How to analyse a Video game from a historical, source-critical perspective: The HGP-Method

by Eugen Pfister & Arno Görgen

Four years ago, when we began to examine digital games from the perspective of the history of ideas, we entered uncharted territory in several respects, specifically in how and with which methods to approach digital games. Since the turn of the millennium, many analysis tools have been developed and tested in game studies, fueled above all by the supposed methodological dispute between narratologists and ludologist. And yet we are still far from being provided with the appropriate instruments for all possible scientific questions about games.

"Introduction to Video Game Analysis"

In "Horror-Game-Politics" the focus was on the analysis of political mythemes in digital games. Accordingly, an approach was required here that foregrounds content-analytical considerations above all, but not only. Politics is not an object with fixed boundaries, but a process that is primarily communicative and driven by structural framings. The framework of how politics can be part of games, namely primarily through the conditions of production but also the modes of consumption on the part of the players, needed to be considered. What we needed, then, was a quasi-holistic approach in which secondary analyses of the production and reception of games underpin the actual content analysis. This very specific methodological challenge had to be met, especially because there was no established method yet that we could adapt 1:1.

Maybe the best introduction can still be found in Clara Fernandez-Vara's "Introduction to Video Game Analysis", who basically divides game analysis into context analysis, a game overview and the analysis of formal elements, each of these parts divided into an elaborate matrix of subdivisions (Fernández-Vara 2015). Another good overview is “Game Research Methods” by Petri Lankoski and Staffan Björk (2015), which provides an anthology of interdisciplinary approaches that include qualitative and quantitative research, mixed methods and even using

games as a research method. A lot has also happened in the historiographies in the past ten years. Both Adam Chapman's important monograph on "Digital Games as History: How Videogames Represent the Past and Offer Access to Historical Practice" (2016) and Nico Nolden's "Geschichte und Erinnerung in Computerspielen: Memory-Cultural Knowledge Systems" (2019) are excellent introductions to the historical study of digital games. While Chapman has mainly dealt with the categorisation of historical representations in digital games, Nolden's comprehensive work also offers a good overview of previous attempts from historical scholarship to develop models for a historical analysis of digital games. While Chapman has mainly dealt with the categorisation of historical representations in digital games, Nolden's comprehensive work also offers a good overview of previous attempts from historical scholarship to develop models for a historical analysis of digital games. First attempts at a uniform citation rule for digital games can also be found in the manifesto of the "Arbeitskreis Geschichtswissenschaft und Digitale Spiele" (Working Group on Historical Studies and Digital Games).

So far, mainly theoretical questions have been discussed, whereas the tools, i.e. best case examples of a practical game analysis are rarely to be found. Now, of course, truly explicit accounts of the scientific method are rare in general, especially in historiography. In most cases, this is not even necessary. The constant reminder of source criticism, i.e. the questioning of an information source concerning its validity, reliability, and relevance to the subject - as a guiding star is usually quite sufficient.

Historical Source Criticism

However, it can also be critically objected at this point that historical source criticism is taken so much for granted in historiography that it is virtually never explicitly explained. After a short research, it soon turns out that a clear definition of source criticism is not easy to find.

For the American historian Harry Ritter for example in 1986 source criticism is the "application of standard techniques for determining the origin, authenticity and meaning of evidence about the past." (Ritter 1986, 85). "Standard techniques", of course, leaves a lot to the imagination. We are probably a discipline that likes to use tacit knowledge. Even if our method as historians is rarely critically questioned, it can be stated that these basic questions unite the most diverse research in our discipline.

The cultural historians Silvia Serena Tschopp and Wofgang E. J. Weber state that, based on the premise that the place, the technological and social framing, as well as the materiality of communication have a determining influence on what is communicated itself via the sources and the conditions of its reflection. Thus, according to Tschopp and Weber, knowledge of the ways in which linguistic, pictorial, and gestural communication function is required, as well as the willingness to make this knowledge productive for the historio-analytical practice (Weber and Tschopp 2007, 84). This knowledge, in turn, can only emerge in an interdisciplinary way, i.e., with the implementation of the disciplines that primarily deal with the respective sources.

