

How *Metal Gear Solid 3: Snake Eater* Obscures Moral Ambiguities

Introduction

This study critically examines how *Metal Gear Solid 3: Snake Eater* (hereafter, MGS3) represents the historic relation between military and weapons engineering in the Cold War, the space race, and the arms race. I argue that, while conveying a strong and commendable anti-war message, MGS3 for various reasons also relies on simplified representations that sometimes conflict with its persuasive aims. One might argue that MGS3 is a work of fiction and therefore, by design, never set out to produce factual accounts of history. This is true to a certain extent because MGS3 taps into the supernatural – be it ghostly apparitions, soldiers metabolizing via photosynthesis, or being able to control lightning or animals – indicating that the game openly embraces fantasy tropes. Then again, MGS3 grounds its narrative in twentieth-century history and displays ambitions to persuade its players into thinking critically about war, be it the Cold War or war in general. I do not argue that historic accuracy is the main problem here. However, my suspicions were raised by the fact that this well-researched, carefully designed, and ambitious game manages to make rocket science one of the main pillars of its spy-action narrative while also removing the origins of that very field of engineering from its discourse.

Having been released almost two decades ago, MGS3 itself is a cultural artefact of gaming culture around the turn of the millennium. While being openly fictional and fantastic, the game evokes memories not only of Cold War history, but also memories of popular culture of the 1960s through its spy-movie aesthetics, as well as reminiscences of previous titles in the series. Conventional history is not removed from the game world. It is rather used as a foundation for the fictional events of the game. In doing so, MGS3 also touches upon sensitive issues like political instrumentalization of the military and sciences, patriotism, physical abuse, and more. MGS3's use of pointed and simplified representations of history may well constitute concessions to

the competitive market situation of the computer games and entertainment industry. However, MGS3 still manages to convey thoughtful messages through its computer game experience. Yet, MGS3's being geared towards anti-war sentiments seems to come at the price of glossing over the historic roots of rocket science. This is a somewhat bitter pill to swallow considering that there is definitely something to see.

In this study, I take a close look at MGS3's rocket scientist "Dr. Nikolai Stepanovich Sokolov." What aspect of Cold War history is represented through him and how is it represented? The short answer: MGS3 is committed to a trope of weapons engineers that can be frequently encountered in Metal Gear games, depicting Sokolov as the definitive victim of oppression and abuse, leaving little room to reflect on the Faustian bargain that he – and weapons scientists more generally – made with politics and the military. It also – and somewhat astonishingly – manages to make strong references to rocket science as one of the paradigmatic technologies of the Cold War without ever referencing Wernher von Braun – despite his critical importance for the development of rockets and missiles even before the Cold War. By comparing MGS3's Sokolov against excerpts of von Braun's biography, I intend to show the extent to which MGS3 obscures the moral ambiguities of rocket science and explore the consequences.

Due to the complexity of computer games as research objects, a historically interested perspective is necessarily only one of many equally valid perspectives. In order to discuss this subject in a nuanced manner, I will start by investigating the relations between MGS3 and history, drawing from Adam Chapman's thoughts on *historical game studies* (2016a and b). A review of research related to Metal Gear games offers various approaches that will help characterize and contextualize the research material further. In this study, I intend to examine MGS3's relation to history by investigating a specific aspect of the game. How is Cold War rocket science represented through Sokolov in MGS3 and how does this constitute obscuring moral ambiguities of weapons engineering? In order to provide context and communicate the reasoning behind my choice for MGS3 as a case study, I will continue with an introduction to the game. This will unfold in three steps: First, I describe the empirical basis for this study by indicating the releases of MGS3 used during research. Second, I attempt an overview of MGS3's plot. Third, I contextualize MGS3 within the franchise. This brief bird's-eye view on the series allows us to take a look at Metal Gear's weapons scientist trope and contextualize Sokolov among other weapons scientists in the series.

A comparative discussion of Sokolov against the backdrop of Wernher von Braun's career will show the shortcomings of a strict victim/perpetrator dichotomy. In his capacity as chief engineer for the Nazi regime, von Braun

designed the “Aggregat 4” or “V-2” missiles that killed about 8,000 people during attacks in the last years of World War II. But the emphasis on the man, who would go on to greatly contribute to the first manned space flight to the moon, blocks the view on the forced labourers in concentration camps like Mittelbau Dora (Buchenwald and Mittelbau-Dora Memorials Foundation, 2021) in the German Harz Mountains region, where the weapons were assembled. In the approximately eighteen months between 1943 and 1945 in which Mittelbau Dora operated, 20,000 people died under hellish conditions. From this perspective, the V-2 rockets, a jealously guarded, proud achievement of the Nazis, claimed around 28,000 lives. None of them should be forgotten. Von Braun himself continued his work within the US’s National Aeronautics and Space Administration (NASA), where perhaps his most famous project was the Apollo missions, which culminated in the first landing of humans on the moon in 1969. He had strong competition from the USSR’s Sergei Korolev and his colleagues, who helped bring a human into space for the first time in 1961. Both technological achievements, however, stemmed from von Braun’s early research for the Nazis. So, when faced with such complex and frequently unresolvable moral ambiguities of historical reality, it seems worth investigating how and why MGS3 entirely divorces its rocket science fiction from these issues.

1 Approaching historical representation in MGS

1.1 *Computer games are complex phenomena*

Researching computer games in general is highly complex, as is the task of this study’s historically motivated analysis of MGS3. Aarseth and Möhring address the specificity of computer games within their discussion of ludo-hermeneutics as “media technologies and as technological practice” (2020, 9) at the same time. My study may be less invested in a fundamentally theoretical discussion of games research than the authors when they propose “a proper ontology of computer games” as a precondition for “ludo-hermeneutic” (Ibid.) approaches to computer games research. Still, characterizing computer games through this immanent tension is convincing and fruitful for this research because it raises awareness about the relation of objects and practices. Aarseth and Möhring account for the systemic character of such multifaceted phenomena and their relations, formulating the “fundamental challenge to establishing a ludo-hermeneutics that games are not one type of phenomenon” (Ibid., 10).

The main takeaway from this insight in the context of this study is that MGS3 is not a singular object (of research), for two reasons. Firstly, MGS3 is manifested in many different types of media objects with regard to its different

releases and their platforms. Secondly, researching MGS3 also entails engaging related cultural practice. Aside from physical copies of MGS3, this study utilizes several resources that originated from fan contexts. Community-built and curated databases will be consulted in order to navigate the Metal Gear Solid franchise (MGS).

Transcriptions of dialogue sequences and character descriptions will be cited from GameFAQs and Fan Wikis (MG-Wiki). Given sufficient accuracy or fidelity, these transcriptions are a convenient way to review conversations that take place in MGS3. Furthermore, this study will make reference to audiovisual resources made available online on YouTube. Recordings of gameplay as well as cut-scenes help illustrate the experience of MGS3. They are, however, in no way a substitute for actually running the software on compatible hardware and playing the game. These resources exist mainly thanks to the efforts of fan communities. This adds weight to Aarseth and Möhring's notion that computer games are "not one type of phenomenon" (see above). It indicates that cultural practices in relation to MGS3 extend beyond the game's concrete technological manifestations. Unfortunately, questions regarding the relation between the cultural practices that yielded the aforementioned resources and Aarseth and Möhring's "technological practices" are outside the scope of this study.

1.2 *Historical game studies*

A central element in my examination of MGS3's relation to twentieth-century history is the exploration of Adam Chapman's *Digital Games as History* (2016a) applied to MGS3. This contributes two things to the discussion: First, it helps focus on history related topics from the multitude of possible research perspectives. Second, it provides analytic terminology that helps describe and analyse MGS3's relation to history.

Adam Chapman suggested an understanding of scholarly interests in the relation between games and history as "the study of games that in some way represent the past or relate to discourses about it, the potential applications of such games to different domains of activity and knowledge, and the practices, motivations and interpretations of players of these games and other stakeholders in their production and consumption" (2016b, 5). While this definition is still rather broad, it manages to outline several possible constellations in which games and history can be researched.

