

///// tematická studie / thematic article //////////////////////////////////////


INTERACTING WITH THE PAST: HISTORICAL SCIENCES AND HISTORICAL GAMES

Abstract: *Historical video games are uniquely tied to the scientific practices of professional historians, archaeologists, and many other experts. However, since video games are an interactive medium and the most common-sensical view of history is that the past is fixed, it is clear that, at least from a representationalist point of view, there is some unresolved tension. The article explores this predicament and draws heavily from contemporary historical non-representationalism – a position that shifts focus from the idea of representing the real past to the close examination of historical discourse as a complex argumentative practice, relying on evidence and robust theoretical background. To complement the theoretical examination of the problem, the paper examines three examples from historical discourse (the Late Bronze Age collapse, cliodynamics, and Big History) and juxtaposes them against two examples of historical video games of a strategic genre that deal with related topics. It is argued that what makes video games historical is their complex relation to the ongoing historical discourse.*

Keywords: *non-representationalism; philosophy of historiography; video games; Big History*

DAVID ČERNÍN

Department of Philosophy
Faculty of Arts, University of Ostrava
tř. Čs. legií 150/9, 701 03 Ostrava
email / david.cernin@osu.cz

 0000-0001-8711-3929

Interakce s minulostí: historické vědy a historické hry

Abstrakt: *Historické videohry jsou unikátně propojeny s vědeckými praktikami profesionálních historiků, archeologů a mnoha dalších odborníků. Jelikož jsou ovšem videohry interaktivním médiem a nejběžnější pohled na historii říká, že minulost je neměnná, je zřejmé, že alespoň z reprezentacionalistického hlediska, je nezbytné vyřešit určitý nesoulad. Článek tuto situaci zkoumá a čerpá ze současného historického non-representacionalismu – pozice, která přesouvá těžiště zájmu z představy reprezentování reálné minulosti na zkoumání historického diskursu jakožto komplexní argumentační praxe, spoléhající na důkazy a robustní teoretickou výstavbu. Pro doplnění této teoretické analýzy dané problematiky byly zvoleny tři příklady z historického diskursu (kolaps pozdní Doby bronzové, kliodynamika a Velká historie), které jsou srovnány s dvěma příklady historických videoher strategického žánru, jenž se věnují obdobným tématům. Text hájí pozici, že to, co činí videohry historickými, je jejich komplexní vztah k probíhajícímu historickému diskursu.*

Klíčová slova: *non-representacionalismus; filosofie historiografie; videohry; Velká historie*



This work is licenced under the Creative Commons Attribution 4.0 International License.

1. Introduction

In the video game market, there is a definite demand for historical titles.¹ The tag “historical” may serve as a marketing tool or as an indication for buyers or players that the game serves further goals beyond entertainment and might be, in some way, educational and informative. Furthermore, the adjective “historical” might imply that these games are in some way unique since they may essentially be linked to specific modes of knowledge production and with a network of professional academic disciplines. While some games may strive to simulate, e.g., the laws of physics or social interactions, the fields of modern physics or social sciences do not define their content to such extent as that of historical titles. The popular genre of simulators (from farming to space flight) might have a strong relationship with the relevant scientific fields. However, when we are speaking about historical video games, we are not speaking about the genre but a more general category. The genre definition entails a combination of the game’s mechanical interfaces and thematic levels,² and historical games can belong to a wide variety of genres, be it action, adventure, role-playing, simulation, or strategy.³

Furthermore, the relevant communities (developers, reviewers, players) can differentiate between types of relationships with the past without the need to impose precise definitions. Historical games are distinct from “alternative history games”⁴ or games which use a historical setting only as a backdrop for otherwise unrealistic or fantastic scenarios or narratives. Finally, the historicity of some video games is, in some cases, seen as its defining characteristic, which is further enhanced by community-based, non-commercial modding scenes that engage with (or are composed of) professional historians to form a lively discourse between scientific fields and popular entertainment.⁵

¹ See, e.g., Andrew B. R. Elliott, “Charlemagne at the Battle of Gettysburg – Video Games and the Middle Age,” in *Historia Ludens*, eds. Alexander von Lünen, Katherine J. Lewis, Benjamin Litherland, and Pat Cullum (New York: Routledge, 2020), 170–71.

² A. Martin Wainwright, *Virtual History* (London: Routledge, 2019), 35.

³ Yannick Rochat, “A Quantitative Study of Historical Video Games (1981–2015),” in *Historia Ludens*, eds. Alexander von Lünen, Katherine J. Lewis, Benjamin Litherland, and Pat Cullum (New York: Routledge, 2020), 7.

⁴ That is, games set in the determined past, but exploring a premise that is openly at odds with our historical knowledge, e.g., games exploring imaginary scenarios of open conflict during the Cold War, like *Command and Conquer: Red Alert* series, *Operation Flashpoint* or *Wargame* series.

⁵ Adam Chapman, *Digital Games as History* (New York: Routledge, 2016), 273.

A number of books and numerous articles have been exploring the specific issues of historical video games in recent years, including the edited volume *Historia Ludens* (2020), A. Martin Wainwright's *Virtual History* (2019), and Adam Chapman's *Digital Games as History* (2016). The motivation for this growing interest goes beyond the fact that the video game industry is becoming larger and larger.⁶ Wainwright, a professor of global history, notes that students in his courses often admit to having their views of history formed through historical video games.⁷ The aforementioned texts deal with the topic of historical video games on many different levels, often inspired by media studies, psychology, pedagogy, etc. Given the interdisciplinary nature of the topic, the names of influential philosophers of history are also referenced. In this respect, the most prolific is Chapman, who engages at length with names like Hayden White, Frank Ankersmit, Keith Jenkins, or Robin G. Collingwood. The philosophical approaches of these authors are particularly suited to the subject of historical video games as representations and constructions. In 2013, Chapman defined historical video games as:

recognisable metonymic narrative devices that are created by a developer making authorial choices, like those made by historians who write "proper" history.⁸

In the 2016 book, Chapman, referencing Keith Jenkins, distinguishes the actual past and the "subjective narrative representations we call history."⁹ This approach to the topic of historical video games proves to be fruitful and allows him to analyse the rich facets and functions of historical titles. Similarly, one of the leading historical narrativists, Hayden White, studied history as "a verbal structure in the form of a narrative prose discourse."¹⁰

Nonetheless, this paper will attempt to explore a different view and draw from other philosophical sources that stand apart from the narrativists. The paper explores the views of historical non-representationalists (e.g., Jouni-Matti Kukkanen, Paul Roth, Eugen Zelenák). While the non-representationalists do share many insights with narrativists and may be described as constructivist, they do not subscribe to history being purely subjectivist, and

⁶ Elliott, "Charlemagne at the Battle of Gettysburg," 170.