In the following, we are therefore concerned with a very practical approach to game analysis from a historical perspective. Basically, historical source criticism asks - very simplified - about the origin of sources (when, where, who, with what), about the integrity of the content of a source and finally about its value. Even though we did not consistently engage with the historical method at the beginning of our project, in retrospect it is evident that we were also guided by these questions. This is, of course, no coincidence. But before that, it is important to introduce the underlying question of the project. Florian Niedlich describes pop culture as both aesthetically stimulating and politically meaningful artefacts that can be understood as significant elements of a pop cultural arena of consent and resistance and complex interventions in cultural processes and social struggles (Niedlich 2012, 11-12). Based on this assumption that popular culture, and accordingly also digital games, also fulfil an ideological (and often also concretely political) communication function, we wanted to examine in an initial assessment: 1. whether such communications can be recognised in a sample of digital horror games and 2. in what form this happens.

The Political Myth as a Discursive Statement in the Digital Game

Since we were not only interested in recording conscious political messages, but above all also unconsciously communicated and received messages, we resorted to Roland Barthes' concept of mythologies.

In his collection of cultural semiological analyses "Mythologies", Barthes understands myths as discursive elements that could only become part of such discourses because meaning is ascribed to them. On this premise, any element that contains meaning can be understood as a text and can be analyzed as such. Barthes accordingly extends discourse analyses from pure textual elements to further levels, to images and objects. With regard to game studies, at the

latest with Ian Bogost's concept of procedural rhetoric, one must also consider processes, performative practices, and actions for such content analyses. What is special about Barthes' idea of myth is the "transformation of a meaning into a form". That is, an object endowed with meaning can be repurposed in another context as a form, as an element of another discursive process. The meaning of the old object remains in its core and is remembered, but contributes to the generation of new discourses and their new meanings. The Greek myth of Ikaros does not stand on its own in "Deus Ex: Human Revolution" (where it is often found in the game world in illustrations, names, etc.), but becomes part of the environmental storytelling that makes the game world constant and meaningful. Such references are at the same time openly visible and hidden. The prerequisite is that the player is familiar with the core meaning of the Ikaros myth and can consistently classify it in his perception of the game world.

Therefore, the aim was to find stringent political statements that are not usually recognised as such and are therefore not questioned because they seem natural.

In doing so, we adapted Barthes' concept of myth for our purposes: The political myth in the digital game refers to a political or ideological statement (with implied instructions for action) that has taken on the appearance of naturalness and is therefore (often) not recognised as such by either game developers or players. Accordingly, the myth is reproduced unconsciously and can also change its quality - in the process of media reproduction. The political myth is characterised by the following four features (Pfister 2018).

1. The political myth is **never a single sign** (a clichéd figure, a motif, a symbol, etc.), but a **political statement composed of a system of mutually reinforcing signs**. In games, for example, the myth of the deviant mother figure is reflected in violent behavior, in sexualized bodily dissociations, in recourse to exaggerations of social attributions such as hysteria, the mother as the protector of the child, the "good soul of the house," and the like.
2. The political **myth is a seemingly immediately obvious political statement**. That is why it is often repeated in several places, i.e. in several games or media forms. **Through its repetition, the myth reinforces the appearance of "naturalness" and is thus unconsciously reproduced.** The "Noble Savage," the idea that "uncivilized" people live in a state of innocence and natural sublimity, for example, can be found in literature and film as well as in comics and games ("Oddworld: Abe's Oddyssey").

3. **The political myth disguises history in its argumentation.** It quotes well-known aesthetic models and transfers them to current phenomena without becoming historically specific. This means that it does not so much reference "real" historical phenomena themselves, but above all their (no less real) aesthetic cover. It gains its persuasiveness from this reference to its supposed predecessors, which in turn reinforces a semblance of naturalness: "Mafia 3" is set in the 1960s in the southern states of the USA. Aesthetically, it reproduces temporal as well as topographical aesthetics. At the same time, it is a complex examination of the racisms of the USA, which is primarily fed by anti-racist discourses of the 2010s.
4. **Despite its ostensibly historical argumentation, every political myth is clearly locatable in its topicality and can only be understood in a concrete contemporary historical context.** The rise of the dicator Tyrak in “Road 96” can only be understood with Donald Trump’s presidency in the US, although the represented elements of this rise visually and tonally resemble historical cases of dictatorship like the NS regime or the Soviet Union.

