWORDS: *Sid Meier's Civilization*; Anthropological Theory; Video Games; Spain; Serious Games; Games and Learning; Anthropology Teaching.

RESUMEN: *Civilization* es considerado a menudo entre las más influyentes series de videojuegos de todos los tiempos. Este trabajo contribuye a una revisión exhaustiva y actualizada de la literatura académica en torno a *Civilization*, escrita principalmente por historiadores, maestros y desde las ciencias políticas y educativas en EE. UU. Empíricamente, añado al debate una experiencia inédita en un seminario de antropología en Europa, discuto los problemas metodológicos en cuanto al uso de *Civilization* como una herramienta educativa en cursos de teoría social y analizo ensayos escritos por estudiantes de Grado en España. Comparando la literatura académica con los ensayos de los estudiantes, defiendo una lectura más equilibrada de *Civilization*, entre la crítica cultural y sus potenciales educativos. En el ámbito de la enseñanza antropológica, considero que el uso de videojuegos para entrenar sensibilidades socio-teóricas podría complementar el énfasis actual en los mundos virtuales y los juegos de rol por un lado, y los tradicionales textos y películas por el otro.

PALABRAS CLAVE: *Sid Meier's Civilization*; Teoría antropológica; Videojuegos; España; Juegos serios; Juegos y aprendizaje; Enseñanza antropológica.

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INTRODUCTION

Video games are increasingly an important field of inquiry for those disciplines reflecting on selfhood and society (Boellstorff 2006: 29). Nonetheless, a gap remains between video game research and the use of video games for educational purposes (Turkay *et al.* 2014: 3). It was in the 1960s when the first ludic video games, such as *The Oregon Trail* were used in social science classrooms (Metzger and Paxton 2016: 537). Since 1991, a particular game series called *Civilization* has attracted the attention not only of researchers, but particularly also of instructors of social sciences. *Civilization* is a classic, bestselling, round-based strategy computer game series. Sid Meier, author of the first game in the series, is since the 1990s considered a foremost video game designer (Sefton-Green 1999: 116). Currently, the sixth title is commercialized by Firaxis and 2K Games, but there are also free open-source versions developed by gamers. I have used one of these versions for teaching purposes in a university classroom setting that I will describe later in this paper. All these different versions of the game share that players are building an empire from early humanity to present-day, by exploiting resources, trading, waging wars, building cities, discovering land and new technologies, to name but a few. Due to these similarities, if not stated differently, in the following I will refer to the series as a whole, even if most of the specialized research and learning experiences cited throughout this paper are based on specific version of the game. In this contribution I will reflect on my recent experience using this game for an exercise within an undergraduate anthropology course in Spain, by building on a discussion of the surprisingly extensive amount of research articles dealing mainly or at least secondarily with *Civilization*. This literature can be divided into four different disciplinary approaches.

First, we have contributions with an orientation on games, media and communication, that focus on the players' experience, such as discussions among expert players, designers or modders (this is players manipulating the source code) of *Civilization* (Squire and Giovanetto 2008; Voorhees 2009: 264; Owens 2010).

The second and maybe largest group of contributions comes from historians focusing on the game as a historic narrative or a teaching tool for history (Kapell 2002; Taylor 2003; Squire 2004; McMichael 2007; Schut 2007; McCall 2012, 2016; Chapman 2013; Wainwright 2014). In the same vein there are some contributions from political scientists (Bevc 2007; Weiß 2007; Weir and Baranowski 2008; Salter 2011). A third group of contributions focuses on education and computer or play-oriented learning (Squire 2005, 2006; Hlodan 2008; McCall 2016). Finally, there is a whole branch of "Civilization cultural studies", critiquing among others the game's ethnocentric and stereotypical reductionism (Douglas 2002), its myth of progress obsessed with frontiers (Kapell 2002: 129), its focus on masculinity and space (Schut 2007), its colonialist undertone (Mukherjee 2016), and bio-cultural imperialism (Poblocki 2002).

In the following section I will discuss this academic literature dealing with *Civilization* in more detail. Starting with different definitions of the game and its genre, I will then proceed to present available reports of learning experiences that tend to see the potentials of *Civilization* for teaching. Then, I will turn to the critical inquiries that are looking at the underlying ideological bias of what is seen as only an apparently (pedagogically) worthwhile game. I will subscribe the argument of those underrepresented authors who see in the exercise of critically assessing video games their main utility for training in social scientific thinking. In the subsequent sections, I will elaborate on the methodological framework of a *Civilization* gaming exercise in anthropological theory, conducted in November 2017 with undergraduates at the University of Seville in Spain. This is followed by an analysis of the outcomes of the exercise by relating the students' essays to the expert discourse on *Civilization* found in the literature. In the conclusions I turn to the ways in which anthropology education has incorporated digital media and games over recent decades. My empirical findings show that beyond the now popular use of multiplayer online worlds for ethnographic experimentation, the discipline could also benefit from considering traditional computer games for training socio-theoretical sensibilities.

THE ACADEMIC DEBATE OVER CIVILIZATION

Civilization is a commercial entertainment "history game" that emulates the growth of "civilizations"

over time by simulating complex concepts, such as trade, diplomacy, science, religion, resources, warfare, wealth, citizenship, production, topography, government, infrastructure, borders, nationhood, tax, revolution, policy, culture, free will or fate. This all-encompassing attempt of the designers stimulated many debates over the accuracy of the game's simulation of all these diverse and complex socio-ecological phenomena. Voorhees (2009: 262) discusses some technical features that eventually support the learning potentials of *Civilization*. For instance, it is strategic (versus skill and action play), has a managing focus (where limited resources have to be adapted to external pressures), and turn-based (allowing for in-game contemplation). In contrast, gamers, bloggers or Wikipedia classify *Civilization* within the "4X" genre, meaning that players essentially explore, expand, exploit and exterminate. Others include it in the genre of the "god game" (where players are given the feeling of total control) or "god perspective" seeing the world from bird's eye viewpoint zooming in and out (Salter 2011: 364). This game feature has been held to enhance the player's awareness of the complexity of international relations and "encounter differing viewpoints" being "exposed to diverse cultures" (Weir and Baranowski 2008: 445). But the contrary has also been argued. The bird's eye view would contribute to a symbiosis between the gamer and the imperialist empire, converging into a "technobody [that] reinforces the predominant power relations and the supremacy of the American state" (Poblocki 2002: 172). In the following, I will discuss in more detail those two conflicting interpretations of the game's potentials and problems.