⁷ Wainwright, *Virtual History*, 2.

⁸ Adam Chapman, "Is Sid Meier's Civilization History?," *Rethinking History* 17, no. 3 (2013): 320.

⁹ Chapman, *Digital Games as History*, 9.

¹⁰ Hayden White, *Metahistory: The Historical Imagination in Nineteenth-century Europe* (Baltimore: Johns Hopkins University Press, 1973), ix.

they focus on inter-subjective aspects of historical research, rules of professional historical discourse, and how various historical claims are warranted.

The merit of this endeavour is twofold: a) we may gain additional insight into what makes some forms of media, discourses, and activities “historical,” and b) we may broaden our philosophical understanding of historical sciences. In order to make our discussions of historical video games more substantial, two specific examples of one particular genre – strategy games – will be explored: *Total War: Pharaoh* (2023) by The Creative Assembly and Sid Meier’s *Civilization IV* (2005).

Thus, the article structure is as follows: First, we will explore historical non-representationalism as an alternative position to representationalism, which is embedded in current views of historical video games. Next, we will examine three different historical theories taken from popular historical discourse through the lens of historical non-representationalism. Lastly, we will take a look at two selected historical video game titles that are related to the examples from historical discourse, and we will demonstrate the advantages of historical non-representationalism with respect to video games.

2. What Does it Mean “To Be Historical”?

When any media producer iterates on a popular subject matter, some parts of the audience will be more invested in the source material than others. Even an insensitive treatment of a clearly fictional work like “The Lord of the Rings” by J. R. R. Tolkien is capable of eliciting a strong emotional response from a devoted fan base.¹¹ There is an easily accessible template (i.e., a book series), and resulting adaptations in forms of various media products often diverge in their interpretation for numerous reasons – some parts may not translate well between different media forms, other parts may leave greater room for interpretation, and yet in other cases, the creators of the adaptation may decide to change some features for various reasons, including value-based ones. In the case of adapting fictional literature, the original text is available to the public as well as to the creators. Comparing interpretations of the source material is as straightforward as possible, and any departure from the source material is readily identifiable. Furthermore, we can even recognise exact points where the producers of the adaptation exercised their creative liberties because a) the source material has not provided clear

¹¹ See, e.g., Ken Gelder, *Adapting Bestsellers Fantasy, Franchise and the Afterlife of Storyworlds* (Cambridge: Cambridge University Press, 2019).

guidance (e.g., the exact appearance of a certain character) and b) when the producers have openly contradicted something in the source material and some vocal experts on the original will gladly alert the producers (and everybody else) about the changes.

On a surface level, there is very little difference between a well-read Tolkien admirer reacting to an adaptation¹² and a self-made history buff reacting to a historical video game or movie. However, it is possible to go beyond internet rhetoric, and we should do that here. While Tolkien readers have their books nicely arranged on a bookshelf, what does a history buff possess to compare the adaptation with? While the answer might be “history books,” we might suspect that these books stand in relation to something else.

If we move to another type of media – what may viewers of a historical movie expect from a portrayal of an event/period/historical agent? The least convincing answer might be that the touchstone for the movie might be the real past as it happened: the exact chronology, interacting processes, and characters, likeness of actors, and historical agents involved, etc. This position might be akin to a naive version of historical realism (our representations of the past must correspond directly to the events described), even though the positions of historical realists are usually much more refined than that.¹³

It is necessary to clarify how the term “real past” will be used in this article. One of the most prominent historical anti-realists, Leon J. Goldstein, claimed that since *the real past* is unobservable and gone, it is not a suitable touchstone against which to test historical theories.¹⁴ At the same time, he held that to fully appreciate history as a way of knowing, we should not focus solely on finished narratives (or representations), which he termed the superstructure of history.¹⁵ He argued that the intellectual activities of historians (warranted research methodology, interaction with evidence, etc.) form the infrastructure of history that constitutes the “*historical past*.” The historical

¹² It is possible to review reactions to Amazon TV Series adaptation *Rings of Power* (2022) or, in the world of video games, e.g., *Middle-earth: Shadow of War* (2017) by Monolith Productions.

¹³ The most recent and comprehensive defence of historical realism is *The Poverty of Anti-realism*, eds. Tor Egil Følrand and Branko Mitrovic (London: Lexington Books, 2023).

¹⁴ Leon J. Goldstein, “Against Historical Realism,” *Philosophy and Phenomenological Research* 40, no. 3 (1980): 428–29.

¹⁵ For a particularly pregnant criticism of narrativists and introduction of the concepts like the superstructure and the infrastructure of history, see Leon J. Goldstein, *Historical Knowing* (Austin: University of Texas Press, 1975), 139–82.

past should be viewed as a contribution to our knowledge of the world. The superstructure of history (including historical narratives in books, movies, or video games) utilises this historical past and adds yet further layers of interpretation, subjectivity, value judgments, etc.¹⁶ For Goldstein, the real past is a concept that cannot be a straightforward truth-maker for historical claims. Nonetheless, looking simply at the finished product (i.e., historical narrative text) puts us at risk of overlooking what makes history what it is – intersubjective intellectual cooperation and ongoing inquiry underpinned by the development of our ability to gain knowledge from present data.

In the same vein, if we try to claim that historical video games represent the real past, the historical video game will become a contradiction in terms. Since games are an interactive experience and players' choices should matter, the happenings portrayed on the screen will sometimes branch away¹⁷ from the real past (or rather from the historical past as a body of knowledge about the past), even if the agency of players is severely limited by the systems the game provides.¹⁸

In Chapman's view:

Digital games, in a way quite unlike conventional historical forms, open up the story space for shared authorship. That is to say that the historical narrative produced in these games is always produced by the actions of both the developer-historian and the player. The former determines the nature and components of the story space and the latter determines which narratives are eventually told within it, by configuring them within the limitations established by these components.¹⁹

We may find that Hayden White²⁰ stresses similar aspects of history writing throughout his work. Writing history is predominantly a creative

¹⁶ Leon. J. Goldstein, "Impediments to Epistemology in the Philosophy of History," *History and Theory* 25, no. 4 (1986): 83.

¹⁷ Some historical video games may tell a fictional story in a historical setting that is not contradicting historical discourse in any way. However, in this article, we will focus on historical videogames that allow players to branch away from historical knowledge.