Chapman views "history as a shared cultural process spread across multiple forms, practices, social domains, and stakeholders" (Ibid., 4). This research perspective has seemingly shaped the landscape of historical game studies into "a series of distinct but overlapping areas of interest and strands of investiga-

tion” (Ibid.). Chapman introduces two such central strands. First, he states that “close readings of historical representations” are endeavours frequently undertaken in historical game studies. The second strand consists of formal analyses that aim to describe the properties of the historical game form” (Ibid.). In short, according to Chapman, historical game studies envelope a multitude of perspectives on and approaches to games and history, with two popular questions being frequently pursued by scholars: How is history being represented in games? And, how are games structured to be able to convey such representations?

Chapman’s approach embraces popular culture with all its artefacts and practices as being “capable of meaningful engagements with the past and have the potential to both determine and reflect on how we both collectively and individually think about, understand, negotiate and talk about the past in the present” (Ibid., 3). In *Digital Games as History*, Chapman (2016a) states with regard to the relation between narrative and gameplay: “History is always narrative, but this narrative does not necessarily have to detail the exact sequence of events that is understood to have taken place in the past in order to be historical” (Ibid., 10). Chapman’s open and inclusive concept of history was developed with emphasis on popular culture. He partly argues against assigning unquestioned authority to professional historians as the only ones qualified to negotiate history. “[T]he rejection of popular history is often not only based on the idea of the primacy of the written word but also the sole primacy of the academic word” (Ibid., 8). Chapman “propose[s] that fantastical settings and narratives [...] could still be used metaphorically to argue about the past, offering particular notions of causality or exploring key ideas or concerns by mixing fantastical elements with those that are more conventionally historical” (Ibid., 10).

1.3 Framework for formal analysis

The following paragraphs introduce key concepts for the formal analysis of historical games developed by Chapman (2016a). Chapman’s examination of “the stylistic variations in the ludic aesthetics of historical description of digital historical games” (Ibid., 59) begins with the introduction of a spectrum of simulation styles that ranges from “realist simulation[s]” (Ibid., 61) to “conceptual simulations” (Ibid., 69). With regard to realist simulations, Chapman states: “When we speak of a realist simulation, we do not refer to the game’s historical accuracy. Some games that use realist simulation styles, [...] also contain fantasy elements.” Realist simulations may still utilize fiction. Chapman moves on to specify that, “when we talk of a realist simulation, we are referring

to its stylistic approach to representation rather than evaluating its historical content” (Ibid., 61). This entails a high level of audiovisual detail in elements that “feature little overt metaphorisation” (Ibid.).

In contrast, conceptual simulations are “[m]uch less visually ‘literal’ simulations characterised by abstract audio-visual representations” (Ibid., 70). Given the visual prowess of MGS3 for its time, the game clearly uses elements of realist-style simulations. Facial expressions, three-dimensionally modelled items, environments, or even animals inhabiting the game world are presented with attention to detail. However, it also engages players with several abstract representations that are sometimes of critical importance for the game. MGS3’s player character has needs that players are encouraged to satisfy. Treating wounds, selecting equipment, or eating provisions is handled via menu screens, which is far closer to a conceptual style of representation. While I will return to this in later sections, I find it safe to assume that MGS3 does not fully match either of the two types of representation styles.

Temporal structure is another analytic dimension that Chapman introduces to his framework of formal analysis. He further differentiates between “real-time,” “play time,” and “fictive time” (Ibid., 91). Play time refers to the time spent by players playing a game, while fictive time refers to the passing of time in the fictional game space. An examination of the ratios between the three is one way to approach temporal structures. Another way is termed “discrete temporal structure” by Chapman (Ibid., 94). MGS3’s temporal structure is a far cry from turned-based discrete temporal structures and shows a strong inclination towards a realist-style representation of time as it attempts to evoke a “sense of present, tangible action and challenge that the realist time structure offers” (Ibid., 98). However, it is full of jumps or skips in fictive time, which is partly due to its orientation on the conventions of Hollywood cinema and movies in general. Furthermore, MGS3 employs mechanics that are tied to the internal clock of a PlayStation 2. Food supplies spoil over time when players are not actively playing, and a boss fight against a sniper soldier called “The End” can be won simply by waiting two weeks once players reach that point of the game: the enemy will have died of old age. This brief excursion already shows that matters of temporal structure can be quite complex and multifaceted, too.

Chapman proposes the utilization of four concepts for the formal analysis of narrative structures: “framing narrative”; “ludonarrative”; “lexia”; and “framing controls.” Framing narrative refers to the aspect of a game’s narrative structure that is mostly controlled by game developers via assemblage of “framing narrative fragments” (Ibid., 121). “By comparison, the formation of the ludonarrative is an active collaboration between developer and player” (Ibid., 122). Chapman proposes to understand lexia “as the most basic narratively charged

units that players can combine with other lexia to produce ludonarrative” (Ibid., 123). Lexia are “combinable ludic representations of agents, objects, social structures, architecture, processes, actions and concepts.” Chapman metaphorically illustrates the relation of lexia to narrative fragments as analogous to “an actor’s use of a prop [...]” that is “subject to a sequence of events in the script” (Ibid.). Lastly, “[f]raming controls are the syntactical structures that govern the usage of lexia, determining the possible constitutive relations between a game’s semantics.” One of their primary functions is to ensure “that possible combinations of lexia maintain some kind of coherency” (Ibid., 125).

Summing up, consulting Chapman has proven quite helpful for this study. At higher levels of abstraction, Chapman provides an integrative perspective on the relation between computer games and history that includes fictionalized representations of history in games and is not primarily driven by questions of scholarly accuracy. Due to Chapman’s emphasis on formal analysis, he also proposed applicable concepts and terminology that will aid this study in localizing and contextualizing its points of interest in the research material.

1.4 Works related to MGS

The following paragraphs introduce characteristic features of MGS games by examining research publications on MGS-related topics. Klevjer (2014) provides a helpful discussion of one of the MGS franchise’s most prominent forms of presentation: cut-scenes. Wasser (2019) helps us see the persuasive potential of MGS games through his discussion of the moral challenges that MGS games can pose to their players. I continue to expand on the notion of persuasion by consulting and discussing publications by Stamenković et al. (2016), Dwulecki (2016), and Calleja (2007). They provide more background to the concept of persuasion while also touching upon the relation between gameplay and persuasion, as well as the difference between player and non-player characters in this context. This section concludes with the discussion of a broader approach to cultural memory and media. Hutchinson (2019) attempts to reconstruct Japanese popular culture with regard to the atomic bombardments on Hiroshima and Nagasaki in 1945 through a comparative study of the representation of atomic imagery in popular Japanese media. This helps raise awareness of cultural differences, tensions, and frictions.

1.4.1 *Cut-scenes*

Over the course of the series, MGS gained notoriety for elaborately employing cut-scenes in order to convey its narrative. Klevjer (2014) argues “that cut-scenes set up a separate cinematic space in parallel to ordinary game space, which redefines rather than necessarily excludes player agency” (Ibid., 1). Klevjer frames cut-scenes functionally: “A cut-scene is a cinematic sequence that suspends regular gameplay in order to convey plot, characterization, and spectacle. In broad gameplay terms, cut-scenes contribute to structure and pacing in story-based single-player games” (Ibid., 2). The MGS series features numerous cut-scenes that fulfil the function he outlines.

However, MGS3’s cut-scenes retain a level of interactivity and are woven into the regular gameplay. Cut-scenes seem to be less parallel to regular gameplay and rather lateral. While player agency is reframed during cut-scenes, it is also more an extension of regular gameplay into cut-scenes. Players can zoom into the video by pressing a button. Sometimes, a button prompt invites players to change the perspective in a cut-scene to a first-person view. At other times, this functionality is hidden when the game abstains from such button prompts but still responds to the input. Utilizing these affordances may reveal optional content like additional solutions to puzzles, for instance to escape captivity. Another noticeable affordance of cut-scene interactivity in MGS3 is to subject the female non-player character *Eva* to a male gaze, basically allowing players to stare at her body. While this is likely an attempt to cater to male audiences, *Eva*’s character also references the Bond movies (cf. Wasser 2019, 25).

MGS3 is somewhat challenging because the distinction between narrative fragments and lexia is rather permeable and blurry. While the game prominently features a deterministic story structure (cf. Chapman 2016b, 119) that sets a clear path for players to experience, it is also saturated with lexia that allow players to produce ludonarrative.