The multiple learning experiences reported for *Civilization* are often embedded in a more general interest of the authors in the potentials of "immersive interactive technologies" (Squire and Giovanetto 2008: 4) and these are often concerned with the use in classroom settings of several video games. McMichael for instance asked his students to compare *Civilization III* with *Patrician II* and *Age of Empires* (2007: 213) and Wainwright gave his students the task of comparing *Civilization IV* with a different history game of the student's choice (2014: 611). Experiences range from using the game as a supplement to courses (Weir and Baranowski 2008) to complete undergraduate seminars centred exclusively on video game learning, and even entirely on *Civilization* (Wainwright 2014). There are experiences in schools (Squire 2004), but also at Universities (McMichael 2007; Weir and

Baranowski 2008; Wainwright 2014) and adaptations for museums (Schaller 2011: 262).

This "educational" *Civilization* literature holds that learning principles are present in video game design (Gee 2007), such as problem solving, communication, resourcefulness or adaptability (Barr 2017) and that the younger generations prefer software-based learning (Metzger and Paxton 2016: 534). Also, game designing is held as a beneficial learning activity (Kafai 2006). In this line, Owens has studied online discussions of gamers modifying the source code of *Civilization* (2010: 484). The same type of players (modders) were studied by Squire and Giovanetto through participatory investigation. They are portraying a self-organized online learning community of *Civilization* players gradually growing into developers that are finally hired by the game industry (2008). The authors see an advantage of online playing or developing games over traditional teaching, because participants decide over their own curricula which "is enjoyable, relates to particular goals [...], stems from a desire for challenge, and, critically, requires a community" (Squire and Giovanetto 2008: 13). In Squire's prior research (2004, 2005, 2006) he is advocating for the potential of video game learning communities. Here the focus is put on learning through digital technology, such as computer games or online communication, where *Civilization* is only one facilitator among others.

A different set of authors are particularly interested in *Civilization* as a so called "serious game" with supposedly intrinsic educational value. Arguments of this kind range from rather uncritical assumptions of one to one transfers between game concepts and learning goals, to more sophisticated analysis of the underlying game concepts. Weir and Baranowski claim that students can learn the workings of international politics through playing *Civilization* (2008). They praise that *Civilization* "forces students to consider [...] the role played by culture" (2008: 445), provides "a wider, more diverse interpretation of history than [...] written texts" and "give students access to understanding history from a non-Western perspective" (2008: 452). Others suggest that the meaning of concepts such as space, temporality, choice or selfhood can be fruitfully discussed through *Civilization*. For Chapman (2013), *Civilization* is a good example to show that histories are selections and no singular, lineal or "true" history exists. Many authors, such as Fogu, are interested in the game's treatment of time and space

(2009: 121) and the production of speculative-conditional historical scenarios intermingling the past with the present and fiction with reality (2009: 111, 118, 121). Here the computer game is presented as a legitimate narrative in the plural postmodern concert of popular histories (Chapman 2013).

Different to those authors discussing the added intellectual value of gaming *Civilization*, there is a whole branch of critical inquiries. These are following a more general trend in cultural studies to uncover hidden power relations expressed by symbolic means in popular cultural artefacts. Here the “postcolonial undertones” in video games (Mukherjee 2016) are put into focus against what is held to be a dangerous “all-out enthusiasm” about *Civilization* (Poblocki 2002: 163). Analogous to my previous classification, it is also possible to distinguish here between authors seeing the ways in which ideas are presented in the game as troublesome, while others have a more general concern with the medium video game itself. This latter concern connects to a larger debate over the extent to which the commonplace of violence in videogames has negative consequences in the real world (Poblocki 2002; Salter 2011).

In the following I will give a short description of a typical game experience of *Civilization*. My text is based freely on my own memories. Hopefully, my prose conveys a feeling for the gameplay experience to the reader. More importantly, it shall help you to better grasp the arguments of the cultural critics of *Civilization*. This is how I remember my days of intensive play of the first three editions.

I feel physically and mentally exhausted after a four-hour playing session. But I am also happy to finally dominate the world. Me means the Zulu civilization and its aggressive male leader Shaka. I was the first among my artificial intelligent opponents, the Americans and the Egyptians, to discover key-technologies such as democracy, build crucial infrastructure such as railroads or world-wonders such as the pyramids. Other nations were destroyed early in the game by Cleopatra, Abraham Lincoln or myself. I have grown my stone-age settlements into megacities producing a tank every second turn. I avoided discontent or revolutions due to overpopulation and warfare by spending more on luxuries, culture and building temples. Partly I was lucky because of the abundant coal, rivers and grasslands close to my first settlements. These crucially contributed to fast growth in demography and production. (To be honest, I started a new game several times to get that advantageous opening situation). In addition,

eliminating a barbarian tribe crucially granted me an early extra settler. Nevertheless, it was also my own merit to use resources efficiently. Meticulously and obsessively controlling each little aspect of my ever growing empire—from diplomacy over infrastructure to science—thousands of my small decisions led me to victory.

To Voorhees, this presumably typical gamer experience I recall from playing *Civilization*, can be described as a symbiosis between the feeling of pure intentionality of the Cartesian or capitalist subject and the imperialist project of domination (2009: 267, 271). This bias of computer games is presenting history as a space-determined and mechanic process (Galloway 2006). In *Civilization* this mechanic is deployed through war, masculine stereotypes, the need to avoid rebellion, economic reductionism and an ethnocentric understanding of “culture” as western (Schut 2007: 220-222). The construction and the need for extermination of barbarians and savages in *Civilization* endorses the colonialist logic of conquest and genocide (Douglas 2002). In addition, while game designers thought to have leveraged some of the more obvious flaws, Poblocki has shown how each version is a reflection of the time’s dominant ideological milieu (2002: 171). While this criticism seems to undermine any attempt to use *Civilization* for didactic purposes, some argue that especially the critical examination of *Civilization* and its ideological bias might be a rewarding exercise for students. I discuss and subscribe to this argument in the following.

Most of the supporters and sceptics of *Civilization* discussed so far seem to view the different ways of approaching the game as irreconcilable, either implicitly or explicitly, as for instance Voorhees (2009: 264). Instead, Fogu argues that both perspectives share a similar misunderstanding by conceiving *Civilization* as representation rather than simulation/immersion (2009: 118). This is true. Yet, I cannot see why the analysis of computer games as representation (text) is less accurate than approaching them as simulation (social practice). McCall for examples provides an example of how such an educational treatment of *Civilization* as representation or as a cultural artefact could look like. Building on similar experiences by Alexander (2013) and Wainwright (2014), he finds in the biases of computer games (like in those of other media) a useful opportunity for reflection (McCall 2016: 529). Owens also shows how expert players are deliberately discussing accurate

understandings of science and history based on the problems they encountered in *Civilization* (2010: 492). To conclude with, I would argue that it is especially the diverse, sophisticated, multi-disciplinary, and controversial debate over *Civilization* that provides the best justification for seeing the game as a rewarding field for social scientific inquiry. This is true for both advanced research (such as academic game studies) and early-stage exercises (such as anthropology education). Probably, what connects me and most of the scholars cited in this paper is our common experience of having intensively played *Civilization* at some moment of our lives (Poblocki 2002: 169; McMichael 2007; Owens 2010: 485). This has provoked our intellectual reaction at some point, particularly in contrast to our professional work as social scientists. It seems to me that this is already a strong case for my argument.