¹⁸ Chapman, *Digital Games as History*, 30.

¹⁹ *Ibid.*, 34.

²⁰ Another acknowledgment of Hayden White's views on analysis of historical video games can be found in Andrew J. Salvati and Jonathan M. Bullinger, "Selective Authenticity and the Playable Past," *Playing with the Past*, eds. Matthew Wilhelm Kapell and Andrew B. R. Elliott (New York: Bloomsbury, 2013): 155–56.

act, and historians can choose how history is portrayed.²¹ However, we are reminded that historical video games still rely on the player's knowledge of historical discourse (however limited) in order to achieve "historical resonance."²² Thus, for a video game to be historical, players must be able to identify its relevance to the historical discourse that is known to them. However, what does it mean for the discourse to be historical if we want to use it for defining historical games?

The idea of studying historical discourse and finding out what its essential features are, is most recently pronounced in the works of Jouni-Matti Kuukkanen. He is critical of representationalist language, which he sees as committing to the subject-object relation and, as such, creating additional theoretical complications.²³ Chapman often makes clear that his position is constructivist, and he is aware that our knowledge of the past is limited, yet the language often remains representationalist:

Digital games are no more or less inherently accurate a form of historical representation than any other.²⁴

This statement begs several questions. What does historical representation actually represent? How do we compare the accuracy of different representations with what is being represented by (supposedly) diverging representations? To answer these questions and provide a philosophically more apt view of history, Kuukkanen proposes the need to abandon the representationalist language and argues for a non-representationalist route. He outlines his view of historical discourse in his book from 2015²⁵ and in a more concrete proposition accompanied by an example of a close reading of historical text from 2021. Historians (participants of historical discourse) make warranted claims about the past.²⁶ Thus, in order to comprehend the

²¹ This is particularly prominent in an interview with Ewa Domanska, "A Conversation with Hayden White," *Rethinking History* 12, no. 1 (2018): 18; or in Hayden White, *The Practical Past* (Evanston: Northwestern University Press, 2016), 20–23.

²² *Ibid.*, 36. It should be noted that historical resonance could be achieved by merely stating that game is historical. While this might be true from the phenomenological point of view, it is not clear how historical video games relate to history as a knowledge.

²³ Jouni-Matti Kuukkanen, "Representationalism and Non-representationalism in Historiography," *Journal of the Philosophy of History* 7, no. 3 (2013): 455.

²⁴ Chapman, *Digital Games as History*, 271.

²⁵ Jouni-Matti Kuukkanen, *Postnarrativist Philosophy of Historiography* (London: Palgrave Macmillan, 2015).

²⁶ Jouni-Matti Kuukkanen, "Historiographical Knowledge as Claiming Correctly," in *Philosophy of History: Twenty-First-Century Perspectives*, ed. Jouni-Matti Kuukkanen

inner workings of historical knowledge, philosophers of history should ask the following questions:

- (1) What kinds of inferences and claiming are there in historiography?
- (2) How are they justified?
- (3) What defines the difference between legitimate and illegitimate inferences in historiography?²⁷

In the following brief case study, Kuukkanen dissects several claims from the book *Revolt at Factories* by Seppo Aalto. Via close reading and asking how individual claims are warranted, Kuukkanen identifies several kinds of *speech acts* and grounds for linguistic acts in historiography: inference from archival material, inference from literature, inference from shared beliefs (historiographical and moral), textual inference, textual coherence, and the authority of the historian.²⁸ The list is hardly exhaustive, but it invites philosophers and other theoreticians to take a closer look at historiographic practice, to examine logic, and warrants historians accept at any given time across various historical disciplines. Historical discourse is seen as an argumentative practice that is open to revisions and competing explanations.

According to Paul Roth, historical knowledge is always a knowledge of events under description; events exist only by proxy.²⁹ Historical events (linguistic descriptions of them) are a) *not standardised*, and no settled theoretical recipe for how to constitute them exists (two narratives may define “a revolution” differently).³⁰ As constituted non-standardised entities, historical events are b) *not detachable* from the holistic narrative they are part of.³¹ Theses a) and b) underwrite the thesis c): we cannot expect different historical narratives to unproblematically cohere: “to aggregate into one seamless account of The Past theoretically.”³² In effect, knowledge of the past, as produced by professional historians, does not simply have a definite touchstone to which we can compare it, and multiple historical pasts are possible because our linguistic practices of capturing the past differ. How-

(London: Bloomsbury Academic, 2021), 46.

²⁷ *Ibid.*, 54.

²⁸ *Ibid.*, 63.

²⁹ Paul A. Roth, *The Philosophical Structure of Historical Explanation* (Evanston: Northwestern University Press, 2020), 30.

³⁰ *Ibid.*, 67.

³¹ *Ibid.*, 14.

³² *Ibid.*, 15.

ever, it is important to stress that knowledge of the past is still based on empirical data, a particular epistemic culture, and evidentiary practice to counter charges of relativism.³³

Eugen Zelenák considers Roth's and Kuukkanen's philosophical positions to be a part of one particular paradigm shift in the philosophy of history. The non-representationalist philosophy of history may provide more meaningful tools to explain the plurality of historical narratives and theories.³⁴ According to Zelenák, historical non-representationalism overcomes traditional scheme-content dualism applied to history and escapes the dangers of vicious relativism.³⁵ By abandoning representationalist vocabulary, philosophers of history are incentivised to take a closer look at historiography and various historiographic practices, including evidential reasoning, concept formation, argumentation, presentation, etc. Non-representationalists view their project as predominantly epistemic and as a way to discard confused metaphysical issues, such as questions about whether the concept of Renaissance refers to any concrete entity or is just a constructed colligatory term (a term grouping individual historical events as a part of a single process). Thus, history is seen neither as a purely subjective act of interpretation nor a mirroring activity representing the real past. History is seen as an intersubjective argumentative practice in a community of highly specialised experts.

Furthermore, this view can explain disagreements in historical discourse and a plurality of narratives in addition to the fact that historical methods and disciplines develop over time. Historical non-representationalism can appreciate the multifaceted nature of the past.³⁶

The next section explores three examples from historical discourse using the non-representationalist philosophy of history. All examples are chosen in accordance with historical video games analysed further below.

³³ Fons Dewulf and Paul A. Roth, "Real True Facts: A Reply to Currie and Swaim," *Journal of the Philosophy of History* 16, no. 2 (2022): 222.