It is worth noting that MGS3 has means to drive forward its plot, other than cut-scenes, which barely qualify as cinematic. Snake is in contact with his support team via radio communication. Conversations over radio are less cut-scenes and more audio dramas. Even when mainly providing aural output, MGS3 retains some level of interactivity in this case, too. Radio conversations are visually represented by a numerical display that shows the current frequency and a set of pictures of Snake’s conversation partners. Frequently, players can switch between a front view, and one picture from both the left and the right side. In some instances, pictures are added that convey additional information. This turns these extensible sets of pictures into miniature slide shows in which players can change slides as they see fit over the course of the call. Radio calls also relate strongly to MGS3’s ludic properties. Based on the

current area that is loaded by the game, the item currently selected from the inventory, or other factors, custom conversations can be triggered. The internal structure of these calls may be deterministic in the sense that the conversations consist of prerecorded audio and video that tie into the framing narrative. However, they also function as lexia that contribute to the ludonarrative by providing players with a mechanic to unlock optional information. This further emphasizes MGS3 structural hybridity.

1.4.2 *MGS challenging players*

In his Master's thesis, Wasser (2019) investigates the question, "What Metal Gear Can Teach Us About Morality?" He assesses that, "[w]hat makes games like Snake Eater, Ground Zeroes and The Phantom Pain so transformative is their ability to challenge the morality of players without ruining the overall experience of the game" (Ibid., 56). It is not the aim of this section to challenge Wasser's views regarding morality. More interesting is how he attempts to develop his argument from a foundation of MG's history. In order to examine moral dilemmas posed by MGS3 and both MGSVs, he characterizes these titles within the context of the canonical MGS subseries. Wasser emphasizes the role of Hideo Kojima as creator of the series, and as the leading producer and creative director of the canonical titles (Ibid., 6–10).

Wasser further specifies that, "[t]he meaning of Metal Gear extends beyond its relationship with its creator and publisher; each game's narrative features implicit and explicit philosophical, political, and psychological concepts, as relevant within the game as they are in the real world" (Ibid., 7). This statement certainly expresses his conviction that MGS games are capable of conveying meaning and knowledge, and that they reach beyond their game worlds.

Wasser helps us understand the dramatic difference for the player experience between player character and non-player character. His discussion of moral dilemmas is aimed at the agency of players and to what extent they may feel morally challenged when playing as Snake. Sokolov may serve as a framing and ludonarrative device to intensify such player experiences. Since players cannot choose for Sokolov, it seems plausible for Wasser to not consider this character's moral ambiguities. While it was interesting to see Wasser present more characteristic persuasive properties of MGS games, it is now time to turn to approaches that are less focused on player agency and therefore that potentially allow us to better address Sokolov.

1.4.3 MGS and persuasion

Stamenković et al. (2016) present an investigation into the “persuasive power” (Ibid., 2) games might possess. Approaching *Metal Gear Solid* (MGS1) from “a multimodal discourse theoretical perspective” (Ibid.), they attempt to reconstruct the persuasive aims of MGS1. With reference to Aarseth’s concept of cybertexts (1997), Stamenković et al. establish that the “cybernetic sign consists of the internal level of code and external level of representation, both of which are equally essential, and each of which exists independently of the other” (Stamenković et al. 2016, 10). In other words: “video games signify [meaning] not only via their semiotics [...], but also via their mechanics” (Ibid., 11).

Stamenković et al. expand on Bogost’s concept of procedural rhetorics, which provides them with the analytic means to characterize MGS1 as a “persuasive game” (Ibid., 14). The “way in which the game spurs the player towards non-violence is the ranking system at the end of the game: in order to get the highest rank, codenamed: Big Boss,” the authors state. This shows the persuasive capabilities of MGS1, which produces a ranking screen at the end. The more enemies players kill in MGS1, the lower they will be ranked. The game creates a trajectory towards non-violence by sanctioning high kill counts. MGS3 continues this trajectory. Its non-lethal weapons and attacks allow players to avoid killing altogether, which, in turn, is rewarded with special rankings.

Dwulecki (2016) also investigates the MGS series from a persuasive games perspective. To him, the “most promising level of persuasive intervention is a phenomenon that shall be called immersion fracture” (Ibid., 161). An “immersion fracture occurs within a game session by consciously breaking the fictional/ludic frame and establishes for a short instance a direct contact with the player.” In other words: immersion fractures extend beyond the internal level of software and the external level of representation. They are the result of game design, ludic engagement, and persuasive intervention. An example for immersion fractures in MGS3 might be how the game has a mechanic tied to the hardware’s internal clock, as already mentioned above.

Calleja (2007) attempts to “question the uni-directional nature of the ‘immersion’ metaphor and the binary relationship between participant and environment that it implies” (Ibid., 83). The author puts considerable argumentative weight on the term “environment.” His extensive discussion of the terms “presence” and “immersion” leads him to ascertain that both refer to “[t]he phenomenon of virtual environment habitation.” In other words, immersion is referring to a specific player experience that, according to Calleja, requires a certain mindset from the players: “The experience of habitation depends on digital games that allow players to absorb the game world into their consciousness

as a habitable place as opposed to controlling a detached agent (or set of pieces) in a game-space” (Ibid., 216).

Calleja provided valuable background to Dwulecki’s argument for MGS1’s persuasive capabilities. In this sense, immersion fracture refers to a design strategy that is employed within an already established game environment. Its disruptive character results from the way a game may confront players with (pre-defined) deviations from pre-established design structures of the play experience. With regard to the examination MGS3, this means that Sokolov shows little involvement in immersion fractures and likely had to be designed in a way that conforms with MGS3’s *habitation* requirements.

1.4.4 MGS and cultural trauma

Hutchinson (2019) attempts to view historic representation from a broader, culturally interested perspective. With regard to media theory, she shows how the film *Battles without Honor or Humanity* and MGS1 reproduce and recontextualize historic imagery of atomic explosions to create a distinct perspective on Japanese history. “To portray the impact and effects of atomic war, both Fukasaku [the movie’s director] and Kojima [MGS1’s director] import techniques from other media” (Ibid., 2). This brings another facet of MGS3’s hybrid representation style to our attention. MGS3 features archival video material as well as quasi-documentary video and illustrations that mimic the effects of the physical degradation of archival materials. This predominantly visual design choice contributes to MGS3’s sense of nostalgia.

Hutchinson’s comparison shows that both “play with the relationship between fictive world and real world in their texts, making the two worlds collide and intersect” (Ibid., 3). Kojima’s MGS1 differs from Fukasaku’s film in respect of “the agency of both main character and consumer [which] is stronger in Kojima’s work.” Both “used Hiroshima to point an accusing finger at the United States as well as the global military-industrial complex. Where Fukasaku is critical of postwar Japan, however, Kojima’s text has removed Japan from the visible sphere of action, repositioning Japan as a victim of history with no bearing on the contemporary political world” (Ibid.). Hutchinson refers to player agency as the characteristic feature of MGS1 that distinguishes it from Fukasaku’s movie. She manages to acknowledge the interactive nature of computer games and to sustain a perspective that allows her to integrate a broader cultural view.

Hutchinson aims to present a perspective on atomic imagery being reproduced in popular media in Japan. MGS1’s ambitious involvement in anti-war rhetoric reaches out globally from a specific cultural context. Furthermore,

from the publications discussed so far that deal with the MGS games, hers is the only paper that pays attention to a lack of representation. Hutchinsons argues that MGS1 “removed Japan from the visible sphere of action” (see above). This leads to the question of how cultural backgrounds shape perspectives on history in general, and in particular how MGS3’s representation of history may be impacted by the cultural backgrounds of its developers. A proper discussion of the matter, unfortunately, exceeds the scope of this study. However, Hutchinson’s input is valuable because she explores approaches to popular culture that are sensitive to cultural differences, tensions, and frictions.

2 Case study: Metal Gear Solid 3

2.1 *Metal Gear Solid 3: Snake Eater – Release history and consulted editions*

Metal Gear Solid 3: Snake Eater (MGS3) is the third release within a series of games that carries the main title “Metal Gear Solid.” It was first released in 2004 by *Konami Digital Entertainment* (Konami) and was developed by an in-house development unit that operated from Tokyo. Initially, the game was exclusively released for Sony’s PlayStation 2 (PS2). Later re-releases made it available for other platforms including the PlayStation Vita (PSv).