THINKING ANTHROPOLOGICAL THEORY WITH VIDEO GAMES

The background of this research is my work as a lecturer of anthropology at the University of Seville. For thirteen years I taught social theories to students of anthropology, communication, tourism or (art) history. Many anthropology text-books focus in their outline of the discipline on schools (Barnard 2000), with a chronological order (Harris 1968), divided by national traditions (Barth *et al.* 2005), with specific contributions from “founding fathers” (Kuper 1983). Two basic problems are cutting through these orientations. The first is related to the specificities of the dominant medium of anthropological knowledge, namely text production and reception, in contrast to fieldwork experience (Geertz 1988; Clifford and Marcus 2010). The second has to do with the question of what makes a theory “socio-anthropological” in the first place (Ellen 2010). What are the historically evolved and periodically reframed paradigms that lend themselves for application to current social problems (Eriksen and Nielsen 2013)? The instruction in all of this abstract knowledge requires different and diverse set of practical exercises, most importantly reading, writing and discussing texts. This is how new information can be applied, exemplified, tested, and experienced. Nevertheless, the extent to which visual materials are used effectively to supplement anthropological training is largely understudied and undertheorized (Bird and Godwin 2006: 285). With the

following research from Spain I aim to provide new insights about how anthropological theories can be applied to the reading of popular computer games in University classroom settings.

In 2014, I firstly took my undergraduate history students to the faculty’s computer room and conceived a short playing and discussion exercise based on a *Civilization* tutorial. I wanted to see whether my students were able to analyse this game in some of the ways I was since the idea first came to my mind. Endowed with my instructions on a range of anthropological theories, I expected them to uncover some of the game’s underlying ethnocentrism, Marxism or structural-functionalism. I thought they might be motivated by the refreshing change of the habitual classroom media. Nevertheless, many of my students were not able to make meaningful connections between gameplay, mechanics or narrative, and the key concepts of my seminar. I mostly received superficial observations. Based on the problems of this first experience, I learned that I would have to put more effort into my own preparation, calculate more seminar time for the exercise and eventually turn to students with more specific training in anthropological theory. The readings I have presented in the previous section made me aware that it was far from original to conceive *Civilization* as a teaching tool or as subject for serious cultural analysis. Ground-breaking works were done already at the turn of the century in the first area by Squire (2004) and in the second by Poblocki (2002) and Kapell (2002). Second, I found that currently there was a plurality of conflicting and highly sophisticated ways of approaching the game in the literature. Each of these could be interesting in relation to the two major learning goals of my course, that I had referred to at the beginning of this section as cutting through most anthropological theory textbooks. These are the role of the medium for knowledge production and the very nature of social theories. Finally, I would have to divide my exercise in several steps giving room for each of these different dimensions. By moving gradually from more general observations on video games and social sciences to more specific analysis of anthropological theories in *Civilization*, I would eventually get better learning results. I would have to give room for more obvious and more sophisticated analysis from players, more critical and more favourable views of *Civilization*. I also considered the difference between interpretations of video games as cultural artefacts as opposed to gaming as social practice. Starting with

these assumptions in mind, I conceived the first exercise to reflect on the medium video game and their users, analogous to the prevalence of text readers and writers of anthropological theory. The second exercise asked for the modelling of social life in computer games, in comparison to the ways in which complexity is simplified in academic social theories. Particularly, I wanted students to look at the specific models used in *Civilization* to simulate evolution, workings and morphology of “civilizations”, in comparison to those models used by anthropologists to frame society.

Planning how to build both exercises into a classroom setting, there were several methodological aspects that had to be taken into account. Students would need to learn playing before they could be expected to engage in the refined analysis (McCall 2012: 25). Some lecturers have solved this time problem by commissioning students to play outside the classroom (Weir and Baranowski 2008: 450-459) or dedicating a whole seminar to *Civilization* (Wainwright 2014). Others have argued that teachers should engage directly with students while these are playing. It should become clear that *Civilization* is just one source among others demanding critical observation (McCall 2016: 532-536). In addition, similar to other classroom media such as documentaries (Bird and Godwin 2006: 288), context had to be provided before exposure to the game, in order to avoid uncritical or passive consumption. However, no closed analytical framework should be imposed at the beginning, to invite students to do their own analysis. To encourage those informed but independent explorations by students, several different tasks are mentioned in the literature as constructive. These range from “field notes” by players while enrolled (Squire and Giovanetto 2008: 10), to answering very specific questions, such as “how does trade benefit or hinder your objective?” (Weir and Baranowski 2008) and more open-ended essay requests on, for instance, the gender dimension in the game (McMichael 2007: 211-212). Even watching videos of the game developers or reading critical *Civilization* scholarship, such as the work of Kapell (2002), is among the suggested exercises (Wainwright 2014: 609-610). Finally, not all students will be enthusiastic about playing video games in the classroom (McCall 2016: 532-536).

Concerning the selection of the adequate game version for the classroom, most scholars have either worked with *Civilization II* (Friedman 2005), *III* (Kapell

2002; Squire 2004; McMichael 2007; Weir and Baranowski 2008; Owens 2010) or *IV* (McCall 2012; Wainwright 2014). Even if the problem of forcing students (or public institutions I would add) to buy commercial titles for educational purposes has been noted by some (McMichael 2007: 208) and not by others (Wainwright 2014: 607), the open source clone *Freeciv* is not mentioned by most authors, with exception of Arjoranta (2015) and Poblocki (2002). I thought that an additional advantage of *Freeciv* was its likelihood to stimulate discussions about modding, an important theoretical layer in game studies.