³⁴ Eugen Zelenák, "Non-representationalism in Philosophy of History: A Case Study," in *Towards a Revival of Analytical Philosophy of History*, ed. Krzysztof Brzechczyn (Leiden: Brill Rodopi, 2018), 124.

³⁵ Eugen Zelenák, *História a relativizmus: Ako prekonať relativistický výklad historickej práce?* (Bratislava: Chronos, 2021), 80.

³⁶ It should be noted that the non-representationalists are often accused of coming dangerously close to the Scylla and Charybdis of relativism and postmodernism, see, e.g., *The Poverty of Anti-realism*, eds. Tor Egil Førland and Branko Mitrovic (London: Lexington Books, 2023).

3. Collapses, Complexity, and Big History

3.1 *The Late Bronze Age Collapse*

In 2021, American historian and archaeologist Eric H. Cline published a second revised edition of his popular book with an intriguing title: *1177 B.C.: The Year Civilization Collapsed*. The book contributes to the broader discourse about the complex historical event referred to as the Late Bronze Age collapse.³⁷ It acknowledges that the historical discourse still lacks a proper explanation of the event, and the “convenient scapegoat”³⁸ in the shape of the Sea People invasions is less convincing after decades of excavations. Even without the explanation, historians assure us that the event happened – the event itself is overdetermined by the available evidence that shows the sharp decline in complexity, i.e., a collapse of civilisation.³⁹

The book has a rather traditional structure. After an introduction that explains why this particular intervention needs to take place (i.e., the Sea People story is less trustworthy given new data), Cline proceeds with establishing the historical context and informs us about the centuries that preceded the collapse of the Bronze Age. If we employ Kuukkanen’s terminology and his close reading approach, we may say that we encounter very clear cases of *inferences from archival material* (“The textual evidence from the various archives and houses at Ugarit indicate that international trade and contact was going strong in the city right up until the last possible moment.”⁴⁰), *inferences from other scholarly literature and historical discourse* (“Traditionally, ever since the University of Chicago excavators published the findings from their excavations at the site during the years 1925–39, it has been accepted that...”⁴¹), etc. In addition, this particular historical narrative vastly relies on archaeological methods and auxiliary disciplines like radiocarbon dating,⁴² fossil pollen particle examination,⁴³ or DNA analysis⁴⁴ (the availability of new DNA material and other new pieces of evidence

³⁷ Eric H. Cline, *1177 B.C.: The Year Civilization Collapsed* (Princeton, NJ: Princeton University Press, 2021).

³⁸ *Ibid.*, 12.

³⁹ *Ibid.*, xvii.

⁴⁰ *Ibid.*, 106.

⁴¹ *Ibid.*, 111.

⁴² *Ibid.*, 113.

⁴³ *Ibid.*, 159.

⁴⁴ *Ibid.*, 149.

prompted Cline to publish a revised edition⁴⁵). It is unclear whether these linguistic acts would constitute a new type of warrant for Kuukkanen or whether we should consider them as another *inference from literature* since Cline is referencing the works of other scientists.

The penultimate chapter – “A ‘Perfect Storm’ of Calamities?” – serves as an evaluation and conclusion to the quest for a new explanation of the Late Bronze Age collapse. Cline references once again the current lack of scholarly consensus⁴⁶ and evaluates all candidates: earthquakes, internal rebellions, invaders and collapse of international trade, decentralisation, diseases, climate change, droughts, famine, etc. The second revised edition actually contains a complex speech act in which Cline summarises his conclusions in the form of a *textual inference*:

Now, however, given the additional data that have appeared in the years since 2014, while I would still posit multifactor causation, I am inclined to think that this megadrought is likely to have been the principal driving force behind many of the problems that Late Bronze Age societies faced.⁴⁷

Numerous clarifications are added to this conclusion, clearly showing that Cline considers this to be merely the best possible explanation currently available.

The very last chapter, “Sea People, Systems Collapse, and Complexity Theory” leaves the narrow focus on the Late Bronze Age collapse behind and attempts to ask more general questions. Cline discusses the complexity and interconnectedness of the Late Bronze Age Mediterranean and compares it to our times, referencing the COVID-19 pandemic and “Black Swan event” (using the definition by Nassim Nicholas Taleb – “unexpected and low-probability events with massive repercussions”⁴⁸). The moral implication is to be wary of the dangers a complex civilisation like ours may face.

In essence, the book focuses on one complex historical event and strives to provide both a historical narrative and explanation by identifying the most likely culprit for the significant loss of complexity we encounter in archaeological and historical records. Even the author admits that his conclusion remains underdetermined by the available evidence, and rather than providing a definite explanation, he sets the stage for historical drama

⁴⁵ Ibid., xix.

⁴⁶ Ibid., 135.

⁴⁷ Ibid., 164.

⁴⁸ Ibid., 171.

composed of many intertwining processes and systems involved in this particular example of collapse.

3.2 *Cliodynamics*

The second example from the (broader) historical discourse diverges significantly from the traditional historical form, but it may pose an excellent follow-up to Cline's book. Rather than speaking about one sole contribution to the historical discourse in the form of a book or an article, we will turn our attention to the transdisciplinary field of cliodynamics as established by Peter Turchin, whose vision of contributing to historical discourse is highly unusual, controversial, and perhaps influenced by his previous vocation as population biologist and complexity scientist. Unlike Cline, Turchin is not primarily interested in explaining singular events but in capturing the regularities of historical development, especially those concerning long-term complex processes related to the rise and fall of civilisations. In a bold defiance of Karl Popper's warning against the search for historical laws,⁴⁹ Turchin claims that mathematical modelling of a large amount of historical and archaeological data (properly vetted by professional historians and archaeologists) may help us uncover some regularities that may further guide our inquiries – i.e., the cliodynamics utilises the fruits of historical discourse and may serve as a heuristic tool. The Seshat: Global History Databank – the database established by Turchin and used for modelling – is open-access and, therefore, outputs of Turchin's models can be scrutinised by anybody who is willing to put the work and time into a such task.

One of the main inspirations for Turchin's project might be traced to the 14th-century North African historian and philosopher Ibn Khaldun and his introductory book to the history of Maghreb. The *Muqadimah* (The Introduction) is an interesting piece of speculative philosophy of history. The author opens with a criticism of previous historians and lists reasons for their failures, like reliance on poor sources or partisanship. However, one pitfall is rather specific:

Another reason making untruth unavoidable – and this one is more powerful than all the reasons previously mentioned – is ignorance of the nature of the various conditions arising in civilization. Every event [or phenomenon], whether

⁴⁹ Peter Turchin, "Towards Cliodynamics," in *History, Big History, & Metahistory*, eds. David C. Krakauer, John Lewis Gaddis, and Kenneth Pomeranz (Santa Fe: The Santa Fe Institute Press, 2017), 228–30.