I did not personally consult editions for Japan (because I lack the necessary language skills) and North America (because I lack an NTSC console and I expect only marginal differences to the PAL versions). My access was limited to two localizations for the German market. The Internet Games Database (IGDB) has registered five distinct versions of MGS3. This includes a bundle that consists of conversions of *Metal Gear Solid 2: Sons of Liberty* (MGS2) and MGS3. This bundle has been released for multiple platforms.

The following versions of MGS3 were used in preparation for this study:
Konami. 2006. *Metal Gear Solid 3: Subsistence*. Konami Digital Entertainment. PlayStation 2 (PAL). Sony ID: SLES 82046, 82047, 82052 [3 DVDs].
-----, 2012. “Metal Gear Solid 3: Snake Eater”. In: Konami. *Metal Gear Solid HD Collection*. Konami Digital Entertainment. PlayStation Vita (PAL). Sony ID: PCSB 00118.

MGS3’s (2006) DVD labelled “SLES 82046” is most resemblant of MGS3 (2012). Both versions share some content additions and adjustments. While the original release of MGS3 (2004) worked with fixed camera positions when navigating the game world, reminiscent of the camera setups in the previous two games, MGS3 2006 and 2012 feature a freely movable camera that can be controlled with the right joystick of the controller. Furthermore, players

have access to conversions of the first *Metal Gear* (MG1) from 1987 and *Metal Gear 2: Solid Snake* (MG2) from 1990 by accessing an assigned item from the game's main menu. In other words, both releases in my possession entail providing access to emulations of two much older releases that are significant to the franchise's own history. In preparation for this study, I consulted MG1 and MG2 only superficially in favour of focusing on MGS3's story. However, both seem to have been visually adjusted to fit the technical requirements of high-definition displays, on one side, and, on the other side, new character illustrations were implemented. The PSv version (MGS3 2012) differs notably from the PS2 version (MGS3 2006) as it does not entail the online multiplayer game *Metal Gear Online*. Regarding the main single-player campaign's story, no significant differences could be detected. However, there are quite a few hardware differences. Sony's DualShock 2 has pressure sensitive buttons that allow for very minute manipulations at the expense of committing time to developing the required fine motor skills. My PSv release omitted pressure sensitivity and was adjusted to different input devices such as its touch sensitive screen and backside (requiring its own set of fine motor skills). This discussion mainly serves to identify my own copies, which I used to verify auxiliary textual resources and will reference accordingly when necessary. If not stated otherwise, MGS3 refers to the game on a higher level of abstraction as the story events are sufficiently similar among most publications bearing the title *Metal Gear Solid 3*.

MGS3 (2006) was shipped with a booklet containing all sorts of information, including the "MGS3 Zeittafel [timeline]" (MGS3 2006 Manual, 042–044). This timeline consists of historical facts on war and political events, fictional events related more closely to MGS3's narrative, a few references to characters outside of MGS3, and the years and months of birth of Harry Gregson-Williams (December 1961), Kyle Cooper (July 1962), Hideo Kojima (August 1963), and Motosada Mori (December 1964). All of these people are part of the production of MGS3. The timeline begins in 1939 and states for September (please note that all translations provided in parentheses were produced by me):

"Deutsche Armee fällt in Polen ein und löst so den Zweiten Weltkrieg aus."
(MGS3 2006 Manual, 042; in English: *The German Army invades Poland and starts World War Two.*)

For June of 1944, the timeline states two entries:

"Die Verbündeten landen in der Normandie (D-Day) | V-1-Raketen [sic] treffen London"
(MGS3 2006 Manual, 042; in English: *Allied Forces land in Normandy (D-Day) | V-1 rockets hit London*)

According to Neumann (2007), whom we will encounter later, the rockets hitting London were actually named “V2” or “Aggregat 4” missiles. This may seem a minor observation, but the events surrounding the V2 weapons technology will play an important role in this paper. The awkward translation “Verbündete”, instead of “Alliierte” for “Allied Forces”, and “V-1” instead of “V-2” are indicative of a localization process that seemingly could have used a bit more time. It appears that the text was translated from an original language other than German. Therefore, I assume that this timeline information is not exclusive to my MGS3 (2006).

The history of atomic weapons technology is first registered in August 1942:

“Forschungsabteilung der US-Armee beginnt mit der Entwicklung der Atombombe (Projekt Manhattan). Otacons Großvater ist an der Entwicklung beteiligt.”

(MGS3 2006 Manual, 042; in English: *US Army’s research division commences development of the atomic bomb (Project Manhattan). Otacon’s grandfather is involved.*)

This entry taps into the history of the technology that was used to obliterate Hiroshima and Nagasaki. “Otacon” refers to a character from another game, also called “Hal Emmerich” (MG-Wiki 3), and hints at his family having their own history with weapons development.

For August 1945 (MGS3 2006 Manual, 042), three items are stated:

“Atombomben auf Hiroshima und Nagasaki abgeworfen | Otacons Vater geboren | Ende des Zweiten Weltkrieges” (in English: *atomic bombs dropped on Hiroshima and Nagasaki | Otacon’s [Hal Emmerich’s] father is born | end of World War II*)

This entry takes two events, one historic and one fictional, to signify a third: the end of World War II. While the first can be read as a subtle reference to the traumatic events of the atomic bombardment of Japan, the second event is a reference to a fictional character from different games, “Hal Emmerich”, and addresses his fatefully tragic relation to weapons development. The timeline links Emmerich to what we already encountered as culturally traumatic events. This hints at weapons development as one of the topics in which the MGS series critically engages.

The timeline ends with December 1964. The beginning of MGS3’s fictional events is registered in August:

“Snake nach Tselinoyarsk entsandt, um Sokolov zu befreien” (MGS3 2006 Manual, 044. in English: *Snake sent to Tselinoyarsk to rescue Sokolov*)

2.2 Plot overview

MGS3 sends its players on the journey of a highly capable male US soldier, codenamed Naked Snake (MG-Wiki 19), who is sent alone on two missions. The *Virtuous Mission* serves as a narrative prologue as well as an introduction to the controls and mechanics of the game. The major portion of the game is committed to *Operation: Snake Eater*. The game's plot is set in 1964, shortly after the Cuban Crisis of 1962.

Snake's first task is to rescue a Russian rocket scientist named Dr. Nikolai Stepanovich Sokolov (MG-Wiki 8) from a facility in the Soviet Union. The reckless mission plan is to insert Snake into Soviet territory via halo jump and with minimal equipment, basically approving the violation of international treaties. He must then locate and rescue the scientist and bring him to the other side of the Iron Curtain and into the US.

Sokolov's relevance to the plot stems from his advanced knowledge of rocket engineering. He is forced to help develop a weapon of mass destruction (WMD). Extracting Sokolov is supposed to prevent the finalization of this WMD, removing a global nuclear threat from the game's Cold War fiction.

Snake is supported by a team of collaborators consisting of his commander (MG-Wiki 20), a medical and regional expert (MG-Wiki 9), and Snake's mentor and legendary soldier called "The Boss" (MG-Wiki 19). The Boss initially provides knowledge in weapons items and strategy, but ultimately prevents mission success by confronting Snake in the mission area and defeating him in combat.

This seals a deal between The Boss and the rogue Soviet commander "Volgin" (MG-Wiki 22) to whom she is defecting. She also brought a portable nuclear weapon as a gift for her new commander. Volgin, who controls a secret and massive fortune addressed as *The Philosopher's Legacy* with which he funds his rogue operations, decides to use a nuclear warhead against Sokolov's former research facilities with catastrophic results.

This situation has severe implications for the state of the Cold War, potentially causing open military conflict between the superpowers. In order to prevent a nuclear war, Snake barely has time to recover from his injuries from the *Virtuous Mission* and is sent on his next assignment. While rescuing Sokolov is again part of the mission objectives, killing The Boss (as well as Volgin informally), and destroying the WMD in development, the "Shagohod", are new on this list. Snake's primary objective is to prevent the finalization of the weapon at any cost. A new radio support frequency is available that is assigned to "Sigint" (MG-Wiki 10) who acts an expert on weapons and technology, filling the position vacated by The Boss.

