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Playing Hitler: The representation of Nazism in *Hearts of Iron IV*

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Abstract

Hearts of Iron IV is a strategy game set during the Second World War, and it features a representation of Nazi-Germany that some right-wing extremists online have taken interest in. This thesis seeks to analyse that representation of Nazi-Germany in order to work out what it communicates about Nazism and how much room for interpretation it leaves open to the player.

To answer the research question of how the formalistic devices of *Hearts of Iron IV* create its representation of Nazi-Germany, this thesis employs textual analysis with a neoformalist approach. The analysis suggests that the room for interpretation left open to the player of the game is quite large, with the game making very few overt value judgements about Nazi-Germany.

This means that the game itself does not contain a pro-Nazi message, but instead it serves as a blank slate representation of Nazi-Germany onto which players are able to project their ideology. Consequently, the game on its own is unlikely to contribute directly to radicalisation, as it doesn't contain much in the way of radicalising content. However, it is probable that it is the open interpretative space that appeals to neo-Nazis, as it allows them to project their ideology onto the game.

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1. Introduction

In half a century, videogames have exploded from being a technological impossibility, through being a fringe activity for the specially interested, to becoming one of the most dominant forms of media in popular culture (Egenfeldt-Nielsen, Smith, & Tosca, 2016, pp. 61-120). Videogames are to a degree symbolic of the huge shifts human society has gone through around the end of the previous millennium. They are a technologically advanced form of mass communication.

In the 21st century, most of Western civilization is digital, and digital culture and technology is rapidly spreading across the world. Much of modern infrastructure relies on digital technology to function, and our culture is channelled through digital media. Videogames are, in part, an expression of the digital itself. They are interactive, almost always multimodal, and unlike music, films, images, and written text, which all exist on digital platforms, videogames cannot exist outside of the digital sphere. This is exemplified in *Hearts of Iron*'s case by the fact that it is being adapted into a board game (Ricchiuto, 2018). Because this game is non-digital, its mechanics must fundamentally differ from the digital game it is based on. Two examples of such changes mentioned in that article is that the board game uses turns, cards, and "worker management", which differs fundamentally from the real-time, menu-based gameplay of its digital counterpart.

When a new form of media emerges, it is only natural that media researchers should seek to analyse it, deconstruct it, and understand it. While a lot of groundwork has been laid down in the last couple of decades, game studies as an academic field is still, relatively speaking, in its infancy. In 2001 Espen Aarseth staked out a direction for the study of videogames with his essay, "Computer Game Studies, Year One", where he stressed the importance of forming a new discipline (Aarseth, 2001). When compared to the academic fields dedicated to analysing literature, theatre, dance, art and even film, it becomes clear that there remains a lot of work to be done in refining the toolset for analysing and understanding videogames. In addition to broader discussions of which analytical approaches are most fruitful in game studies, the continual refinement of the field's toolsets also requires in-depth analysis to be performed. It is impossible to accurately gauge the usefulness of a tool before it has been put to the test in practice. In this thesis I will be employing a neoformalist approach partly to explore one of the analytical approaches that I believe can be the most helpful to videogame studies as an independent academic discipline.

War has been a frequent theme in games for a long time, and videogames are no exception (Pötzsch & Hammond, 2016). It manifests itself throughout almost every genre, taking on various forms, and is treated with varying degrees of seriousness from game to game. By its very nature, war offers games many of the ingredients they need to become functional and entertaining, such as a central conflict and a win state. War also sets a certain set of expectations and limits the scope of interactivity required from the game: no one expects that they need to be able to sit their characters down to drink coffee in shooters such as *Call of Duty* or *Battlefield*. Managing expectations is always important in media and art because no piece of media will be able to deliver everything. Having a theme that clearly sets expectations is especially helpful in videogames, where players expect a large degree of freedom. However, the fact that a popular form of media so commonly uses war as a stage for play in a society that is, generally, removed from war, does mean that it might play a role in shaping people's perception of war. This means that the representation of warfare in videogames, as well as the representation of militaristic ideologies that fuel war, need to be studied, as I will be doing in this thesis.