Another good example of this is the myth of the collapse of democracy in the face of the zombie apocalypse. This is a political statement - modern democracies are unable to deal effectively with an external threat - but it seems natural because it is implicit in most zombie narratives. A historical source criticism of this myth, however, shows that it is a comparatively recent phenomenon: Only since the late 1960s and 1970s have shifted from (post-)colonial zombie narratives presupposed a complete systemic collapse, and it can be linked with good reason to contemporary circumstances like the Vietnam War, the Cold War, or the oil crises of the 1970s.

Accordingly, a great challenge for historians is 1. to recognise such unconsciously communicated myths in the first place and 2. to describe their functioning precisely.

Production analysis - Product analysis - Reception analysis

Therefore, learning from the experience of related disciplines, especially media, communication, and film studies, we have based our play analyses on the tripartite analysis model of the German communication scientist Marion Müller (2003). This also corresponds to Helmut Korte's tripartite film analytical model (2010) i.e. context analysis - product analysis - reception analysis.

In a first step - **the production analysis (1)** - we examined the origin of the games and their historical context. In a second - more detailed - step, the games themselves as sources - **the product analysis (2)** - have been examined for form and content. Then, where possible, we examined the reception of the game - **the reception analysis (3)**. Building on this analysis, in a final step we have elaborated several **dominant myths (4)** for each game.

1. Production Analysis

The first step - production analysis - of digital games itself turned out to be a challenge. For one thing, large-scale productions in particular are closed systems. All developers involved, usually have to sign non-disclosure agreements and requests from researchers are usually rejected accordingly. In the case of smaller game productions, such requests can be successful, but due to the size of the sample we had to refrain from doing so, as individual developers would first have to be painstakingly located.

Instead, we have drawn on freely available resources: Interviews, short documentaries, scientific literature in the few cases where it existed, lectures by the developers and, above all, postmortems. The interviews and short documentaries, mostly made for promotional reasons, were of course to be used as sources with all caution: they served one purpose above all: to promote the game. Self-critical observations as well as reports on setbacks and mistakes were not to be expected here. These were most likely to be found in post-mortems, which were mainly addressed to other developers, or only several years after the game's release. Due to the temporal proximity of the object of study, we were able to draw on a myriad of online sources for almost all games. This was also one of the reasons why the production analysis per game was much more time-consuming than originally assumed. On average, at least one full week had to be invested in online research alone.

Another challenge was the heterogeneity of our sample. Since no two games – with the exception of "Shadows of the Damned" and "Lollipop Chainsaw" - were produced by the same developer, we had to start from scratch for each case study. The research was further complicated by language barriers. For example, some of the games studied were produced in Poland. The most interesting sources here were naturally in Polish. When we found information here, we were able to work with translation programmes to a certain, limited extent, but with Japanese sources we didn't even get as far as finding the relevant sources. The aim of the production analysis was not to identify the author's intention, but to shed light on the context in which the work was created. How big was the team? What was the demographic composition

of the team during product development? What was the biographical background of the developers? How has the development process changed over time? What design decisions have arisen here due to structural/external constraints and influences? What conflicts existed during the development process and how were they resolved?

2. Product Analysis

The core of our investigation was naturally the product analysis, i.e. the analysis of the games themselves. Here, the main task was to find ways to enable the most thorough, comprehensible and stringent analysis possible of all games, but also not to go too far in terms of time and effort, so as to really provide a larger sample of the games.

In film analysis, for example, sequence logs are common, which precisely record every shot of the film and record perspective, image angle, sound, music and action. A 1:1 transfer to digital games is naturally not possible due to the interactivity of the medium alone, but it was also important for us to constantly remember to pay attention to all levels of the medium. This means not only to concentrate on story and plot and/or game mechanics and gameplay, but on both equally as well as on the audiovisual level, which has often been neglected in game studies up to now. Therefore, we decided to focus our analysis on three vectors: story, audio-visual aesthetics and game mechanics.

The separation of these three vectors, or levels, is of course arbitrary to a certain extent. The narrative of a game also takes place in the audiovisual aesthetics (e.g. environmental storytelling) as well as through the game mechanics (e.g. procedural rhetorics). What we want to say is that these three levels can never be separated from each other, they are interdependent and interrelated, which is why we chose the term vectors. Their purpose is to draw our attention to those medial levels that we might otherwise neglect. We know from ourselves, for example, that we tend to focus our attention on the narrative in games, i.e. the background story, characters and dialogue. Now it is the case that in many games the entire background story, or at least parts of it, can be ignored by players without the game losing its appeal, especially when this appeal results from a good gameplay experience or convincing game mechanics. But even in such games, ideological transfer processes take place on an aesthetic, but above all also on a game-mechanical level. A myth always works particularly well in games when it is composed of countless characters on all levels of the game, which constantly refer to each other and thus confirm each other. This becomes most evident when it doesn't work.