Snake manages to locate Sokolov again but only after the prototype's construction is finished. Their escape is prevented by Volgin, who imprisons and

tortures them. Sokolov dies from the injuries inflicted by Volgin. Snake escapes captivity and succeeds in both destroying the “Shagohod” (killing Volgin during the process) and killing The Boss. But the mission’s success comes at a high personal cost to Snake. His strong personal connection with his mentor, whom he killed, left him conflicted regarding his patriotism and status as a highly decorated US soldier. MGS3’s 1964 US government awards Snake the title “Big Boss,” who is now on his path to grow into the villain of the series’ first installments MG1 and MG2.

2.3 MGS3 and the Metal Gear Solid subseries

There are many ways to illustrate MGS3’s relation to the whole franchise. One important distinction to make is between “Metal Gear” and “Metal Gear Solid,” both of which refer to a series of multiple game releases. The former entails all games of the franchise, intellectual property of Konami. The latter is a subset of these games. The earliest release to bear the title addition “Solid” was initially released exclusively for the PlayStation (PS1). We have already briefly encountered the second iteration of the MGS subset as a part of the *Metal Gear Solid HD Collection* (2012) at my disposal.

A characterizing feature of both my MGS3 versions is that they provide access to two other games of the franchise. Not only are their first releases significantly older than MGS3. They also lack “Solid” in their title. This is by no means splitting hairs. The MGS subseries is considered for its canonicity, discerning canonical releases from spin-offs. This distinction largely depends on Hideo Kojima’s status as a games auteur (see Hutchinson 2019, 10; Wasser 2019, 6; Dwulecki 2016, 149; Stamenković et al. 2016, 41) and his degree of involvement in the production. For the purposes of this study, the following nine titles out of Metal Gear’s over 30 years of publication history were considered as parts of the canonical MGS subset:

- MG1: Metal Gear (Konami 1987: MSX2)
- MG2: Metal Gear 2: Solid Snake (Konami 1990: MSX2)
- MGS1: Metal Gear Solid (Konami 1998: PlayStation)
- MGS2: Metal Gear Solid 2: Sons of the Patriots (Konami 2001: PlayStation 2)
- MGS3
- MGS4: Metal Gear Solid 4: Guns of the Patriots (Konami 2008: PlayStation 3)
- MGS-PW: Metal Gear Solid: Peace Walker (Konami 2010: PlayStation Portable)

- MGSV-GZ: *Metal Gear Solid V: Ground Zeroes* (Konami 2014: PlayStation 3 & 4 [non-exclusive])
- MGSV-TPP: *Metal Gear Solid V: The Phantom Pain* (Konami 2015: PlayStation 3 & 4 [non-exclusive])

MGS3 conveys the events that lead to Snake's promotion to the supposedly legendary rank of "Big Boss." MGS knows multiple characters whose code name contains the word "Snake." MGS3's Snake is also the protagonist and playable character of MGS-PW and MGSV-GZ. He is the main antagonist in MG and MG2. MGS 1, 2, 4, and MGSV-TPP reference MGS3's Snake less directly and mainly through their narratives. The MGS subset is held to together by a framing narrative that is built over the course of multiple titles.

3 Findings

MGS3's complex formal structures pose a challenge for an analysis of its historic references. The inclusive and rather open concept of history that Chapman proposes allows for multiple possible ways in which games can engage with history, which MGS3 seems to do so eloquently. One risk of such inclusiveness can be that it detracts from the research focus in case of an overabundance of options. MGS3 does not refer to history as a monolithic structure, but approaches it from different angles.

In order to maintain focus, I limit the discussion to three types of historical references that are prominent in MGS3: First, MGS3 refers to the history of the Cold War as a foundation for its story. Second, the game devises strategies to refer to media history. We encountered two such strategies with regard to styles of audiovisual presentation: MGS3 embraces cinema tropes from 1960s spy-action movies, and it also utilizes a documentary style. It is noteworthy that the PS2 versions of MGS3 are themselves historical documents of the gaming industry before games were distributed digitally. Although it basically featured a software patch for the camera controls and additional content, MGS3 "Subsistence" (2006) had to be published as a new edition, separated from the initial release. Nowadays, games would handle this with software updates and downloadable content. Third, MGS3 makes reference to the history of MG as a franchise. This already becomes clear when contextualizing Naked Snake, who is set up to become Big Boss, within the series. MGS has established a set of its own tropes, many of which are present in MGS3. The protagonist being betrayed by his commander, stealth gameplay that rewards players who avoid lethal combat, escaping captivity or hostage rescue missions are among

such tropes. In the next section, I will examine one such trope more closely: weapons scientists.

3.1 Scientist characters in MGS

The aim of this section is to contextualize Sokolov as a character in the MGS series by examining the trope of weapons scientists. Table 1 serves to illustrate different types of characters with a scientific or engineering background and their distribution over the MGS series. The top row shows the year in which MGS games were first released. The second row features the title abbreviations introduced above. Starting in the third row, the left column lists all the names of MGS characters with an identifiable scientific background. Characters are categorized in three groups: hostages that are to be rescued (H); scientists who act antagonistically to the player or rival the hostage-scientist (A); and members of the protagonist's radio support team (S). This typology seeks to convey characteristic features of scientist characters to make them comparable. It is mostly a suggestion for how this could be formalized (Table 1).

Table 1. H - hostage to be rescued, A - antagonistic scientist, S - support team member

initial release year	1987	1990	1998	2001	2004	2008	2010	2014	2015
	MG1	MG2	MGS1	MGS2	MGS3	MGS4	MGS -PW	MGSV -GZ	MGSV -TPP
Drago Petrovich Madnar	H	A							
Kio Marv		H							
Hal Emmerich			HS	S		S			
Naomi Hunter			SA			H			
Mei Ling			S						
Emma Emmerich				H					
Aleksandr Leonovitch Granin					A				
<u>Nikolai Stepanovich Sokolov</u>					H				
Dr. Clark/Para Medic					S				
Sigint/Donald Anderson			(H)		S				
Dr. Strangelove							A		
Huey Emmerich							HS		HS
Code Talker									HS

This illustration shows two important things: Firstly, it illustrates that Sokolov stands in a long line of scientist characters in MGS, who sometimes appear in more than one game. Secondly, it allows us to see that MGS established recurring character constellations. Sokolov character design and presentation are therefore likely guided by considerations regarding this trope, which may well lead to pointed or simplified design choices. Every MGS title features a scientist hostage, with the exception of MGSV-GZ. The above table annotated “Sigint/Donald Anderson” as “(H)” for MGS1. He is part of MGS3’s radio support Team and advises on weapons and engineering. The parentheses are meant to signify that, in MGS1, it is a mission objective to save him, but Anderson already died before he could be rescued (or could even be met alive in the first place). MGS1 features a second hostage, “Kenneth Baker,” who was omitted for his emphasis on war as a business and absence of scientific background. MGS1’s “Hal Emmerich,” in turn, is not a mission objective. But he proves essential to the mission’s success due to his knowledge of MGS1’s WMD *Metal Gear Rex*. Although she also appears in MGS4, Mei Ling was omitted, despite appearing in MGS4 as the commanding officer of an attack ship, and does not act as part of Snake’s support team.

In MGS3, “Para Medic” is part of Snake’s mission support. Her main functions are to create save files and provide medical advice, while she is also very knowledgeable on Japanese popular culture. For the most part, she acts through radio calls. “Aleksandr Leonovitch Granin” is another, highly decorated Soviet weapons engineer who is, however, not a mission target. He antagonises Sokolov’s research because they compete for funding that rendered Granin defeated:

Granin: Sokolov! It’s him you’re looking for, isn’t it? Because of him, I have been stripped of my authority. My research has come to nothing. Look! (pulls out some schematics and hands them to Snake) It is a revolutionary mobile nuclear missile system, a bipedal tank.” (GameFAQs)

Granin subverts his superior’s interests by helping Snake progress in the game. His betrayal costs him his life later in the game. His aim is to sabotage Sokolov’s project, hoping to resume his former place at the top:

“Snake: Why are you helping me?
Granin: Unlike Sokolov, the thought of defecting has never once crossed my mind. I love... my country. I love this land. I cannot even imagine living anywhere else. I wish to remain a hero... of the great motherland. I cannot bear the thought of being hounded into a corner and left to waste away. ...” (GameFAQs)

For the duration of the prologue *Virtuous Mission*, Snake is codenamed differently, “Jack,” which is changed later for *Operation Snake Eater*. MGS3 introduces Sokolov during its opening cut-scene as follows:

“Jack: Sokolov... isn’t he that famous rocket scientist?”