1.1 Research question

The central research question in this thesis is, simply put: “how does *Hearts of Iron IV*, through its aesthetics and gameplay, deal with Nazism?” *Hearts of Iron IV*'s setting, after all, demands a conscious approach to Nazism as an ideology and a historical concept. In the game, a certain view of Nazism is expressed through its aesthetics and game mechanics. My analysis will look at how various aspects of the game come together to form a coherent representation of the Nazi ideology and Hitler's Third Reich. As there has been a notable level of engagement from some white supremacists with *Hearts of Iron IV*, understanding the way in which the game portrays Nazism might contribute to build an understanding of how such groups engage with digital culture.

I would note that while the game does have some significant appeal among contemporary white supremacists, as I will document later in this chapter, this does not necessarily mean that the game itself is in some way inherently sympathetic to Nazism. Right wing extremists will project their ideology onto different media whether there are grounds for doing so or not. One example of this is their past admiration for Taylor Swift. When she did not to endorse Hillary Clinton for president in 2016, “alt-right trolls adopted her as an Aryan ideal” (O'Neil, 2019).

This worship of Taylor Swift from right wing extremists is perhaps best summarised in the following quote from one of their bloggers:

“Taylor Swift is a pure Aryan goddess, like something out of classical Greek poetry. Athena reborn.” (quoted in O’Neil, 2019).

Their adoration for Swift lasted until 2019, when she explicitly denounced them. In an interview with Rolling Stones, she said that “There’s literally nothing worse than white supremacy. It’s repulsive” (Hiatt, 2019). Following this she immediately fell out of favour with those groups. This series of events demonstrates how white supremacists are ready and willing to take any media, such as the stardom of Taylor Swift and the lyrics in her songs, and read it as a positive endorsement of their movement as long as it does anything less than explicitly denounce them.

This lesson from this Taylor Swift episode can be applied to *Hearts of Iron IV* as well. While there exists some overlap between the *Hearts of Iron IV* fan community and certain online white supremacist groups, this does not mean that these white supremacists are representative of *Hearts of Iron IV*’s playerbase at large. The fact that one can point to white supremacists creating a malevolent interpretation of a piece of media is not in itself enough to pass some sort of moral judgement on that media. Instead, I would take their engagement with this game as an example of their broader engagement with modern digital culture. Another way of looking at my thesis, then, is not to ask, “to what extent does this game appeal to white supremacists”, but rather, “what is this representation of Nazism that white supremacists have chosen to engage with”.

It is partly due to this distinction that I choose to focus my analysis on the representation of Nazism as it exists within *Hearts of Iron IV*, instead of analysing external community engagement with the game. I will be looking at the formalistic devices that construct the representation of Nazi Germany we see in *Hearts of Iron IV*. Essentially, my approach will be to pick apart the building blocks of symbols and meaning that collectively make up the game’s conceptualisation of “Nazi-Germany” to work out how they operate. Here, I will be using a neoformalist analytical approach to create an understanding of how the game’s representation of Nazism works. Hopefully, my analysis can also highlight some “dos” and “don’ts” in how game designers should treat such politically sensitive topics, though I will not be making continual, explicit “right” and “wrong” judgements throughout the thesis.

1.2 Research subject: an introduction to *Hearts of Iron IV*

Hearts of Iron IV, or just *HoI4* for short, is a strategy game set during World War 2 where the player is free to play as any country that existed during that time, and that has sold over 1 million copies (Valentine, 2018). In *HoI4*, countries are divided into four ideological categories: democratic, communist, fascist, and unaligned. In this thesis I will be looking at the representation of Nazism in the game, which is one of the iterations of fascism present. Because *Hearts of Iron IV* offers little in way of meaningful mechanical differences tied to the variations in ideology between fascist Italy, fascist Spain and Imperial Japan, some of this work will apply generally to the “fascist” category of ideology in the game, but the focus of this thesis will be maintained strictly on Germany.

In Simon Dor’s article on definitions of strategy games, he outlined three ways of defining the term “strategy” in games: iconic, formal and experiential (Dor, 2018). *Hearts of Iron IV* fits so neatly within the strategy genre that no matter which of the three ways of the defining the term is being used, it unequivocally applies to this game. It fits with the iconic definitions outlined in Dor’s piece, which are “based on the depiction of certain parts of a real war in the diegetic world of the game to establish if there is strategy or not” (Dor, 2018), as it is set in World War 2. According to the formal definitions, which focusses on game rules, there is a distinction to be drawn between strategy, overarching decisions that affect the entire game, and tactics, smaller, short-term decisions. *HoI4* has the similar forms of tactical and strategic levels of decision making as Go does: a strategic decision in *HoI4* can be what country to invade, while a tactical decision can be where to move individual troop units. The final form of definitions, the experiential ones, focus on the player’s experience in play, where “the actions a player performs are “strategic” if they emerge from their cognitive skills and from the player’s interaction with the rules, rather than merely from a prescribed sequence of actions” (Dor, 2018). *Hearts of Iron IV* offers relatively little in the form of prescribed sequences of actions, and a lot in the form of rules the player must try to manoeuvre strategically.