There are for example cases of digital games that make an effort to question violence and brutality in their story. But if the game mechanics of a third person shooter then nevertheless reward violent behaviour on the part of the players, such a statement critical of violence cannot work. A well-known example of this can be found in the reboot of Tomb Raider, when the character Lara Croft regrets having killed a deer, but shortly afterwards kills hundreds of enemies without remorse and doubt, guided by the players. In this case, we can assume that a critique of violence does not work.

Originally, we had developed a matrix - similar to a sequence log - to fill in for each game. Here, observations on story, audio-visual aesthetics and game mechanics (X-axis) were to be written down for each game section (Y-axis). In fact, however, it quickly became apparent that this matrix practically does not work. For one thing, games are much more heterogeneous than films: some games have levels that can be easily separated from each other, others are more open (open world) and allow almost no temporal subdivision. Some work through unlinear emergent or procedural storytelling, and don't allow an analysis based on linear storytelling.

Above all, however, the question quickly arose as to whether it made sense to make observations as comprehensively as possible. First of all for reasons of time. Unlike films, games often cannot be paused. One possibility would be to film the whole game session. The problem that develops as a result of this approach is that playing is a highly subjective, sometimes irrational process. Filming these sequences collides with the goal of reconstructing the event as objectively as possible, because the singularity of filming could result in a distorted reproduction. Therefore, one would have to perform a critical mass of plays of the same sequence in order to be able to approach it with a statistical average in terms of content. Steven Malliet (2007) and Jesper Juul (2005) summarize this phenomenon under the term irreducibility. Malliet writes that:

"*Unlike films or television programs, where the 'text' presented to the spectator is the same every time it is being played, video games have the property of not being reducible to a predefined sequence of signifiers (e.g. Juul, 2005). Every time a (part of a) game is played, the output that appears on the pc or console screen is different from any previous time, even if it is played by the same player under similar circumstances. Therefore, it becomes very difficult to define what belongs to the 'text' of a game and what not, and consequently, what will be the boundaries of the object of analysis.*"

(Malliet, Game Studies - Adapting the Principles of Ludology to the Method of Video Game Content Analysis, 2007)

Petri Lankoski and Staffan Björk circumvent this problem in their "Formal Analysis of Gameplay" by stating that at least the events, that build up a narrative usually follow a certain path despite intermediate ramifications and that a certain outcome is always unavoidable. These fixed points are to be noted in the following (Lankoski and Bjork 2015, 32). Most games also take between 20 and 60 hours to "play through" from start to finish. In our experience, consciously watching a game takes about twice as much time as a normal playthrough. Certain passages have to be played through several times. Especially games that are designed to be as open as possible - in contrast to linear ones - often allow several approaches to the game, of which we had to try out at least the most obvious ones. All this ultimately led us to develop an approach to games that could be described as "observational play". This approach partly follows Participant Observation, an ethnographic method. Participant Observation involves the conscious personal participation of the researchers in the lives of the groups of people to be observed. The personal integration into the life world to be observed enables new perspectives that would not have been possible through a simple observation "from the outside". A great challenge of participant observation is that the research object also changes in direct contact with the researchers. (Kelle 2003).

From our perspective, the fact that the observed world is a virtual one is not unimportant but secondary, because we understand it as an outcome of real world social processes. There was always a notebook next to us for this, and we took screenshots whenever possible. These notebooks resembled diaries in a way. Despite all attempts at objectification, they are testimonies to a subjective experience of play.

In addition to this, we specifically watched so-called Let's Play videos, i.e. filmed game experiences of others (filmed with an audience in mind). When available, we also used printed game guides, walkthroughs and game-specific wikis. Based on the notes and the additional sources mentioned above, we have written down the product analysis, mostly with one to two weeks interval after the play-through.

In terms of **story/narrative**, we focused on the setting, backstory, characters, dialogue, texts and world building in the games. In terms of **audio-visual design**, we focused on lighting direction, colour spectrum, environmental architecture, character and monster design, sound and music. In terms of **game mechanics** we focused on the underlying mechanics (puzzle,

action, combat, survival, etc.), conflict resolution options (combat, negotiation, escape, stealth, etc.), virtual resource management, storage options, possible ethical decision making options, and, in general, the degree of interactivity and the type of interaction between humans and the game.