[it comes about in connection with some] essence or [as the result of] action, must inevitably possess a nature peculiar to its essence as well as to the accidental conditions that may attach themselves to it. If the student knows the nature of events and the circumstances and requirements in the world of existence, it will help him to distinguish truth from untruth in investigating the historical information critically.⁵⁰

Further in the book, the nature of events and the guiding force of all history is revealed as *asabiya* or – in Rosenthal’s translation – group feeling. While the concept is multifaceted and multiple interpretations are possible, it is often understood as the social cohesion of a particular group (Ibn Khaldun usually associates *asabiya* with nomadic groups). A unique aspect of this concept is that *asabiya* in Ibn Khaldun’s work operates almost as a quantifiable currency (similar to abstract quantifiable values like loyalty or public order in historical video games) that grounds all historical change.⁵¹ Apparently, this aspect has fascinated mathematically-minded Turchin (indeed, Ibn Khaldun’s text sometimes reads as an exact manual for a board game), who directly borrows the concept of *asabiya* from Ibn Khaldun and strives to transform it into mathematical models.⁵²

Let us sum up a few notes about Peter Turchin’s cliodynamics. While the entire project might be controversial and at odds with views of history as a field concerned with unique events, it is still part of broader historical discourse. Similarly to Cline’s book, it often touches on the subject of collapses in history. Still, it employs highly different methods (mathematical modelling instead of evidentiary reasoning and inferences) and prefers generalisations to narrativisations of unique causal pathways. While Cline’s and Turchin’s narratives definitely do not aggregate and the events they described are holistically dependent on the narratives they are built into, they are still part of the historical discourse, and we can think of them as a past. When Turchin writes of secular cycles⁵³ as constant ups and downs in historical development, we may imagine the Late Bronze Age as an endpoint of one such cycle and as another source of needed data for modelling purposes. In this case, historical narratives do not aggregate, and this feature becomes even

⁵⁰ Ibn Khaldun, *The Muqaddimah – An Introduction to History*, trans. Franz Rosenthal (Princeton, NJ: Princeton University Press, 2015), 90.

⁵¹ See, e.g., Ibn Khaldun, *The Muqaddimah*, 176–77.

⁵² Peter Turchin, *Historical Dynamics: Why States Rise and Fall* (Princeton, NJ: Princeton University Press, 2003), 40.

⁵³ *Ibid.*, 150–69.

more noticeable when we further dial up the scope in our third example. We will return to the idea of “scopes” in our analysis of historical video games.

3.3 *Big History*

Whereas Cline’s inquiry into the Late Bronze Age collapse and Turchin’s mathematical modelling of collapses throughout history produced gloomy narratives and cautionary tales, David Christian’s Big History project goes in an entirely different direction. The author originally worked in the field of microhistory and explored the intricate, interconnected world of vodka in 19th-century Russia, taking into account its influence on culture, politics, tax policies, corruption, businesses, and daily lives.⁵⁴ However, it was perhaps the influence of famous historian Fernand Braudel and his concept of *longue duree*⁵⁵ that helped set off his most famous project. A concise characterisation of Big History would be that it tries to tell a story of the past, from the Big Bang to the present state of affairs on Earth, and provide some outlook about the future before the heat death of the universe. The distinguishing features of Big History are its multiscalearity, interdisciplinarity, and an attempt to break down the wall between human and natural histories.

David Christian views his project as “a modern creation myth”⁵⁶ and every word in this description deserves explanation.

The project is modern because it is tied with modern research methods across natural and social sciences.⁵⁷ The modernity of the project is also defined by the era in which it takes place. The idea of a single historical continuum would not have been conceivable earlier.⁵⁸ As such, the book is also written for a contemporary reader who asks contemporary questions.

The project is a creation myth because it – as any other creation myth – revolves around those who are trying to understand the world they live in, it captures the relationship between a particular human community and the universe as this community imagines it.⁵⁹ In short, the Big History is, despite

⁵⁴ David Christian, *Living Water: Vodka and Russian Society on the Eve of Emancipation* (Oxford: Clarendon Press, 1990).

⁵⁵ Christian references Braudel in David Christian, “A Single Historical Continuum,” in *History, Big History, & Metahistory*, eds. David C. Krakauer, John Lewis Gaddis, and Kenneth Pomeranz (Santa Fe: The Santa Fe Institute Press, 2017), 21.

⁵⁶ David Christian, *Maps of Time: An Introduction to Big History* (Berkeley: University of California Press, 2004), 6.

⁵⁷ *Ibid.*, 11.

⁵⁸ Christian, “A Single Historical Continuum,” 25.

⁵⁹ Christian, *Maps of Time*, 6.

its enormous scope, essentially anthropocentric. However, since the story is modern, humans are viewed as a part of nature and, ultimately, a part of the constant struggle against entropy.

Finally, the project is mythical because Christian ultimately concedes that he cannot consciously claim that the Big History narrative captures the ultimate truth about the universe. The project is modern and thus constrained by the limitations of contemporary sciences. The project is tied to the finite observer and does not rely on any God's eye view:

We need to try to understand our universe even if we can be certain that our attempts can never fully succeed. So, the strongest claim we can make about the truth of a modern creation myth is that it offers a unified account of origins from the perspective of the early twenty-first century.⁶⁰

While the books devote some space to the exposition of the cyclical nature of civilisation collapses,⁶¹ they ultimately follow the constant rise of complexity across natural and human history (we should point out that Christian acknowledges problems with the term and notes that modern science teaches us that, in the end, the entropy must win and complexity will disappear – to sustain the levels of complexity, entities increase their use of free energy, thus increasing entropy).⁶²

However, Christian does not want to be gloomy about the distant heat death of the universe. His book focuses on the unique pathway that produced the complexity of our contemporary society. He praises the human ability to learn and transmit information via language and written word.⁶³ Whereas Cline's book was a story of a unique collapse, and Turchin's text focused on the law-like regularities in general and the cyclical nature of collapses, the Big History project stresses the constant rise in complexity *despite* collapses. The Bronze Age is merely a part of the Holocene and does not deserve a deeper look, nor does its collapse.