As a strategy game, *Hearts of Iron IV* is centred around military strategy on a national level. It concerns itself with management of resources, movement of troops, national policies, and international diplomacy. When military divisions clash, combat in the game is resolved based on the relative strength of the divisions fighting without player interference into the battle. The result of the battle is displayed by a small bubble which is colour coded green if the player is

winning, red if they are losing, or yellow in case of a stalemate. Because combat is resolved in such an abstract manner, someone playing *Hearts of Iron IV* will play through the entirety of World War 2 without at any point being confronted, visually, with a human death.

Instead, the game encourages a “big picture” approach to winning the war. Ethically questionable decisions that range from the strategic sacrifice of a few thousand soldiers to dropping nuclear bombs on civilian targets become run-of-the-mill as the conflict intensifies throughout the course of the game. The only importance that the game itself gives to the policies enacted within any single country is how they strengthen the country’s military and its industrial capacity, keeps the country united, and ultimately puts it on the path to victory. The four ideologies in the game each grant the countries a certain set of bonuses and drawbacks that affect their ability to win. It follows, then, that which ideologies are “good” or “bad” in the game’s terms would seem to be unrelated to their ethical implications, but instead tied to the relative strength of their in-game bonuses.

However, there are other aspects to the game’s value judgement of the different ideologies than pure game mechanics. The game has a narrative that is partly scripted, partly emergent. The scripted parts of the narrative are events that are programmed to occur every single time (albeit with random results), such as the Spanish Civil War, as well as each country’s focus tree, which represents a series of policy decisions the country makes. Because the “focuses” in these trees are organised in a certain order, each country has a pattern of behaviour that follows the structure of their respective focus tree. For example, Germany’s tree has the remilitarisation of the Rhineland at the very start. Completing this focus is a prerequisite for continuing down the path of German expansion, which means that Germany will almost always remilitarise the Rhineland early, and will always do it before annexing Austria – the option to annex Austria is not available before Rhineland is remilitarised. Contrary to this, the emergent narrative of the game is the result of all the different decisions made by the player and the AI during play and can vary wildly between playthroughs. Both the nature of the events that are scripted, as well as the realm of possibility in the emergent narratives, inevitably expresses a certain point of view on the different countries that participated in World War 2, as well as their ideologies.

Ultimately, *Hearts of Iron IV* is a numbers game. A lot of the gameplay is centred on different type of number management, representing various resources. These resources range from representing very abstract things, such as “political power”, to the very concrete, such as infantry equipment or tanks. Generally, bonuses and penalties in the game come in the form

of numerical or percentage increases to some other number. This is helpful because it allows for very direct comparisons between the numerical values of different countries and ideologies in the game. One can easily see who has the strongest economy, for example. It is also helpful because it allows for comparison with relevant historical data. I would note that I will not be comparing the accuracy of the game's numbers with historical data for the purposes of making some value judgement about the quality of the game. It is of no concern for this thesis whether it is "better" or not for the game to be historically accurate. The point of comparing the game to historical data is simply that it allows for contextualisation of the game's mechanics. It is, sometimes, interesting to note whether the game's representation of WW2 mirrors historical sources or deviates from them when working to map how the game's representation of Nazi-Germany might be similar to, or deviate from, historical sources. It is not a question of better or worse, but merely different or similar.

1.2.1 The focus of *Hearts of Iron IV* vs the focus of this thesis

As this thesis will be an analysis of the representation of Nazism in *Hearts of Iron IV*, it will focus narrowly on those aspects of the game that relate to Nazi-Germany. This might cause a reader of this thesis who is previously unfamiliar with the game to gain a skewed view of the importance Nazism is given in *HoI4*. In order to avoid this I want to make clear from the outset that the game has a much broader focus, and that this thesis is intentionally narrowly focussed on limited aspects of the game largely to the exclusion of its representation of other parts of the WW2 time period.