3. Reception Analysis

Following the product analysis, we researched the reception of the games. For the most part, we restricted ourselves to easily accessible sources, namely reviews. In the beginning, our goal was to also include forum discussions and social media interactions. But it soon became apparent that this meant an extreme expenditure of time for very little usable information. In general, apart from a few public discussions, ideology and politics in digital horror games are almost never discussed in player forums. The same is true for professional game reviews, but these served us above all to be able to work out a basic tenor of the reception: These texts showed us the focus of the reviewers. Which aspects of the story, aesthetics and game mechanics were perceived as relevant? What was reported on and what was not? It became exciting when not only the graphics engine and "game fun" were discussed, but also gender roles and/or social issues in general.

Since we made an effort to include not only English and German reviews, but also French and Italian ones, each of them opened up its own review culture, with partly different foci and interests. Overall, however, we have to admit that the gain in knowledge of the reception analysis based on reviews has remained limited, especially in comparison to the time required.

What was valuable, however, was the popular cultural framing or positioning of the games that took place in the reviews. With which other games, films, books were the reviewed games compared?

4. The catalogue of myths

The first process of writing down our product analysis was already a reflexive step that allowed us to objectify our originally subjective game experience through a (historical) contextualisation. We then repeated this objectification step by elaborating on some dominant myths based on the analysis of the games in a final stage.

To analyse a myth, the historical context of its creation, reception and tradition within (pop) culture and society must be thoroughly researched. Here we quickly became aware of our limitations. For example, we had to familiarise ourselves with Taiwan's contemporary history in order to be able to recognise myths in “Detention”. Then again, we had to familiarise ourselves with the history of Poland immediately after the fall of the Iron Curtain, because this is where the socialisation of many Polish developers took place.

We wanted to take a first inventory of myths in digital horror games to see which political content is communicated preferentially in this medium and this genre. One consequence of this was that instead of an in-depth analysis of a single myth, we rather created a topography of myths for each game, which accordingly remained relatively two-dimensional. We managed to do that in any case. In addition to several myths we had anticipated from the beginning: "Mad Science"; "Evil Corporation" and "Democratic Collapse", we also encountered consistent myths in several games that we had not expected: "city vs. province", "teenager as danger" and "the deviant mother" to name a few.

--> Liste der Mythen // (Katalog Beta-Version)

Positive and negative lessons learned

The most noticeable experience was that we had underestimated the time needed for a thorough game analysis. While more than 50 case studies seemed realistic in the project proposal, we had to drastically adjust this number downwards to 23 case studies in the course of the project, and not only because of the time lost due to corona lockdowns. In fact, playing a game alone takes between 20 and 60 working hours, so it takes 2 to 5 weeks, depending on other workloads. The research for production and reception analyses takes another week each. Writing up the production, product and reception analysis then takes another two weeks. This is followed by at least another week of research on the historical context, on the analysis of myths and finally a week filled with revisions of the first draft of the analyses. This means that a complete case study - under the best conditions - takes an average of one and a half to two months.

We have also found that rigid protocol templates do not do justice to the heterogeneity of the medium. We were investigating uncharted territory and needed to keep our methods open so that unexpected elements could be easily integrated. A uniformly structured game protocol or analysis matrix for all games proved to be ineffective for such an endeavor. On the other hand, classic notebooks - which could also be digital - have turned out to be a blessing. On the positive

side, it has been shown that a larger sample helps to sharpen the analytical view and to recognise common conventions and rules. After all, the heterogeneity of the sample constantly reminded us of the extreme heterogeneity of the medium. It was particularly exciting to observe how individual myths spread globally, while others remain geographically limited. In conclusion, it is important to note that we were able to fulfil one of the main goals of the project: the elaboration and practical testing of a historically source-critical approach to digital games, which we would for the time being call the HGP method after the project.

Recommended Quotation: : Eugen Pfister and Arno Görgen, „How to analyse a Video game? The HGP-Method“ in: Horror-Game-Politics, <http://hgp.hypotheses.org/1754> 03.08.2022

Header: Screenshot from "Alan Wake" via PAIDIA, URL: https://www.paidia.de/alan-wake-theoriediskurs-im-fiktionalen-gewand/

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