Notwithstanding substantial differences, all three examples are clearly part of a single historical discourse, and, occasionally, they exchange some ideas, like in the 2017 edited volume *History, Big History, & Metahistory*, where both Turchin⁶⁴ and Christian⁶⁵ contributed their papers while more

⁶⁰ Ibid., 11.

⁶¹ Ibid., 311.

⁶² Ibid., 509.

⁶³ Ibid., 182–83.

⁶⁴ Turchin, "Towards Cliodynamics."

⁶⁵ Christian, "A Single Historical Continuum."

traditional historians were represented by, e.g., John Lewis Gaddis who helped edit the volume. The events they explore prove to be non-standardised, they are not detachable from the larger framework they are part of, and they do not aggregate. As the non-representationalists would expect, all three authors provide warrants for their claims, but their variety is far richer. While all authors rely on inferences from evidence, literature, and discourse, they also make use of modern scientific theories or mathematical modelling. They are also aware they must support their conclusions with appropriate argumentation since this is required by historical discourse, and their propositions are often controversial and at odds with common views of history and widely accepted narratives. These examples will now be compared with historical video games.

4. Are Historical Video Games Discursive?

What do historical video games represent? Non-representationalists deny the real past as an ultimate touchstone; instead of it, they advise focusing on historical discourse and what is constituted by it. Does it mean that historical video games represent the historical discourse? That seems wrong since video games do not usually shower us with evidence and arguments (though Chapman notices that historical video games may confront us with historical evidence to increase historical resonance)⁶⁶ or honest admissions that scientific knowledge is inconclusive, as Cline does when discussing the causes of the collapse. However, they clearly must have some relation to the discourse. Let us explore two video game series relevant to the discursive topics we mentioned.

⁶⁶ Chapman, *Digital Games as History*, 67.

4.1 Total War

The most recent historical title⁶⁷ by The Creative Assembly, *Total War: Pharaoh* (2023), revolves around the Late Bronze Age collapse. It combines two distinct genres: turn-based strategy that takes place on a larger geographical map and real-time strategy that covers field battles and sieges on a smaller local map determined by regional topography and weather conditions. The large map of *Pharaoh* covers Egypt, the Middle East, and most of Anatolia. This map is populated by historical cultures – Egyptians, Canaanites, Hittites, and Sea People who are further divided into cultural variations and factions represented by the individual characters as faction leaders. The player's first interaction with the system is when choosing a faction leader. Choices include historical figures like Ramesses III or Taurset for Egyptians, Suppilulima for Hittites, or made-up figures like Iolaos for the poorly documented Sea People. Thus, the player is then thrown into the starting date, 1205 BCE and each year consists of six turns. Players are tasked with developing their factions, cities, and characters as well as leading armies. There is a significant degree of player freedom, even though the game attempts to situate each character in an appropriate historical context. Thus, young Ramesses will soon encounter Egypt being thrown into the civil war after the death of Pharaoh Merenptah, while Suppiluliuma, starting as the king of Hittites, is hard-pressed to keep his kingdom from falling apart. Those playing as Sea People are encouraged to play like raiders and pillagers. The events are not predefined by the programmed script, but they are emergent on mechanisms set in the game.

The strategic turn-based map uses a mechanic tracking the progress of civilisation from prosperity through crisis to collapse. The number of razed cities determines its value, and various states determine bonuses or maluses for cultures (e.g., the collapse means bonuses for the Sea People and maluses for settled cultures). It also modifies the chances for random positive and negative events. The game simulates almost all candidates for drivers of the Late Bronze Age collapse that Cline addressed in the chapter “A ‘Perfect Storm’ of Calamities?” we mentioned earlier: earthquakes, famine, diseases, droughts, climate change (in the form of randomised text-based events that impact the population numbers, happiness, and

⁶⁷ For analysis of earlier titles, see, e.g., Simon Maria Hassemer, “Does History Play the Role of Storyline? Historiographical Periodization as Theme in Video Game Series,” *Early Modernity and Video Games*, eds. Tobias Winnerling and Florian Kerschbaumer (Newcastle upon Tyne: Cambridge Scholars Publishing, 2014): 71–72.

damage buildings and armies), internal rebellions (mechanics covering the civil war for Egyptian or Hittite crown), invaders (end game crisis in the form of massive Sea People onslaught), the collapse of international trade (destruction of friendly factions limits the trade options and may lead to, for example, the lack of bronze resource needed to maintain armies), or decentralisation (civil war mechanic).

The real-time battle systems are limited by the historical context, e.g., no cavalry except for chariots. Locally recruited units are trying to simulate a cultural variety of various regions, e.g., Lower and Upper Egypt. *Pharaoh* tries to depict battles in detail, and every soldier (up to several thousand on the battlefield) has their own detailed model (various parts of the model are iterated from a limited database, sufficiently inspired by archaeological records and depictions of contemporary historians).

Despite the detailed mechanics and attention to detail, the game cannot be seen as a historical representation in any representationalist sense, i.e., corresponding to the past. The player agency can create scenarios clearly at odds with historical discourse and knowledge like the survival of the Hittite kingdom and the conquest of Egypt. Furthermore, the game includes purely fictional characters and treats them like historical ones.

At the same time, the game retains a strong relation to the professional historical discourse; thus, it is historical in a non-representationalist sense. Despite our limited knowledge and lack of an ultimate explanation of the Late Bronze Age collapse, all of the possible explanations are present in the game as mechanics (centred around the counter ranging from prosperity to collapse, described above), and they are fully emergent and not scripted. *Pharaoh* often follows historical discourses close enough to be considered “accurate” – when juxtaposed against textual and material evidence and body of historical and archaeological knowledge – and even brings significant portions of the discourse to the player as an in-game encyclopaedia.⁶⁸

We may consider *Total War: Pharaoh* as an “accurate” historical video game focusing on the same singular “event” as Cline’s book *1177 B.C.: The Year Civilization Collapsed*. The accuracy of historical video games would then rest on the visual fidelity of portrayed units and environments in relation to archaeological records and their further visualisation in contem-

⁶⁸ Jacqueline Burgess and Christian Jones, “Exploring Player Understandings of Historical Accuracy and Historical Authenticity in Video Games,” *Games and Culture* 17, no. 5 (2022): 818.

porary historical discourse or inclusion of recognised historical processes transformed into video game mechanisms.