In fact, Luke Plunkett has written the following on *Hearts of Iron IV* in a Kotaku editorial titled "Hey History Games, The Nazis Were the Bad Guys":

One of the reasons I find Hearts of Iron IV so fascinating is that it's able to, and genuinely takes heart in, exploring the literally endless ways the war could have turned out differently, and doesn't have as its default position players taking on the role of a genocidal death cult's spearhead.

What if the French, the largest land army in the world in 1939, had invaded Germany and ended the war in months? What would that 1940 have looked like, with a dominant France (and their own very cool tanks) suddenly left face-to-face with Stalin's emergent Soviet Union? Who knows, but it'd be fun to find out, and Hearts of Iron IV (and some of its most popular mods) let us find out! (Plunkett, 2020)

In this piece, Plunkett compares *Hearts of Iron IV* favourably to a whole range of other historical strategy games, pointing out the dominant focus on Nazi-Germany in most of those

other games, contrasted to the broader, open focus of *HoI4*. I agree with his assessment. Playing *Hearts of Iron IV* is a very open sandbox experience, and countless different outcomes are possible. The Empire of Austria-Hungary can be reformed with a Habsburg on their throne. Scandinavia can be united as one, in a new Kalmar Union. China can be ruled by nationalists, then overtaken by communists, then overtaken again by nationalists who end up turning the country democratic. A thesis that is strictly focussed on a single ideology in a single country cannot claim to capture the full breadth of the *Hearts of Iron IV* experience.

However, capturing the full breadth of *Hearts of Iron IV* is simply not the aim of this thesis. The calculation behind focussing narrowly on Nazi-Germany is simple: the narrower the scope and stricter the delimitations of a thesis, the deeper analysis there is room for within it. In fact, the wide array of possibilities and options in *HoI4* only makes restrictions in what is being focussed on all the more necessary. It would not be feasible to comprehensively analyse every single aspect of every ideology, country, and game mechanic in *HoI4* in the span of this master thesis. Consequently, this is not a thesis on *Hearts of Iron IV*, but it is a thesis on Nazism within *Hearts of Iron IV*. I will go in further detail on the delimitations in this thesis in chapter 2.1. In the next chapter I will explain why this thesis is focussed on this particular ideology.

1.3 Why study Nazism in videogames?

Around three decades ago the idea took hold, most famously argued for by Francis Fukuyama (1989), that as the last bastion of totalitarianism had fallen and totalitarian ideologies were essentially defeated, democracies' historical conflict with those mindsets had ended. Fukuyama declared this "the end of history". The crux of his argument was that liberal democracy had won "an unabashed victory" after having contended with "the remnants of absolutism, then bolshevism and fascism, and finally an updated Marxism that threatened to lead to the ultimate apocalypse of nuclear war" throughout the 20th century (Fukuyama, 1989, p. 3). In his view this represented the end of grand scale ideological conflict, liberal democracy being the final form of human government. According to this view that totalitarian ideology, including fascism, had been relegated to the fringes of human society, without any real chance of gaining traction or influence, studying it in a contemporary setting might not have seemed a very relevant pursuit.

However, in 2017, Fukuyama himself announced that he feared for the future of liberal democracy. In an interview with the Washington Post, he said that "Twenty-five years ago, I

didn't have a sense or a theory about how democracies can go backward. I think they clearly can" (Tharoor, 2017). This doesn't necessarily represent a rebuttal of his original thesis, where he did leave the door open for future conflict. In his 1992 book *The End of History and the Last Man* he asked if "the recognition available to citizens of contemporary liberal democracies" is "completely satisfying" (Fukuyama, 1992, p. xxii). However, his new worry points to the political shifts that have taken place in the past years: the growth of the far right and the potential decline of democracy.

It is uncertain whether democracy is actually in decline. The Economist argues, based on a "Democracy Index" they have developed, that democracy has been in gradual decline for the past ten years ("Democracy continues its disturbing retreat," 2018). On the other hand, the International Institute for Democracy and Electoral Assistance (International IDEA) argue in their recent report, *The Global State of Democracy*, that democracy is more resilient than most people think, and that "It is easy to lose sight of the long-term gains the world has made in maintaining democracy" (FeedBackGaming, 2017, p. vi). However, across all viewpoints on the robustness of democracy there is a clear consensus, held by Fukuyama, The Economist and International IDEA, that there exists an authoritarian nationalist far-right movement across many Western countries.