Trying to give credit to most of these methodological problems, I finally opted for five in classroom sessions of one hour each distributed over three days. I was moving pairs of students through two subsequent intervals of play/data gathering and writing/analysis. The concluding session was a final collective discussion. For each session I provided students with a written handout giving general explanations and specific instructions. These had to be returned with brief notes (playing sessions) or short essays (analysis sessions). The first sequence was dedicated to getting a feeling for the game and to undergo a player experience. The handout gave some brief information of the game series, some instructions on how they could get started with playing *Freeciv 2.5.7* with Spanish interface. It asked students to take some short notes of their first impressions. The only analytical frame given at that moment was alerting that we would examine this game just as any other source analysed in previous occasions, such as texts and documentaries. The second sequence was designed to stimulate students to think about the medium. They were asked to write a short commentary comparing the presentation of human evolution in a video game for ludic purposes and the presentation of human evolution in a text for scientific purposes. The third session was dedicated to learning some of the game’s mechanics, rules or concepts. The student’s attention was drawn to reading the extensive Wikipedia-like in-game instructions and to take notes. This “reading the game” was also thought to tackle the before mentioned time problem and to provide the opportunity to understand the game’s overall workings to the less game enthusiastic students. In the fourth session, students were asked to write a commentary on social theories and *Civilization*, based on the notes and information they had collected previously. Particularly, students were encouraged to discuss whether specific theories (such as functionalism, materialism, particularism) or

paradigms (such as relativism or determinism) where at the heart of the game's philosophy or imbricated in any of its specific mechanisms. The final session was dedicated to collectively discussing the game as well as the exercise itself.

A medium of 34 undergraduate students of anthropology at the University of Seville participated during three different days of the exercise in November 2017, fairly in the middle of the Spanish fall term. I have dedicated over 8% of my available seminar time for teaching "classic anthropological theories" for the exercise. The following sections provide an analysis of the outcomes based on my own interpretation and translation of the written and oral Spanish commentaries provided by my students. These were informed previously by a note on the handouts that I would eventually use their contributions anonymized for research purposes.

PLAYING THE MEDIUM

In the previous section I have argued that one of the foremost tasks of learning social theory is the reading, writing and interpretation of texts. It is the contribution of the so-called writing culture debate of the 1980s to underline the importance of text for practicing and understanding anthropology (Clifford and Marcus 2010). One way of raising the awareness of the potentials, limitations and conditions of the medium text for anthropological knowledge is the comparison with other media. McCall suggests that "simulation games" provide closer analogies with the "real world" than "text" (2012: 13) but he also suggests that they are just another "simplified version of complicated realities [...] like historical monographs and articles" (2012: 19). McCall's ambivalent take on this problem shows two different ways of reflecting on the role of the medium of social theory. One can either underline the differences or the similarities between the writer/text/reader and the designer/game/player. Taking this problem as a starting point, in the first exercise I have asked my students to write a short essay on the following topic, after they had previously played for an hour and taken some brief notes. This is a transcript of what I asked them to do in my handout.

Let us consider the video game *Civilization* as an anthropological text for a moment. *Civilization*, just as the theories we read in class, is a simplified narrative of the world based on causality or probabi-

lity of human collective behaviour. Nevertheless, the video game is different to the texts we read in class in at least two ways. First it is an interactive text that grants protagonism to the "reader" to participate in "writing" the text. On the other hand, the game was not designed to claim scientific accuracy for the way it portrays society, but to entertain. Write a short essay considering both observations and try to use specific experiences you have made with playing *Civilization* to sustain your arguments.

When looking at the reactions to the first two sessions, the short notes from playing and the essay response to the previous question, it is interesting to see how many students took for granted the seriousness or intrinsic value of the game. Thus, they were putting little obstacles to the idea of a one to one comparison between scientific text and game narrative. It seems that especially the overwhelming complexity of *Civilization* for the beginners (or the dominion of this complexity by some students with previous *Civilization* experience) were taken as a proof for the game's characteristic "seriousness", thus having an additional value to mere entertainment. This was expressed by many students through quantitative accounts or listing the numerous game features they have encountered. This in a way suggested that all those functions were worthwhile, and proof of analogies with social scientific theories. A student wrote a list of skills eventually developed through *Civilization*, arguing that players "interpret, observe, comment, administrate, critique, are emphatic, and most importantly, creative". This echoes McCall's observation that "choice" and the "what-if-questions" raised by gaming are its greatest potential (2016: 525). One student even labelled her playing an "ethnographic experience" analogous to participatory research "inside" games as suggested by Snodgrass (2016: 135). Following my discussion of the literature, such observations seem very naïve.

Nevertheless, I do think that this is not necessarily a problem specific to computer games. Similar reactions can be seen from students to the more complicated texts we discuss in the classroom, such as for instance those of French structuralisms. Here, Kuper provides a parallel of how over-complexity is also sometimes confused with quality in academic circles. He is recalling a "highly esoteric" lecture by Claude Lévi-Strauss in London praised by Edmund Leach as exclusively comprehensible for a selected group of insiders (1983: 161). Therefore, not framing a video

game “critically” in the classroom right from the beginning seems to lead many students assume that their professor elevates only intellectually important games to a worthwhile subject of inquiry. In our case, longevity also seems to convey high “intellectual” status to computer games. These are more often supported by middle-aged professionals having played them since the 1990s. For instance, in an ethnographic account of adults’ justifications of their own computer gaming in the UK, Thornham cites gamers using the example of the PC game *Civilization*. Informants distinguished sophisticated gaming for grown-ups from “anything contemporaneous on the PlayStation” (2009: 148).

In turn some of the fewer critical observations of the game were immediately related to the flaws of the medium video game in general. This somehow excused *Civilization*, which may be appreciated in the following quotes from two different student essays.

It has the typical mechanical perspective of video games.

[*Civilization*] has a lineal conception based on a constant cause and effect logic, which is normal because it’s a video game.

Their arguments overlap exactly with Schut’s excuse for the mono-cultural reductionism of *Civilization*. One cannot critique computer games for being mechanic (Schut 2007: 226). Nevertheless, another smaller group of students had more clear-cut concerns. One of them objected the apparent freedom of the open source software *Freeciv*. Players could not really participate in “writing” the game. This was because the overall materialist and evolutionist framework coupled with an (and I quote) “egocentric perspective typical for modernity”, undermined any of such attempts. This echoes Poblocki’s concern of *Civilization* players being “told that we can write anything we want as long as it is the master narrative of globalization” (2002: 175). A small minority of students indirectly challenged the high-flying meta-analysis of *Civilization* that I have suggested as an exercise, by building their comments on the ludic dimension of gaming. Consider the following short comment made by a student that I found particularly interesting.

After half an hour trying to found the Andalusian nation and the cities of Cáí [sic] and Graná [sic] I have declared war, without intention, on the Iroquois, but I have no military [...] We need help from the Swedes to get out of this one!