Zero: The very same. On April 12, 1961, the Soviets achieved the first manned space flight in history. ...

Zero: ... The rocket that carried Yuri Gagarin into orbit was the A1, known as the Vostok rocket. Sokolov is said to be the man most responsible for the multi-engine cluster used in that rocket. After Gagarin’s flight, Sokolov left rocket development to become the head of the newly established Design Bureau.” (GameFAQs)

Sokolov’s contributions to rocket science are of such extreme magnitude, as Zero confirms, that the Cuba Crisis was defused and nuclear war was averted because Sokolov was handed over to the USSR:

Zero: ... Finally, on October 28 [1962], the Soviet Union agreed to remove its missiles from Cuba. And so the world avoided a nuclear holocaust. But in order to get the Soviets to pull their missiles out, we had to make a deal.

Jack: You mean the one where the US agreed to remove its IRBMs [intermediate-range ballistic missiles] from Turkey?

Zero: No. The Jupiter IRBMs deployed in Turkey were obsolete and we were going to get rid of them anyway. They had no strategic value whatsoever to either the US or the Russians. The Turkey deal was a ruse – a cover story that was fed to the other intelligence agencies around the world.

Jack: So, what did the Russians really want?

Zero: Sokolov. They wanted us to return Sokolov.

Jack: You mean the Soviets pulled out of Cuba just to get their hands on Sokolov?

Zero: That’s right.” (GameFAQs)

Snake’s first encounter with Sokolov takes place during the *Virtuous Mission*. Sokolov says about his situation, that he was guarded by soldiers, not in order to detain him but to keep Sokolov out of Volgin’s, MGS3’s main villain, reach:

“Sokolov: The intelligence says that they [Volgin’s troops] are going to make their move during the test.

Snake: Then the soldiers outside...

Sokolov: Exactly. They wouldn’t need that many men just to keep me inside. Their orders were to prevent Colonel Volgin from capturing me. Even if it meant killing me in the process, or so it would seem. Volgin will come, I’m sure of it. You must get me out of here before then.” (GameFAQs)

Snake asks Sokolov about the weapon he developed. He replies that it is not yet finished and cannot be completed without him. The construction of an operational prototype would already constitute a severe threat:

“Snake: The end of the Cold War?

Sokolov: Yes. And then [after the weapon’s completion] the age of fear will truly begin...

Snake: A world war?

Sokolov: I had no choice but to cooperate! I didn’t want to die. I wanted to see my wife and child again in America.... Please, take me to America quickly. They cannot complete it without my help.” (GameFAQs)

Sokolov preemptively answers questions regarding his motivation and complicity, being left without a choice because his life was threatened. He also seems acutely aware of the threat posed by his invention. Snake’s first attempt to rescue Sokolov fails. They meet again during “Operation: Snake Eater.” Sokolov informs Snake that he has completed work on a prototype and helps Snake develop a plan to destroy the weapon prototype. Sokolov also opens up about his view of the situation:

“Sokolov: Khrushchev has abandoned me. I cannot return to my country. I would most certainly be sent to the gulags.

Snake: What about the US?

Sokolov: Yes. I once thought of that. My family is waiting for me there. But even if I fled to the United States, I would once again find myself creating weapons of mass murder. In the end, it doesn’t matter where I go. I am still a weapons scientist. To be honest with you, I am tired. Every day, I help create things that should never be used – things that should never have existed in the first place. Every day, without sleep. Without a word of praise from others. And my creations do not even benefit mankind. They are merely the tools of politicians. All I wanted to do was build space rockets. But it was not to be. The space race between America and Russia became the prey the of (sic!) politicians. The space race and the arms race are one and the same. Missiles, rockets... what’s the difference? Scientists are always being used. Please watch over my family.” (GameFAQs)

Sokolov states that nothing binds him to his home country anymore, although his resignation might go deeper than that. He also remarks on his research on the “Shagohod”. He regrets the destructive nature of his work and describes his treatment in captivity as sleep deprived and ungrateful. He bitterly acknowledges that the conflict between the US and the USSR shattered his dreams of building space rockets, as the “space race [...] became the prey [of the] politicians. The space race and the arms race are one and the same thing.” This presents him as a person whose talents were abused and if it were not for political intervention, Sokolov’s endeavour would have taken a different, likely

civilian, and more peaceful path. This encounter between Snake and Sokolov ends abruptly when they are discovered, captured, and, ultimately, tortured by Volgin. Sokolov does not survive the torture.

Sokolov's notion, that scientists in general were nothing but political tools without any control over their actions, may have been expressed out of his regret and resignation. However, it enforces the powerlessness of his position and, in doing so, implicitly absolves his ambiguous involvement. But not only is this statement – scientists are always being used – simply not true, this emphasis on victimhood shuts out questions regarding the scientist's moral challenges. Furthermore, and rather implicitly, in the dialogue excerpts above the threat posed by WMDs is reduced to their use against humans in combat. This reduction is problematic because, as I will show below, the Nazi science that gave rise to the technology and that Sokolov embraces so wholeheartedly claimed even more lives in the concentration camps in which it was built than in attacks conducted with the "V-2."

4 Discussion

4.1 *Sokolov the rocket scientist*

Who is Dr. Nikolai Stepanovich Sokolov? He is a character in a computer game. He *is* what and how he is *represented* in MGS3. He can be characterized as the leading mind in rocket science – at least within MGS3's fictional framing narrative. This informs the search for commonalities with the – non-fictional – von Braun. Both share proficiency, popularity, and a single-minded pursuit of bringing humans into space. The following discussion of excerpts of von Braun's career will, in turn, show the differences between the two. Von Braun, who is viewed as one of the most influential pioneers of space flight, remains an ambiguous persona due to his close relation with the Nazi's V-weapons programme, which saw him involved in the exploitation of forced labourers in the Mittelbau Dora concentration camp and in Peenemünde on the Baltic coast. While he has not been criminally charged with war crimes, the Faustian bargain he made prevented him from rising to the highest positions in NASA. Sokolov, on the other hand, is designed in a way that leaves no room for ambiguities. Weapons development in MGS3 is dominantly characterized as one arena of political power play. This encompasses the instrumentalization of scientists like Sokolov, who himself has next to no agency or control over his fate. While von Braun's single-mindedness brought him to make a deal with the devil, Sokolov shows no sign of such fatal opportunism. While Sokolov dies at the hands of his oppressor, carrying regrets about having built weapons

of mass destruction, von Braun transitioned with relative ease via Operation Paperclip into NASA's space programme. The issue of forced labour affects them very differently: While von Braun only rarely commented publicly on his role in the murderous exploitation of forced labourers who assembled his rocket designs, MGS3 shows mainly Sokolov as having suffered from forced labor.

Sokolov is predominantly present in cut-scenes. His – not necessarily the player's – moral dilemma is between saving his life and exposing millions of lives to the risk of atomic warfare. However, Sokolov's character is developed making explicit reference to historic events, like the first manned space flight of the USSR to which he is said to have contributed so greatly – while in fact the Russian Sergei Korolov is considered the leading mind behind the Vostok rocket. Another such reference is made to the Cuba Crisis in 1962, which was defused only because of Sokolov's return to the USSR. And since he is also the only person who can complete the "Shagohod," he becomes a high priority target in Snake's missions during MGS3.

Sokolov is presented as helpless and without choice, limiting his accountability in WMD development. In the expression of his resentment for the destructive way in which he claims to have been affected by political power struggles, he points the finger at the realm of politics. He states that his interest in rocket science arose from an interest in space travel. He wanted to contribute something to civilization but now he helps destroy it. Sokolov may have little agency, but his ties to events of historical proportions help establish both a sense of the era in which the plot takes place and a sense of urgency to come to his rescue. However, Sokolov seems to be set up to show as little ambiguity as possible.