In addition to the current pressure made on the democratic institutions of Western democracies by far-right movements, outright genocidal fascist and neo-Nazi movements make themselves heard online. One article in Huffington Post revealed a leaked "style guide" in which Andrew Anglin, described by Huffington Post as "a neo-Nazi troll and propagandist who runs the Daily Stormer, one of the more prominent sites of the white supremacist web" details how he and other neo-Nazis use digital platforms to work methodically towards a goal that is explicitly stated in the document: to gas Jews (Feinberg, 2017). The Daily Stormer's style guide describes a set of rhetorical devices developed by neo-Nazis to spread their propaganda on digital platforms. A key element of their strategy is using humour to make the "unindoctrinated" uncertain whether they actually mean the outrageous things they are saying, an approach The Guardian has described as "weaponizing irony" (Wilson, 2017).

Another approach is to use "dog whistles", which are terms, memes and jokes that seem innocuous to people outside of their movement but are codes for Nazi ideas and concepts. Vice made a list of these in 2017, which includes marking a name with three parenthesis, like (((this))), in order to signify to other anti-Semites that the person whose name they marked is a Jew, and the phrase "Global Special Interests", which in online neo-Nazi circles is a direct

code for “Jews” (Caffer, 2017). Another dog whistle is the number “1488”, where “14” represents the 14 word David Logan quote “We must secure the existence of our people and a future for white children”, and “88” represents the 8th letter in the alphabet: “HH” or “Heil Hitler”. This code was used in the style guide leaked by Huffington Post, where it’s stated that writers for the neo-Nazi site will be paid “\$14.88” per published article (Feinberg, 2017).

With this web of symbolism being employed in spreading contemporary neo-Nazi propaganda through digital media, different manifestations of Nazi iconography in digital media should be analysed. This includes videogames. In addition to jokes, dog whistles and memes, videogames are an important part of digital Nazi, white supremacist and “alt right” culture. This was exemplified by the Gamergate movement in 2014, a campaign that largely targeted a few specific women who called for a more diverse game industry, resulting in hateful harassment online and offline of women in gaming, described by news outlets in the US as a “culture war” (Todd, 2015, p. 64). While Gamergate focused largely on women, not race, there are signs of overlap between this antifeminism and online white supremacy. For one, the style guide written by the neo-Nazi Andrew Anglin includes a list of slurs deemed appropriate to be used against women (Feinberg, 2017), and through thematic analysis there has been found significant ideological parallels between Gamergate itself and white supremacy (Etherington, 2018). In one book on the alt-right, Gamergate is described as a “highly significant moment” in their development (Hermansson, Lawrence, Mulhall, & Murdoch, 2020).

In this climate it is my belief that the study of Nazism is as relevant as ever. Though I would not seek to overstate the popularity and influence of these movements, they certainly exist and are active. Consequently, it is worth looking into how they manifest, how they operate, and how they engage with contemporary society. Especially because, as I will be covering an example of in the coming sub-chapter, the radicalisation within these communities have in several cases lead to terror attacks. It is on these grounds, then, that this thesis will be looking at one highly specific example of a piece of media that white supremacists have chosen to engage with.

1.3.1 White supremacist terror and the *Hoi4* community

The relationship between some sections of online gaming culture and right-wing extremism came to the forefront in the terror attack in Christchurch, New Zealand committed on March 15, 2019. In the wake of the attack, The Christian Science Monitor wrote that while Islamist terrorism is seen as a global phenomenon, white supremacist terror is generally treated as a

regional, “homegrown” problem in different countries, but this should change because the far-right is in fact “very transnational” (Llana, 2019). Vice News wrote a piece titled “Decoding the Racist Memes the New Zealand Shooter Used to Communicate” which, in doing exactly what the title states it will, highlights the relationship between modern violent right-wing extremism and a coded language they employ in online communication, often in gaming-related communities (Owen, 2019). And only a couple of hours after the terror attack a moderator on a network of Paradox Interactive dedicated subreddits, including r/hoi4, put up a post on each of the subreddits titled *Let’s take our good name back; we need to talk about Islamophobic and racist jokes in the context of our community*, writing:

In light of the Christchurch mosque shootings, we’ve been made very aware that islamophobic memes, even within context of the videogames, have no place in a community. Despite the fact that the shootings are unrelated to our community, we do feel like we could and should be harsher on these things.