Such a “ludic framing”, I suggest, consists of reducing games to the dimension of entertainment. This viewpoint is largely absent from the academic *Civilization* literature. This is also the reason why I will give this way of looking at the game some more room for discussion here. For instance, one could easily read the student’s text as a creative metaphor used to comment on the regional separatist crisis in Spain that dominated the public debate in the country at the end of 2017. Eventually Andalusia was employed as a metaphor for Catalonia by the student because both regions have separatist-nationalistic movements. The Iroquois then would stand for the Spanish, because the Iroquois are “aggressive” in *Civilization*. The debate over the hostility of the Spanish state was a central debate in often pro-independence social-science University circles at that time. The Swedes eventually stand for the European Union, because in southern Spain, Europe is often associated in ordinary language with the northern countries writ large. The EU was held a key party to mediate the Catalan-Spanish conflict. This reading of the essay is also interesting because the heated political climate in Spain complicated straight forward speaking about one’s own position on the conflict. Therefore, ironic or metaphorical framing of the conflict parties (Catalans, Spaniards and the EU) became extremely popular on (social) media during this period. Yet, I probably went too far with this interpretation of the student’s essay.

Another possible reading of the student’s comment is that of an acid comment on the weak Andalusian separatist movement. Never really catching up with the more powerful Catalans or Basques, Andalusia would try to copy other regions by desperately “trying to found a nation”. Writing from the perspective of the Andalusian capital Seville, the nation’s foremost cities are Granada (challenging Seville’s status as the capital both in the game and in reality) and Cádiz (the smaller ancient city south of Seville often considered for the humour of their inhabitants). By writing both cities in dialect, the student eventually plays with the ambivalence of whether these were the “real” names within a new “fictional” Andalusian nation, or the other way round. The unintended war and the need for outside intervention, to which the student refers in his comment, plays into familiar tropes of tranquility, oppression or dependency of Andalusia, which is also often seen as the major obstacle (or argument) for independence. As demonstrated, a “ludic framing” of game elements is not necessarily the most banal mode of social analysis. Eventually my second

interpretation of the student's essay also went a little too far. Still, this example is suggesting that humour and entertainment through gaming can encourage imaginative writing and creative ways of reflecting intellectually on social issues. I will now turn from considerations about computer games as social theory to the application of anthropological theories to games such as *Civilization*.

MODELLING HUMANITY

Already a first quick assessment of *Civilization* reveals some analogies with classic anthropological theories. There are hints to enlightenment naturalist-evolutionism (civilizations move at different pace through identical development stages), cultural diffusionism (civilizations granted with different assets start at different points on the map), sociological-functionalism (everything within a civilization has a specific utility, nothing occurs by chance), materialism (the overall survival of civilizations depends on the natural resources at their disposal) or historical-particularism (the players/civilizations are rewriting history according to their will and intentions). In this line, I asked students in the second exercise to play again, to take notes and to examine the extensive in-game instructions in order to get familiar with more specific game concepts (such as government, diplomacy, science, religion, cities) or general features of the game (such as the importance of randomness/determination, the winning-requirements or the comparison with other games). After one hour of playing, I asked students to write an essay on the following question (I quote again from my handout).

You have seen in this and other seminars the specificities of grand theoretical models, such as historical particularism, functionalism, individualism, hermeneutics, physical plasticity, Marxism, positivism or the culture and personality school, among others. Write a comment relating any of these models to some of the dimensions of *Civilization*, such as a) the game narrative, b) the player experience or c) the explicit or implicit rules.

Many of my students forced an analysis where every theory had to be accommodated with some of the game's concepts. Others embarked on a lofty appraisal of learning opportunities, similar to Weir and Baranowski (2008), for instance by arguing that achieving the overall goals in *Civilization* depends on the need to balance the State expenditure. For example,

military goals cannot be achieved without investing in education, science or infrastructure. One student had celebrated this as "holistic approach" of the game, like the anthropological project of studying society's different dimensions, such as the economy, politics or culture, without downplaying any of them. To the contrary, a smaller group of students leaned towards a one-dimensional and often poorly argued condemnation of the game. Some limited their critique to the detection of the games restricted set of winning conditions. Different games, such as the *Sims* where suspiciously mentioned twice as a better alternative. Others only made reference to the addictive potential of *Civilization* and recognized their own excessive play in the past. Some experienced the game as "antiquate" because of the interface, or "boring" because of the difficulty to win.

Nevertheless, there were also some more sophisticated essays. Some students focused on the ways in which the game portrayed or reflected uneven power relations and on a set of social theories that have this problem at their core. A specific essay focused on the lack of "interpersonal relations" within the game, stating that there were only "collective archetypes", expressed through the units and cities. Just as McMichael, this student found that "individuals disappear" in the game (2007: 212). This was differently labelled by another student as a "cold experience of society". In a similar vein, some argued that order was the underlying principle of the game just as it was in structural-functionalist sociology in the tradition of Durkheim or Radcliffe-Brown. This was exemplified by several students through the game concept of "happiness". "Happiness is measured as if it was objective data" a student wrote. It was framed as a collective, rather than a subjective phenomenon, which was related by students to the underlying idea of culture as a coercive force on the individual and external to their conscience, like Durkheim described "social facts". Also, the definition of the game units, like warriors, settlers or explorers, was associated with the division of labour, a backbone of organicist sociological theory. Different parts of society are contemplated only to the extent to which they fulfil functions for the overall system and its perpetuation. This was further supported by what a student saw as an implicit social Darwinism in *Civilization*, because the ultimate aim of nations was winning the space-race or world domination. Another point was made by student regarding the distinction of societies according to "grades of complexity". This

way of framing exotic or historical societies as “simple” by many social theories was held to be supported by a game mechanic that was moving the player from “very little options” at the beginning to “overwhelmingly countless options” towards the end of the game. Societies then “naturally” become functionally differentiated and turn from simple social relations into complex societies. Also, the central role of the State in *Civilization* was addressed by a student in comparing it to Hobbes’ Leviathan, just the way Poblocki suggested (2002). The player is “becoming-state” (Poblocki’s term) domesticating the brute situation of society by imposing a regime of control and order. Kapell based his reading of *Civilization* on the seminal “frontier thesis” coined by historian Frederick Jackson Turner who sees in the historical process of constantly moving the western border the basis for the expansionist US cultural identity (2002: 133). On this same topic, but with a different focus, a student suggested that the “frontier” in *Civilization* suggests that there is no “real cultural exchange” in opposition to Franz Boas’ view on cultures shaped historically by intercultural exchange and mixing of cultural traits, travelling through migration, war and commerce. In this sense my student’s echoed Friedman’s observation that no creolization or hybridization is possible in *Civilization* (2005: 164).