MGS3 also features atomic imagery. The threat of atomic war is deeply rooted in its Cold War setting. But the same goes for World War II, which is acknowledged as the event that shaped the geopolitical situation of the Cold War. A text card at the very beginning of MGS3's opening cut-scene states:

"After the end of World War II, the world was split into two – East and West. This marked the beginning of the era called the Cold War." (Game-FAQs)

So, how does this constitute a reduction of complexity of historic reality? How can this be strategic and when does this become problematic? I argue that the emphasis on the end of World War II constitutes a complexity reduction, as it marginalizes questions about how, why, and who began this war. The war's importance supposedly lies in its end. Nazi Germany began World War II and employed Wernher von Braun to build weapons systems that would go on to

become the foundation on which space rockets as well as intercontinental ballistic missiles (ICBMs) were built. If MGS3's persuasive aim lies in promoting critical and nuanced reflection on war, technology, and politics, disproportionate complexity reduction seems to work against these aims.

Regarding Sokolov, his pronounced position allows MGS3 to have a competent and knowledgeable character at its disposal to which it attributes considerable weight when it comes to rocket technology. To be fair, Granin is also an elite scientist who works in weapons development. But he is far less committed to rocket technology. Instead, he wanted tanks to have legs, indicating Granin as the earliest beginnings of the bipedal weapons technology named Metal Gear (also cf. above) which establishes a strong connection to the overarching narrative of MGS:

“Granin: ... Legs!! Legs that allow it to go anywhere!! Just as when humans learned to walk upright! THAT is the real evolution in weaponry! Don't you agree? But... the fools in charge choose Sokolov.” (GameFAQs)

Granin, however, who carries the Order of Lenin, also represents not only his team of researchers, but also stands for the Soviet Union's core values, signified by the honours he received. He also represents a branch of weapons development that was pushed aside by Sokolov's work. Both Sokolov and Granin are helpless subjects to political and military decisions. They are not “in charge” (aside from head positions in Soviet design bureaus it seems) and both meet the same tragic end. They suffer dehumanization in their expendability once their usefulness expires. This feeds into Sokolov's sentiment about being a tool to political powers who abused him. MGS3 exaggerates its scientist characters, Granin and Sokolov, to a degree where they can carry significant argumentative weight. However, both characters are presented in a way that leaves little room for doubt or the critical questioning of their roles, which partly obstructs the view on moral ambiguities. MGS3's representation also seems to have a discursive blind spot regarding the organizational structures behind weapons development.

So, what constitutes MGS3's anti-war sentiment and how is the game conflicted? In the final moments before Snake fights his former mentor, The Boss, to the death, he asks about her motivations:

“Boss: Why? To make the world one again. ... Is there such thing as an absolute timeless enemy? There is no such thing and never has been. And the reason is that our enemies are human beings like us. They can only be our enemies in relative terms. The world must be made whole again. ...” (GameFAQs)

This conversation leads to the climax of the game. The Boss's argument against "an absolute timeless enemy" takes place right before players have to defeat her. Snake eventually completes his mission. But having to kill his mentor during a mission alienates him from the national military that he served and sets him on a path that leads to the villains players encounter in MG1 and MG2.

The tragedy of Sokolov contributes to The Boss's notion of an existence in which "the foibles of politics and the march of time can turn friends into enemies just as easily as the wind changes." (GameFAQs) Enemies are defined by history ("march of time") and politics, both human and therefore relative, constantly changing constructs. Soldiers like The Boss or Snake, but also civilians like Sokolov and Granin are subject to this change. This process, however, is more similar to forces of nature ("as easy as the wind changes"). This allows her to invalidate political conflict as relatively short-lived or meaningless competition in contrast to the magnitude of achievements in the twentieth century. As intriguing as The Boss's view may be, it rests on the assumption that the world can be united as it once was ("again"). Since World War II was introduced as the event that marked the global schism, The Boss's statement prompts the question of *if* or *when* the world has ever been in a united state before. World War I already announced the twentieth century as an era of unprecedented conflict and destruction. Did The Boss refer to a time before then? Unfortunately, she remains vague on the matter.

The paragraphs above serve to show Sokolov's development in MGS3, while represented with exaggerations and abbreviations, is in alignment with the broader persuasive aim of MGS3 regarding its anti-war rhetoric. However, his disambiguated narrative setup and the nuanced proposition that the game makes towards reflecting on war contrast sharply. MGS3 made several concessions to the series, for instance, regarding recurring character constellations. Simplification in this context is likely a strategy devised to drive its plot forward, support MGS3's compatibility with tropes of the series, and the audiovisual conventions that are emulated in the game. MGS3 was also designed as an entertainment product, meaning that design choices were aimed at creating a marketable product and not necessarily at an extensive discussion of (political) history. Still, the game reaches beyond trivial matters and attempts a balancing act between entertainment and thought provocation.

4.2 *Remov(-ed/-ing) context*

Until this point, I have showed that MGS3 entertains different types of relations to historical topics. Sokolov's role within MGS3 is quite complex. While he plays a big role in the game's framing narrative, his design attempts to conform

to the series' weapons scientist trope and to audiovisual conventions of cinema and documentary style. Simplified representations of history may, in Sokolov's case, be rooted in one or more of the aforementioned procedures. As a result, however, Sokolov's representation seems somewhat conflicted as it omits key aspects of the history of rocket science in favour of a clear-cut picture. Consequently, it also manages to reproduce another blindspot that characterized the popular discourse surrounding one of space technologies early pioneers. The following section mainly serves to illuminate this subject in an attempt to fill in the blanks in MGS3's representation.

Rocket technology originated largely from World War II and went on to become one of the most contended technologies of the Cold War. Wernher von Braun is famously considered to be among the most talented early contributors. He was known for his contributions to NASA's advances in space flight. His involvement with the Nazi's military during World War II continued to draw critique.

Von Braun was chosen in this study for three reasons. Firstly, his persona is as famously and closely linked to the history of rocket technology as few others. Secondly, he was surrounded with a highly polarized discourse that viewed von Braun either as an unprincipled opportunist or a blameless victim of the turmoils of World War II. But the situation is not as simple as that. Thirdly, the polarized discourse surrounding him also created a gap between von Braun's weapons designs for, and the weapon's application by the Nazis. In a way, von Braun's persona overshadowed crimes that Nazis committed in order to realize his designs. It also overshadowed his part in these crimes, such as his role in planning the facilities and calculating the required workforce. About 20,000 people were worked to death or suffered other mistreatment in German concentration camps assembling the V-weapons between 1943 and 45 (Neumann 2007). Yet, if we return to the manual from the beginning (MGS3 2006 Manual), the remark on the falsely labelled "V-1" missiles was made with regard to the weapons hitting London.

Musical satirist Tom Lehrer's Song "Wernher von Braun" helps illustrate von Braun's discursive surroundings during the 1960s. In the introduction to his performance of the song in Copenhagen in 1967 (Lehrer 1967), Lehrer makes explicit reference to the arms race and space race when he asks his audience:

"What is it that makes America the world's greatest nuclear power? And what is it that will make it possible for us to use twenty thousand million dollars of our taxpayer's money to put some idiot on the moon?"

Lehrer answers the question himself:

“Well it was the great, enormous superiority of American technology, of course, provided by our great American scientists, such as Dr. Wernher von Braun.”

Lehrer creates tension between the national connotation of the US’s technological superiority and von Braun’s name, which hints at his German descent. The joke lies in the contrast between expectations raised by a strong American patriotic charge and von Braun’s non-American sounding name.

Lehrer’s satirical remark on von Braun’s Nazi past (“Call him a Nazi, he won’t even frown”) sets the tone for the whole song. The second verse maybe shows best (Lehrer’s grasp on) the polarized nature of the popular discourse on Wernher von Braun:

“do not say that he’s hypocritical | Say rather he’s apolitical | ‘Once the rockets are up, who cares where they come down? | That’s not my department’ says Wernher von Braun.”

The tension between “hypocritical” and “apolitical” stems from von Braun’s involvement in the V-Weapons programme of the Nazis and unresolved questions of moral (if not criminal) responsibility, for instance, with regard to the attacks on London. Did he act consciously supporting the Nazi regime? Lehrer’s song suggests that von Braun would answer by relativizing his connection to the Nazis and his involvement in political affairs. The third verse continues:

“Some have harsh words for this man of renown | But some think our attitude | Should be one of gratitude | Like the widows and cripples of old London town | Who owe their large pensions to Wernher von Braun.”

This verse is characterized by a similar polarization as the second. This time it is between condemning him (“harsh words”) and an “attitude ... of gratitude.” The last half of this verse ironically addresses those who fell victim to the fruits of von Braun’s work for the Nazis. But this view, too, leaves out those who died not from those attacks but from building the V-Weapons in concentration camps. In a way, MGS3 managed to reproduce a historical blind spot that also seems to have been present in Western popular culture at least during the 1960s.