While we understand that the vast majority of people are making a joke when they write that they want to “Remove kebab”, these memes have always been in that weird gray area where something is joke when called out and it isn’t when people start to discuss it. Plenty of people write half-racist rants about “Turkroaches” or “Remove Kebab” and when called out, respond in anger that it’s just a meme. In context of current events, these jokes are especially tasteless (Zwemvest, 2019).

On r/paradoxplaza, the main subreddit for fans of Paradox’ games, the post received hundreds of supportive comments, some pointing out what Zwemvest had not said explicitly: on the way to committing the massacre the shooter had played Remove Kebab, a song “from a propaganda music video made by Serb Army soldiers as a tribute to war criminal Radovan Karadžić”, and the shooter had also written the phrase on one of his firearms (Evans, 2019). This means that racially charged language frequently used by some members of the Paradox community had been actively employed as part of a terrorist’s justification for a real-life terror attack where 50 Muslims lost their lives. In writing that the “Remove Kebab” meme had “always been in that weird grey area where something is joke when called out and it isn’t when people start to discuss it” (Zwemvest, 2019), Zwemvest points to a specific example of what The Guardian has described as “weaponizing irony” (Wilson, 2017). Business Insider pointed out in an article on the terrorist’s internet activity and manifesto that the “entire manifesto is dotted, liberally, with references to memes and Internet in-jokes that only the extremely online would get” (Evans, 2019). The article also shows evidence of how the use of these memes were intended to cater to a particular extremist audience, and that the attacks were meant to inspire other members of that radicalised community to committing similar attacks.

Later that same day it was revealed in posts both in the Paradox community subreddit (Owen_Teh_Pirate, 2019) and the Discord app's subreddit (Ends_Deliverance, 2019) that all members of a popular *Hoi4*-related Discord server called "The Tribe" had been collectively banned from Discord. One comment on Owen_Teh_Pirate's post asked "Was the server bad? Hoi4 discords are notorious for being just terrible places". One reply to this described The Tribe's moderators as "pure, unbridled fascists". The size of the server was estimated by other commenters to be about 10-15 000 members. Another commenter wrote:

Every time I join a HOI4 server or any PDX discord server I see people casually dropping stuff like "nigger", "kike", "Yellow man" and stuff like that in channels saying its just a meme and no ones offended and I just leave those servers after leaving a short message why in the main chat.

4X games, and GSG games have a REALLY big problem with allowing racialized meme culture become normalized and thus acting like a like screen for turbo facists.

I've had to shut down white genocide conspiracy theorists in the comments sections of my videos too (Potato_Mc_Whiskey, 2019).

Eventually, a trust and safety representative of Discord replied to the post in the Discord app's subreddit complaining about the carpet ban, writing:

We have been taking specific action against users who have been posting content glorifying the recent shootings in Christchurch, as per our Community Guidelines. We have also taken action on a number of small servers where there was celebration, glorification, and creation of content that further glorifies that violence. There are, unfortunately, users on Discord that have openly celebrated the attack and called for more violence, including server owners and administrators, who used the reach they had to spread such content. In those cases, we have generally removed the server but not taken action on the members of the servers. There are also cases where we've investigated servers and found that they have a long history of unacceptable conduct where we've taken wider action (karrdian, 2019).

It is clear, both from the fact that all members of the server had been banned and how various members of the Paradox community describe the server, that it had fallen into the last category, aka a server with a "long history of unacceptable conduct". With its large member count of over 10 000 people, the server represented a not insignificant part of the online *Hoi4* community.

There are also more examples of interest in Paradox Interactive's games taken by white supremacists and neo-Nazis. In 2016, Paradox deleted a mod one player had created for their science fiction game *Stellaris*. The mod made all humans in the game white – erasing all

people of colour (Bratt, 2016). In December 2017, a 22-year old who made a mod called Millennium Dawn for *Hearts of Iron IV* deleted the discussion forums for his mod on the Steam platform. The modder explained in an interview that “I am not getting paid for any of this, and I can’t be bothered to explain to every 15-year-old edgelord who just discovered 4chan last week why fascism is not something I want to see” (Winkie, 2018). The mod he had created changed the setting of the game from WW2 to the modern day. A side effect of this was that because the game allows players to change the ideologies of their countries, players could now take the modern-day United States and turn it fascist. In the article, Luke Winkie refers to an anonymous player who made their opinion on this explicitly clear on a different online forum: “*Hearts of Iron IV* Millennium Dawn is awesome. You can focus on racial superiority” (Winkie, 2018). As the interview makes clear, this was never intended by the 22-year old who created the mod.