A second much smaller group of comments reflected on the economic, technological or ecological bottom line of the game and those social theories that favour a materialist understanding of social life. This line of analysis also resonates strongly among the professional game analysts. *Civilization* is economic-reductionist (Poblocki 2002: 165), teleological (Salter 2011: 366), materialist (Squire 2005, 2006; Metzger and Paxton 2016: 534), evolutionist, incremental and sequential (Schut 2007: 224). Possibly this is one of the most obvious sociological readings of the game and therefore I will turn immediately to the ways in which the game negotiates (or not) the tension between freedom and determination of human action, a central problem underlying all social theories. One group of scholars argued that *Civilization* only apparently supports player’s choice, the generation of new open-ended historical scenarios and subversive ways of imagining a different society. In the end, whatever you choose to do, the rules and the quantification of every aspect of social life will make conservative, western, androcentric ideology prevail (Poblocki 2002: 168; Schut 2007: 224; McCall 2016: 528). In addition, the only way in which agency is

conveyed to the player in *Civilization* is by subordinating your mind and body to the “western idea of hard work” (Douglas 2002), the “Cartesian subject” complicit with the “imperialist project” (Voorhees 2009: 271). There are a series of authors opposing these views. Owens underlines the fact that *Civilization* is designed for modification (2010: 483) and Chapman holds that modders are “digital history revisionists” (2013: 317). “They collectively, seriously, and freely discuss the same issues as professional historians, philosophers, and sociologists” (Owens 2010: 490). These liberating and scientific potentials experienced by gaming also resonated among my students. They commented that in *Civilization* you are a “designer of your own nation” or that “civilizations are granted with a specific type of personality”. Others held that civilizations throughout the game embody the player’s values and principles, just as ethnic groups have their own personality according to the culture and personality school once advocated by Ruth Benedict and Margaret Mead. In addition, another student held that *Freeciv* was “highly personable” and the possibility of configurations before and during the game are supportive for the creativity of the player. In addition, “every game is different, whether you stay with the same strategy or not”. An even more subjectivist stance was introduced by a student that focused his essay on the extent to which “learning the game” was experienced by her as “anthropological fieldwork”. She explained how getting familiarized with the abstract gameplay of *Civilization* was like getting socialized “to a strange new cultural context”. Taken together, the essays showed that it was possible to creatively interpret *Civilization* with all the anthropological theories dealt with in my seminar.

CONCLUSIONS

Boellstorff sees a natural connection between games studies and anthropology, as cultures are shaped by gaming and video games foment new cultural forms (2006). In this line, many prominent socio-anthropological theories have been used since the 2000s to scrutinise *Civilization*. These include Edward Said, Michel Foucault, Zygmunt Bauman, Samuel Huntington, Bruno Latour or Immanuel Wallerstein (Poblocki 2002; Friedman 2005; Wainwright 2014; Mukherjee 2016). My undergraduate seminar was supported by a close examination of this literature. I

tried to test the extent to which undergraduate students can improve their understanding of these or similar theories by applying them to scrutinise a video game. I suggested the need to prearrange a balanced exercise, both offering students to do their own (often less critical) analysis *and* giving enough orientation to empower critical engagement with the medium and its content. I gave an extensive example of a “ludic analysis” inspired by the implicit rejection of some of my students to consider “seriously” reflecting on something they saw as entertainment. These students opted for a humoristic-associative play with current social issues, such as nationalism in Spain. This is an important analytical approach, because it is largely absent from the game’s academic literature. Nevertheless, many students could not make differentiated analysis of *Civilization* or took the educational value of the game for granted, for instance by alluding to the complexity of the gameplay. In addition, there was an unbalance between ludic, critical and pedagogical interpretations of the game. I suggested that these difficulties with applying recently learned social theory are not necessarily limited to video games or *Civilization*, and also happen with text or video analysis in the classroom. Thus, I demonstrate that this game classic still constitutes an exciting, yet controversial subject of inquiry, as well as a potential instrument for creative-critical thinking for both researchers and undergraduates. The parallels I have demonstrated between the academic literature and the student essays stand as a proof.

My extensive review of the literature from across the social sciences also supports my finding that *Civilization* is a potentially suitable tool for social theory training. Surprisingly, to my knowledge, no similar experience has yet been reported from the anthropology classroom. One of the reasons for this gap in the literature might be the limited scholarly interest in anthropology education more generally. There is a widespread “amnesia that surrounds teaching” in anthropology, as Mills, Dracklé and Edgar put it (2004: 5). Still, within the marginal field of anthropology teaching research, the trend since the 2000s might be described as a move in two directions. One could be labelled as “gamifying” of student learning processes, and the other as a trend to “digitalize” education. In a path breaking edited volume on the state of the art of anthropology teaching across Europe (Dracklé and Edgar 2004), the overwhelming majority of contributors discussed either digital technologies or experimental-performative elements as cut-

ting-edge educational practice. For instance, Tescari (2004) explains the use of role-play exercises to recreate a Mexican pilgrimage experience. Pink (2004) describes the virtues of the non-linear hypertext that she wrote for students, so that they could autonomously learn about video and photography from her ethnographic fieldwork on bullfighting in Spain. Nevertheless, reports on computer games in the classroom (that perhaps combine in new ways both of the mentioned trends) were not only absent from this book. In a more recently edited volume on anthropology teaching experiences in the US, I found the same gap (Shanafelt 2012).

Another plausible explanation of the little attention computer games have received as a way to practice theorizing in anthropology, is that recent writing on anthropology instruction is principally concerned with how to teach “doing ethnography”. Mills has identified disciplinary prejudices in this respect, for example that fieldwork cannot be taught (2011: 12). In response to such objections “in-class ethnography” is suggested to get to grips with this problem (Hriskos 1996; Long 2012) or also real-life, on-site role playing and simulation games as opposed to computer or internet supported teaching (Kuehling 2014). In contrast, Michael Wesch is among the pioneers in joining his students into online worlds to practice participatory research, as explained for instance in his “anthropological introduction to YouTube” on YouTube (2008). In this sense, online virtual worlds are increasingly framed as sites for participatory research (Wesch 2009: 21). Actually, as mentioned earlier, even expert players of *Civilization* have become the subject of digital ethnographers (Squire and Giovanetto 2008: 7). Given all these new trends in both research and teaching, it is surprising that video games have not received much attention in anthropology education, and that the few available contributions are primarily concerned with ethnography (Squire and Giovanetto 2008) or critique (Poblocki 2002).