4.2 Sid Meier's Civilization

The Civilization series is comprised of numerous titles belonging to the turn-based strategy genre. The player chooses “a civilisation” which is also represented by a corresponding historical figure. Game sessions mostly take place on a randomly generated world map, which is not meant to represent our planet,⁶⁹ even though it attempts to uphold some geographical logic and structure. Thus, a player can start as an Indian civilisation led by Mahatma Gandhi, situated in the temperate zone, in the year 4000 BCE. Gandhi can also order to build the pyramids shortly after the game starts. Any representationalist account of historical narratives must understand this as pure fiction.

This raises the question whether the mere use of historical characters make the *Civilization* series historical in some weaker sense? It could be argued that the mere presence of “historical” characters might not be sufficient. Using Gandhi as a character in a video game about space exploration would not make the game historical. Yet, *Civilization* is often considered (and defended⁷⁰) as a historical game. Chapman’s solution for the issues regarding the historicity of Civilization echoes Hayden White and Frank Ankersmit:

What I am proposing through this approach is that videogames are also recognisable metonymic narrative devices, with the developer making similar choices to those historians who write “proper” history. Far from being a destructive process of eradicating the “truth” of the past (which is, most likely, irretrievable anyway), the production of a videogame-based history (like any history) is a creative process, as meaning is produced even whilst a duty of care is given to the referential nature of the evidence. When Meier built *Civilization* he didn’t erase or ignore the meaning of the past; like all the historians before him, he constituted it.⁷¹

Civilization focuses on the rise (and fall) of civilisations and perfectly communicates the increase of complexity via its gameplay. In an ordinary

⁶⁹ Thus, the game might be viewed as an alternative history, as a reviewer pointed out.

⁷⁰ Chapman, “Is Sid Meier’s *Civilization* History?”

⁷¹ *Ibid.*, 315.

session, players start with very few things to do, exploring their immediate surroundings, engaging in early research activities (e.g., developing agriculture) and frequently clicking the end turn button (at the beginning in 4000 BCE, each turn represents 40 years on standard settings and the speed is slowly decreasing up to one year per turn when the date reaches 1900 CE). In later stages, players must manage numerous complex cities, modern units, trade routes, research programmes, religious and political systems, global diplomacy, etc. Even the significance of geology and geography (a randomised map) changes throughout the game session. The fertility of the land and mineral resources in the earlier stages guide the player's choice of where to settle, while in the late stages, the previously invisible sites containing fossil or nuclear fuel are essential to trade or war-related decisions since most of the world map is already settled and divided between developed civilisations. Later entries in the series even introduced mechanics like global warming and rising sea levels.

While the *Civilization* series contains war mechanics, the units lack the detail and cultural uniqueness of *Total War*. This sense of finer historical resolution has been forgone for a much larger scope, which is vastly expanded to cover millennia in contrast to *Total War*'s few centuries or decades. Aviezer Tucker, while discussing different examples of historiography ranging from simple narratives to comparative historiography,⁷² noted that historians often need to balance cognitive values like scope, simplicity, or accuracy. While studies of a single revolution may favour more accurate (in the sense of historiographic cognitive value) descriptions, larger comparative studies of revolutions often need to decrease their accuracy and omit details in order to increase their scope. We can see similar authorial decisions when we compare *Total War* and *Civilization*. Since *Civilization* favours a larger scope, numerous details, and uniqueness, typical for *Total War*, are omitted. However, this favouring of scope over accuracy does not necessarily make a video game less historical.

The design decision echoes the choices made by David Christian when creating a narrative of increasing complexity, which requires glossing over events that might have been crucial in other narratives. Peter Turchin's mathematical modelling of historical dynamics can be compared to the game rules, and ibn Khaldun *asabiya*, as an obscure force, is very similar

⁷² See Aviezer Tucker's treatment of cognitive values in historiography: Aviezer Tucker, *Our Knowledge of the Past: A Philosophy of Historiography* (Cambridge: Cambridge University Press, 2004), 149–53.

to abstract quantifiable resources like loyalty, cultural influence, or public order. The colourful and playful stylisation typical of the *Civilization* series is also reminiscent of David Christian's optimism inherent to the Big History project, and lengthy flavour texts about researched technologies serve similar educational purposes.

5. Conclusion

While neither Sid Meier's *Civilization* nor *Pharaoh* can claim to represent the past as it was (as is the case with any type of media), they clearly have strong relevance to the historical discourse. The mechanics and content of historical games are related to both professional and public practices when thinking and talking about history. To a certain extent, historical video games themselves can be seen as a part of the same discourse. While they cannot claim to portray the past as it really was (since the idea goes against the very nature of a game as an interactive medium), they may still portray our current (historically contingent) understanding of the processes and events which are being discussed in the ever-going process of historical discourse.

Historical non-representationalists claim that we should abandon representationalist vocabulary and sentiments when we are speaking about our knowledge of the past. The correctness of historical knowledge is not tested against the unobservable past, but it is evaluated via professional historical discourse and historians may, to varying extent, cooperate on a historical video game production. The knowledge itself is inferred from available and recognised evidence⁷³ thanks to an ever-expanding array of methods, including discoveries of natural sciences and mathematical modelling. Attempts to increase the scope of historical narrative or theory often lead to significant changes in the way the presentation is structured, and they can communicate different messages, ranging from more "true-to-the-evidence"-descriptions to more general statements and challenges to our everyday thinking.

Historical video games are uniquely suited to communicate a wide range of messages that belong to the historical discourse by exploring counter-factual scenarios, showing the influence of multiple intertwined processes (i.e., topics explored by selected examples from professional historical discourse) as well as eliciting curiosity and incentivising the search

⁷³ For an exposition of an evidentialist framework, see Georg Gangl and Ilkka Lähteenmäki, "The Futures of the Philosophy of History: An Introduction," *Journal of the Philosophy of History* 17, no. 2 (2023): 184.

for more information. While it is effortless to criticise a historical video game as a failed representation of the past, it might be misleading to follow the narrativist route to the letter and downplay all claims to knowledge that historians can make. Exploring how exactly the game relates to historical discourse may show us similarities, such as the influence of chronological resolution or scope on how details and peculiarities are portrayed. When comparing the goals and conceptual schemes of Cline's detailed analysis of the Bronze Age collapse, Turchin's attempts to generalise societal dynamics, and Christian's multiscalar narrative with a contained title like *Total War: Pharaoh* and large-scoped *Civilization*, we may see striking similarities in authorial choices.

Acknowledgements:

I am grateful to the anonymous reviewers for their constructive comments and inspiring points.