This excursion contributes two important insights so far: Firstly, Lehrer’s performance in Copenhagen is indicative of the popular reputation of Wernher von Braun, in the sense that he was in fact a “famous rocket scientist” (cf. above). Secondly, Lehrer, too, is relying on simplified representations of social reality, in this case the polarization of evaluations of von Braun’s Nazi past. Similar to MGS3’s discourse that evolves around Sokolov, Lehrer’s satirical

song pays no attention to the work force behind von Braun's technological achievements, as if exempt from the discussion.

How is this polarization problematic with regard to the history of rocket science? Could von Braun not simply be an example of an "enemy in relative terms" (GameFAQs)? Firstly, von Braun's involvement with the Nazis was more complex than a narrow enemy/friend or perpetrator/victim dichotomy might suggest.

Neumann (2007), who shows his extensive historical research in his book *Von Braun. Dreamer of Space | Engineer of War*, offers biographical findings on Wernher von Braun. His V-2 rocket "went on to influence missile technology in the United States, the USSR, France, Britain, and China, accelerating the arrival of the ICBM and the space launch vehicle by perhaps a decade. Nothing von Braun ever did in his life was ever as influential as that" (Ibid., 476–477) Neumann outlines von Braun's position regarding the space race to be strongly contended by the Soviet rocket scientist Sergei Korolov, who, in terms of firsts, may have achieved more than von Braun – including the development the Vostok rocket that carried Gagarin into orbit. But still: "[Korolov's] postwar accomplishments were founded on German technology: by Stalin's order, he started over in 1945–46 by copying the V-2" (Ibid., 477).

However magnificent von Braun's achievements in engineering may be, Neumann says he also symbolizes the "temptations of engineers and scientists in [the twentieth century] and beyond: the temptation to work on weapons of mass destruction in the name of duty to one's nation, the temptation to work with an evil regime in return for the resources to carry out the research closest to one's heart" (Ibid.). His Nazi past prevented him from rising above the position of Administrator in NASA (cf. Ibid., 5). Von Braun excelled most in organizational leadership, not engineering, and was materially motivated by space exploration: "the foundation of his remarkable career as an engineering manager and space visionary was his romantic ambition to explore space, if possible personally" (Ibid., 6).

Neumann's paper on *Questions of Moral, Political, and Criminal Responsibility* (2002), argues against the "decisive split between pro- and anti-von Braun camps [of discourse]" (Ibid., 57). He describes the antagonising characterizations of von Braun as "apolitical space enthusiast who was not a 'real' Nazi and had nothing to do with the crimes of the Third Reich" on the one side, and "unprincipled opportunist or even a convinced Nazi who is directly responsible for the deaths of 20,000 prisoners" (Ibid., emphasis in original) on the other.

Neumann argues against such dualism. He states that it "is his [von Braun's] involvement in concentration-camp labor that is central to any judgement of him." Faced with "meager surviving evidence" he sees himself unable to provide "a conclusive answer as to the degree of his [criminal] responsibility"

(Ibid., 58). Neumann concludes that “[i]n many ways, Wernher von Braun remains an ambiguous case” (Ibid.). However, von Braun “witnessed the terrible conditions in Dora and elsewhere and was in a position of some power, he cannot escape moral responsibility for the criminal abuse of concentration-camp labor” (Ibid., 72).

“Mittelbau Dora” was the name of the facilities in von Braun’s administrative reach after production was moved from the Baltic coast to underground facilities in the inner country’s Harz Mountains region in response to an attack. Between late summer 1943 and April 1945, the SS-operated concentration camp was committed to von Braun’s secret projects. Within the complex of concentration camps associated with Buchenwald, it soon became feared “because of the catastrophic conditions of starvation, bad sanitation, brutal overseers, rampant disease, cold, and overwork prevailing there. During the winter of 1943/44, twenty prisoners on average died each day” (Ibid., 64).

This is the history of rocket science, too. The propulsion systems that helped humans travel into space are achievements not only built on the shoulders of intellectual giants and pioneers of engineering, they are also built on the mass graves of forced labourers. MGS3’s deafening silence on the subject may be due to formal or commercial concessions and even resembles the polarization of the popular discourse surrounding von Braun in the 1960s. However, the game’s comparatively uncritical representation of rocket science is in sharp contrast to its persuasive aims. Considering how thorough and careful MGS3 has been researched and designed, the absence of the conflicted history of rocket science appears more like a deliberate omission. However, the reasoning behind this decision remains unclear.

Conclusion

This study set out to examine MGS3’s representation of the historic relation between weapons engineering and the military. Chapman’s inclusive concept of popular history and his framework for the formal analysis of historic games are foundational components of the analysis of the game. I could show that MGS3 devises multiple strategies to engage players in its game world and that historic references play a big part in this process. Within Chapman’s analytic framework, MGS3 is a structural hybrid that utilizes realist as well as conceptual simulation styles and in which framing narrative and ludonarrative are tightly interwoven. Notwithstanding its prowess as an entertainment product, MGS3 attempts to raise awareness to the moral ambiguities of war, proposing to abandon the notion of absolute enemies. However, the game subverts these ambitions when it comes to the relation between weapons engineering and the

military. Compared to the historic tensions of rocket science and given MGS3's strong emphasis on rocket propulsion technologies, Sokolov's representation of the field is rather simplistic because every indication of moral ambiguities is seemingly removed in favour of a woodcut-like victimization. If the aim was to encourage players to think critically beyond the dualism of friend and foe, it does not seem helpful in the long run to remove ambiguities and therefore opportunities to engage critically with the past. At least with Sokolov, rocket science and weapons engineering, and how the murderous beginnings of rocket technologies were entirely omitted from MGS3's fiction, this seems to be the case. While von Braun may be a historical figure that helps illustrate the Faustian bargain between science and military like few others, the popular discourse surrounding him in the 1960s also hints at something else. The conditions and the extent to which forced labourers in Nazi Germany paid with their lives to achieve the technological foundation on which space travel would be built seem to have been underrepresented beyond MGS3. In both the historic popular discourse and in MGS3, their fates were overshadowed by few great minds.

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Comment by Hugo Gelis

Konstantin Freybe's chapter on *Metal Gear Solid 3's* (MGS3) rocket scientist deals with the consequences of World War II and how it is portrayed in popular

media. *MGS3* is set in the Cold War era and, while it touches upon the fallout of World War II, it mostly ignores it. Indeed, The Boss and her Cobra Unit are the only characters whose backstory ties into the previous conflict.

Sokolov's role in the war is unknown: while born at roughly the same time as Wernher von Braun, around 1910, his history only starts in the 1960s. He is a blank state, a scientist in distress having contributed to the space race.

Kojima Production's anti-war stance is clear and their research thorough, yet they leave an unfortunate blank spot. While Von Braun had a hand in exploitation and death in Nazi Germany's work camps, Sokolov apparently has no responsibility whatsoever. The true extent of the work of a rocket scientist, their involvement in decision-making and war crimes is ignored.

While the game's presentation, mixing archival footage and character voiceovers, anchors its story in history, its narrative does not address the full extent of the moral complexity of the Cold War.

Comment by Siyu Yang

Thanks for offering me the chance to review this paper. I found it really intriguing to read, since it reveals a contradiction in the scenario of *Metal Gear Solid 3*: The selected reflection on "real" history. I presume that, from the author's point of view, it is strongly influenced by Western historical culture, as is clear from the portrayal of the German rocket scientist Wernher von Braun. Moreover, this paper shows that there is a new type of storytelling in *MGS3*, one that goes beyond the ideologies and attitude towards historical events in video games based on history or the "real world". I also find it interesting that the author uses the word "persuade" to describe how the *Metal Gear (Solid)* series expresses its anti-war sentiment.

On the other hand, I have a simple comment: Since, in this case, history is nothing more than a backdrop, and the core of the story is fictional, I would like to know whether the author believes it is necessary – or not – to show this side of history in a commercial top-selling video game series, whose central point is not to "reflect the true history." Also, if the narrative really followed the course that the author suggests in this chapter, then this has implications for the game's story and the overall direction of the franchise, and thus warrants further discussion.