In conclusion, this research contributes new insights to both anthropology educators and game scholars. First, I provide the first comprehensive review of the academic literature of one of the most popular videogames to date. Second, while focusing on student experiences with computer gaming, I also critically incorporate the points made by digital ethnographers and critical game studies. Therefore, I put the critical and the educational research in conversation. I do so by analysing the extent to which my

students' essays reflected similar epistemic-theoretic observations or bodily experiences discussed by senior game scholars. Third, different to the focus on the US, digital ethnography, massively multiplayer online games and expert gamers, I provide an unprecedented report from an anthropology classroom in Europe to the conversation. Thus, gamifying anthropological theory education is an interesting, yet largely unexplored possible complement to working with texts, films and online environments.

CITED REFERENCES

- Alexander, Jeffrey W. 2013. "Civilization and Enlightenment: A Study in Computer Gaming and History Education". *The Middle Ground Journal* 6 (Spring): 1-26. doi: <<https://doi.org/10.1177/1046878116646693>>.
- Arjoranta, Jonne. 2015. "Narrative Tools for Games. Focalization, Granularity, and the Mode of Narration in Games". *Games and Culture* 12(7-8): 696-717. doi: <<https://doi.org/10.1177/1555412015596271>>.
- Barnard, Alan. 2000. *History and Theory in Anthropology*. Cambridge: Cambridge University Press.
- Barr, Matthew. 2017. "Video Games Can Develop Graduate Skills in Higher Education Students". *Computers & Education* 113: 86-97. doi: <<https://doi.org/10.1016/j.compedu.2017.05.016>>.
- Barth, Frederic, Robert Parkin, Sydel Silverman and Andre Gingrich. 2005. *One Discipline, Four Ways British, German, French, and American Anthropology*. Halle lectures. Chicago: University of Chicago Press.
- Bevc, Tobias. 2007. "Konstruktion von Politik und Gesellschaft in Computerspielen?", in Tobias Bevc (ed.), *Computerspiele und Politik: Zur Konstruktion von Politik und Gesellschaft in Computerspielen*: 25-54. Berlin: Lit Verlag.
- Bird, S. Elisabeth and Jonathan P. Godwin. 2006. "Film in the Undergraduate Anthropology Classroom: Applying Audience Response Research in Pedagogical Practice". *Anthropology and Education Quarterly* 37(3): 285-299. doi: <<https://doi.org/10.1525/aeq.2006.37.3.285>>.
- Boellstorff, Tom. 2006. "A Ludicrous Discipline? Ethnography and Game Studies". *Games and Culture* 1(1): 29-35. doi: <<https://doi.org/10.1177/1555412005281620>>.
- Chapman, Adam. 2013. "Is Sid Meier's Civilization History". *Rethinking History* 17(3): 312-332. doi: <<https://doi.org/10.1080/13642529.2013.774719>>.
- Clifford, James and George E. Marcus. 2010. *Writing Culture: The Poetics and Politics of Ethnography*. Berkeley: University of California Press.
- Douglas, Christopher. 2002. "'You Have Unleashed a Horde of Barbarians!': Fighting Indians, Playing Games, Forming Disciplines". *Postmodern Culture* 13(1). doi: <<https://doi.org/10.1353/pmc.2002.0029>>.
- Dracklé, Dorle and Iain R. Edgar (ed.). 2004. *Current Policies and Practices in European Social Anthropology Education*. New York: Berghahn.
- Ellen, Roy. 2010. "Theories in Anthropology and 'Anthropological Theory'". *The Journal of the Royal Anthropological Institute* 16(2): 387-404. doi: <<https://doi.org/10.1111/j.1467-9655.2010.01631.x>>.
- Eriksen, Thomas H. and Finn S. Nielsen. 2013. *A History of Anthropology*. London: Pluto Press.
- Fogu, Claudio. 2009. "Digitalizing Historical Consciousness". *History and Theory* 48(2): 103-121. doi: <<https://doi.org/10.1111/j.1468-2303.2009.00500.x>>.
- Friedman, Ted. 2005. "Civilization and Its Discontents: Simulation, Subjectivity, and Space", in Greg Smith (ed), *Discovering Discs: Transforming Space and Genre on CD-ROM*: 132-150. New York: New York University Press.
- Galloway, Alexander. R. 2006. *Gaming. Essays on Algorithmic Culture*. Minnesota: University of Minnesota Press.
- Gee, James Paul. 2007. *What Video Games Have to Teach Us about Learning and Literacy*. New York: Palgrave Macmillan.
- Geertz, Clifford. 1988. *Works and Lives: The Anthropologist as Author*. Cambridge: Polity.
- Harris, Marvin. 1968. *The Rise of Anthropological Theory: A History of Theories of Culture*. New York: Thomas Y. Crowell.
- Hlodan, Oksana. 2008. "Digital Games: Learning through Play". *BioScience* 58(9): 791-791. doi: <<https://doi.org/10.1641/B580905>>.
- Hrskos, C. 1996. "Religion, Magic, and Witchcraft: On Performing Ethnography in the Classroom". *Anthropology of Consciousness* 7(1): 20-27. doi: <<https://doi.org/10.1525/ac.1996.7.1.20>>.
- Kafai, Yasmin B. 2006. "Playing and Making Games for Learning. Instructionist and Constructionist Perspectives for Game Studies". *Games and Culture* 1(1): 36-40. doi: <<https://doi.org/10.1177/1555412005281767>>.
- Kapell, Matthew. 2002. "Civilization and its Discontents: American Monomythic Structure as Historical Simulacrum". *Popular Culture Review* 13(2): 129-135.
- Kuehling, Susanne. 2014. "Transforming Classrooms into Tropical Islands: Simulation as a Teaching Tool". *Teaching Anthropology* 4: 37-50. doi: <<https://doi.org/10.22582/ta.v4i1.259>>.
- Kuper, Adam. 1983. *Anthropology and Anthropologists: The Modern British School*. London: Routledge & Kegan Paul.
- Long, Jennifer. 2012. "Understanding the Everyday: In-class Ethnography for Social Science Students". *Teaching Innovation Projects* 2(1).
- McCall, Jeremiah. 2012. "Navigating the Problem Space: The Medium of Simulation Games in the Teaching of History". *The History Teacher* 46(1): 9-28.
- McCall, Jeremiah. 2016. "Teaching History with Digital Historical Games. An Introduction to the Field and Best Practices". *Simulation & Gaming* 47(4): 517-542. doi: <<https://doi.org/10.1177/1046878116646693>>.