Bibliography:

- Burgess, Jacqueline, and Christian Jones. "Exploring Player Understandings of Historical Accuracy and Historical Authenticity in Video Games." *Games and Culture* 17, no. 5 (2022): 816–35. <https://doi.org/10.1177/15554120211061853>
- Chapman, Adam. "Is Sid Meier's *Civilization* History?" *Rethinking History* 17, no. 3 (2013): 312–32. <http://dx.doi.org/10.1080/13642529.2013.774719>
- Chapman, Adam. *Digital Games as History*. New York: Routledge, 2016. <https://doi.org/10.4324/9781315732060>
- Christian, David. *Living Water: Vodka and Russian Society on the Eve of Emancipation*. Oxford: Clarendon Press, 1990. <https://doi.org/10.1093/acprof:oso/9780198222866.001.0001>
- Christian, David. *Maps of Time: An Introduction to Big History*. Berkeley: University of California Press, 2004. <https://doi.org/10.1525/9780520931923>
- Christian, David. "A Single Historical Continuum." In *History, Big History, & Metahistory*, edited by David C. Krakauer, John Lewis Gaddis, and Kenneth Pomeranz, 1–27. Santa Fe: The Santa Fe Institute Press, 2017.
- Cline, Eric H. *1177 B.C.: The Year Civilization Collapsed*. Princeton, NJ: Princeton University Press, 2021. <https://doi.org/10.1515/9780691208022>

Creative Assembly Sofia. *Total War: Pharaoh*. Sega, 2023. Windows and macOS.

Dewulf, Fons, and Paul A. Roth. "Real True Facts: A Reply to Currie and Swaim." *Journal of the Philosophy of History* 16, no. 2 (2022): 207–25.
<https://doi.org/10.1163/18722636-12341478>

Domanska, Ewa. "A Conversation with Hayden White." *Rethinking History* 12, no. 1 (2018): 3–21. <https://doi.org/10.1080/13642520701838744>

Elliott, Andrew B. R. "Charlemagne at the Battle of Gettysburg – Video Games and the Middle Age." In *Historia Ludens*, edited by Alexander von Lünen, Katherine J. Lewis, Benjamin Litherland, and Pat Cullum, 170–85. New York: Routledge, 2020.

Firaxis Games. *Sid Meier's Civilization IV*. 2K and Aspyr, 2005. Windows and macOS.

Førland, Tor Egil, and Branko Mitrovic, eds. *The Poverty of Anti-realism*. London: Lexington Books, 2023.

Gangl, Georg, and Ilkka Lähteenmäki. "The Futures of the Philosophy of History: An Introduction." *Journal of the Philosophy of History* 17, no. 2 (2023): 177–94.
<https://doi.org/10.1163/18722636-12341496>

Gelder, Ken. *Adapting Bestsellers Fantasy, Franchise and the Afterlife of Storyworlds*. Cambridge: Cambridge University Press, 2019.
<https://doi.org/10.1017/9781108589604>

Goldstein, Leon J. *Historical Knowing*. Austin: University of Texas Press, 1975.

Goldstein, Leon J. "Against Historical Realism." *Philosophy and Phenomenological Research* 40, no. 3 (1980): 426–29. <https://doi.org/10.2307/2106407>

Goldstein, Leon J. "Impediments to Epistemology in the Philosophy of History." *History and Theory* 25, no. 4 (1986): 82–100. <https://doi.org/10.2307/2505133>

Hassemer, Simon Maria. "Does History Play the Role of Storyline? Historiographical Periodization as Theme in Video Game Series." In *Early Modernity and Video Games*, edited by Tobias Winnerling and Florian Kerschbaumer, 64–75. Newcastle upon Tyne: Cambridge Scholars Publishing, 2014.

Ibn Khaldun. *The Muqaddimah – An Introduction to History*, translated by Franz Rosenthal. Princeton, NJ: Princeton University Press, 2015.

Kuukkanen, Jouni-Matti. "Historiographical Knowledge as Claiming Correctly." In *Philosophy of History: Twenty-First-Century Perspectives*, edited by Jouni-Matti

Kuukkanen, 44–66. London: Bloomsbury Academic, 2021.

<https://doi.org/10.5040/9781350111875.0008>

Kuukkanen, Jouni-Matti. *Postnarrativist Philosophy of Historiography*. London:

Palgrave Macmillan, 2015. <https://doi.org/10.1057/9781137409874>

Kuukkanen, Jouni-Matti. “Representationalism and Non-representationalism in Historiography.” *Journal of the Philosophy of History* 7, no. 3 (2013): 453–79.

<https://doi.org/10.1163/18722636-12341261>

Rochat, Yannick. “A Quantitative Study of Historical Video Games (1981–2015).”

In *Historia Ludens*, edited by Alexander von Lünen, Katherine J. Lewis, Benjamin Litherland, and Pat Cullum, 3–19. New York: Routledge, 2020.

Roth, Paul A. *The Philosophical Structure of Historical Explanation*. Evanston:

Northwestern University Press, 2020.

Salvati Andrew J., and Bullinger, Jonathan M. “Selective Authenticity and the

Playable Past.” In *Playing with the Past*, edited by Matthew Wilhelm Kapell and Andrew B. R. Elliott, 153–67. New York: Bloomsbury, 2013.

Tucker, Aviezer. *Our Knowledge of the Past: A Philosophy of Historiography*.

Cambridge: Cambridge University Press, 2004.

<https://doi.org/10.1017/CBO9780511498381>

Turchin, Peter. *Historical Dynamics: Why States Rise and Fall*. Princeton, NJ:

Princeton University Press, 2003. <https://doi.org/10.1515/9781400889310>

Turchin, Peter. “Towards Cliodynamics.” In *History, Big History, & Metahistory*,

edited by David C. Krakauer, John Lewis Gaddis, and Kenneth Pomeranz, 225–49. Santa Fe: The Santa Fe Institute Press, 2017.

Wainwright, A. Martin. *Virtual History*. London: Routledge, 2019.

<https://doi.org/10.4324/9781315157351>

White, Hayden. *Metahistory: The Historical Imagination in Nineteenth-century*

Europe. Baltimore: John Hopkins University Press, 1973.

Zelenák, Eugen. “Non-representationalism in Philosophy of History: A Case

Study.” In *Towards a Revival of Analytical Philosophy of History*, edited by Krzysztof Brzechczyn, 116–29. Leiden: Brill Rodopi, 2018.

https://doi.org/10.1163/9789004356900_009

Zelenák, Eugen. *História a relativizmus: Ako prekonať relativistický výklad historickej práce?* Bratislava: Chronos, 2021.