- McMichael, Andrew. 2007. "PC Games and the Teaching of History". *The History Teacher* 40(2): 203-218. doi: <<https://doi.org/10.2307/30036988>>.
- Metzger, Scott A. and Richard J. Paxton. 2016. "Gaming History: A Framework for What Video Games Teach about the Past". *Theory & Research in Social Education* 44(4): 532-564. doi: <<https://doi.org/10.1080/00933104.2016.1208596>>.
- Mills, David. 2011. "Have We Ever Taught Anthropology? A Hidden History of Disciplinary Pedagogy". *Teaching Anthropology* 1(1): 12-20. doi: <<https://doi.org/10.22582/ta.v1i1.252>>.
- Mills, David, Dorle Dracklé and Iain R. Edgar. 2004. "Learning Fields, Disciplinary Landscapes", in Dorle Dracklé and Iain R. Edgar (ed.), *Current Policies and Practices in European Social Anthropology Education*: 1-17. New York: Berghahn.
- Mukherjee, Souvik. 2016. "Playing Subaltern. Video Games and Postcolonialism". *Games and Culture* 13(5): 504-520. doi: <<https://doi.org/10.1177/1555412015627258>>.
- Owens, Trevor J. 2010. "Modding the History of Science: Values at Play in Modder Discussions of Sid Meier's CIVILIZATION". *Simulation & Gaming* 42(4): 481-495. doi: <<https://doi.org/10.1177/1046878110366277>>.
- Pink, Sarah. 2004. "Ethnography, Experience and Electronic Text: A discussion of the Potential of Hypermedia for Teaching and Representation in Anthropology", in Dorle Dracklé and Iain R. Edgar (ed.), *Current Policies and Practices in European Social Anthropology Education*: 97-111. New York: Berghahn.
- Poblocki, Kacper. 2002. "Becoming-State: The Bio-cultural Imperialism of Sid Meier's Civilization". *Focaal: European Journal of Anthropology* 39: 163-177.
- Salter, Mark. B. 2011. "The Geographical Imaginations of Video Games: Diplomacy, Civilization, America's Army and Grand Theft Auto IV". *Geopolitics* 16(2): 359-388. doi: <<https://doi.org/10.1080/14650045.2010.538875>>.
- Schaller, David. T. 2011. "The Meaning Makes It Fun". *Journal of Museum Education* 36(3): 261-268. doi: <<https://doi.org/10.1080/10598650.2011.11510707>>.
- Schut, Kevin. 2007. "Strategic Simulations and Our Past. The Bias of Computer Games in the Presentation of History". *Games and Culture* 2(3): 213-235. doi: <<https://doi.org/10.1177/1555412007306202>>.
- Sefton-Green, Julian. 1999. "Playing the Game. The Critical Study of Computer Games". *Convergence* 5(4): 114-120. doi: <<https://doi.org/10.1177/135485659900500408>>.
- Shanafelt, R. 2012. *Building Bridges in Anthropology: Understanding, Acting, Teaching, and Theorizing*. Knoxville: Newfound Press, University of Tennessee Libraries.
- Snodgrass, Jeffrey G. 2016 "Online Virtual Worlds as Anthropological Field Sites: Ethnographic Methods Training Via Collaborative Research of Internet Gaming Cultures". *Annals of Anthropological Practice* 40: 134-147. doi: <<https://doi.org/10.1111/napa.12097>>.
- Squire, Kurt D. 2004. *Replaying History: Learning World History Through Playing Civilization III*. PhD, Indiana University.
- Squire, Kurt D. 2005. "Changing the Game: What Happens When Video Games enter the Classroom?" *Innovate: Journal of Online Education* 1(6). Available at: <<https://nsuworks.nova.edu/innovate/vol1/iss6/5>>. Accessed: 23 May. 2018.
- Squire, Kurt D. 2006. "From Content to Context: Videogames as Designed Experience". *Educational Researcher* 35(8): 19-29. doi: <<https://doi.org/10.3102/0013189X035008019>>.
- Squire, Kurt D. and Levi Giovanetto. 2008. "The Higher Education of Gaming". *E-Learning and Digital Media* 5(1): 2-28. doi: <<https://doi.org/10.2304/elea.2008.5.1.2>>.
- Taylor, Tom. 2003. "Historical Simulations and the Future of the Historical Narrative". *History and Computing* 6(2). Available at: <<http://hdl.handle.net/2027/spo.3310410.0006.203>>. Accessed: 12 Jun. 2018.
- Tescari, Giuliano. 2004. "Ethnodrama in Anthropology Education", in Dorle Dracklé and Iain R. Edgar (ed.), *Current Policies and Practices in European Social Anthropology Education*: 181-192. New York: Berghahn.
- Thornham, Helen. 2009. "Claiming a Stake in the Videogame. What Grown-Ups Say to Rationalize and Normalize Gaming". *Convergence* 15(2): 141-159. doi: <<https://doi.org/10.1177/1354856508101580>>.
- Turkay, Selen, Daniel Hoffman, Charles K. Kinzer, Pantiphar Chantes and Christopher Vicari. 2014. "Toward Understanding the Potential of Games for Learning: Learning Theory, Game Design Characteristics, and Situating Video Games in Classrooms". *Computers in the Schools* 31(1-2): 2-22. doi: <<https://doi.org/10.1080/07380569.2014.890879>>.
- Voorhees, Gerald A. 2009. "I Play Therefore I Am. Sid Meier's Civilization, Turn-Based Strategy Games and the Cogito". *Games and Culture* 4(3): 254-275. doi: <<https://doi.org/10.1177/1555412009339728>>.
- Wainwright, A. Martin. 2014. "Teaching Historical Theory through Video Games". *The History Teacher* 47(4): 579-612. Available at: <<https://www.jstor.org/stable/43264355>>. Accessed: 03 Abr. 2018.
- Weir, Kemberly and Michael Baranowski. 2008. "Simulating History to Understand International Politics". *Simulation & Gaming* 42(4): 441-461. doi: <<https://doi.org/10.1177/1046878108325442>>.
- Weiß, A. 2007. "Computerspiele als Aufbewahrungsform des Politischen: Politische Theorie in Age of Empires und Civilization", in Tobias Bevc (ed.), *Computerspiele und Politik: Zur Konstruktion von Politik und Gesellschaft in Computerspielen*: 77-97. Berlin: Lit Verlag.
- Wesch, Michael. 2008. Recording of a lecture titled "The Anthropology of YouTube," on June 23, at the Library of Congress, Washington, D.C. Available at: <https://youtu.be/TPAO-lZ4_hU>. Accessed: 24 Jun. 2018.
- Wesch, Michael. 2009. "YouTube and You: Experiences of Self-awareness in the Context Collapse of the Recording Webcam". *Explorations in Media Ecology* 8(2): 19-34.