The Paradox community and online white supremacist communities also intersect in one specific internet meme that is used by white supremacists as a dog whistle for racism, but might originate in the community around Paradox Interactive’s games. This meme is centred on the phrase “Deus Vult”, a Latin battle cry that translates to “God wills it”, used in reference to the crusades. This phrase is featured on Vice’s list over alt right dog whistles with a dubious claim that it originates in a 2015 Youtube video (Caffer, 2017). However, Luke Winkie identifies the phrase as a “long-running gag within the Paradox community”, and “the most iconic phrase in the Paradox dictionary”. By now, the term has been “repurposed into an image macro of a Medieval knight, dressed in a white tabard bearing the Red Cross of Constantine, holding a sword over an unseen infidel” (Winkie, 2018). To white supremacists, the term is symbolic of their desire for a real genocide against “infidels”, i.e. Muslims and Jews.



Figure 1-1: An example of the “Deus Vult” meme (Know Your Meme, 2016).
 “Launching the 10th crusade” would in practice mean a contemporary genocide on Muslims and Jews.

In the context of Paradox’ games, the phrase comes from *Crusader Kings*, a strategy game series set in the middle ages where the Pope occasionally calls for a crusade for the Holy Land in the Middle-East. The phrase “Deus Vult” is featured on the announcements of these crusades, as it is a historical phrase used by crusaders during the middle ages. The presence of this phrase in this game lead to it being adopted as a meme within the Paradox fan community before it was ever adopted by online neo-Nazis. Inspired by this meme, a member of the Paradox community has created a mod for *Hearts of Iron IV* called “Deus Vult”, where the player is encouraged to commit genocide against both Muslims and Jews. As of writing, that mod is still available on the official Steam Workshop platform (Tauronsss, 2018). Last year Paradox Interactive was criticized for using the “Deus Vult”-phrase in a tweet promoting *Crusader Kings 2*, resulting in the company issuing a statement saying it has “no tolerance for racist or nationalist organizations” (Murdock, 2018).

Bearing all this in mind it might be tempting to overstate the link between *Hearts of Iron IV* and white supremacy. As it is beyond the scope of this thesis to quantitatively map out the prevalence of right-wing extremist views in the Paradox community, no provable claims of its extent will be made here. The community activity referred to here does demonstrate that there exists a white supremacist subset of *HoI4* players. It is however unclear how many of these

people genuinely hold white supremacist views and how many are being “ironic”, but because, as has been discussed earlier in this chapter, “weaponizing irony” is part of online white supremacist strategy, the distinction between those two groups might be less significant than expected. This phenomenon has been encoded as Poe’s Law: “On the internet, it’s impossible to tell who is joking” (Ellis, 2017).

There is no basis for claiming that all, or even the majority, of the 10 000 members of “The Tribe” group on Discord that was shut down were white supremacists. Many might not have visited the group regularly and therefore missed the extremist views being expressed there, and Discord did allow a lot of users back in after reviewing their user history. It seems certain, though, that all the group’s active members at the very least tolerated white supremacist rhetoric, perhaps because they thought it was ironic or simply didn’t care. On the other hand it’s worth noting that in comments and posts referred to in this chapter there are also people taking clear stances against white supremacists having a place in the *HoI4* community, and that the Reddit post denouncing white supremacist “jokes” did receive a wave of support from the subreddit’s members.

In analysing Nazism as represented in *Hearts of Iron IV*, then, I am looking at a representation of Nazism that has a concrete, demonstrable relationship with real neo-Nazi communities. As I have stated in my chapter on the research question, I am not doing any quantitative or qualitative work on the *HoI4* community. Instead, I will use a neoformalist approach to do a textual analysis of the representation of Nazism in the game to work out what this piece of media that neo-Nazis have chosen to engage with is. It lies in the nature of this approach that I will not be able to make a determination in this thesis on whether the game itself has a radicalising effect on players, or if there really is radicalisation occurring within the game’s fan community. Hopefully, though, my work will contribute to building an understanding of white supremacists’ engagement with digital culture, which, as I have described in this chapter, is an important part of their online communities, and also important to the violent terrorists their movement has produced. Additionally, my analysis will hopefully provide some pointers to game designers as to what constitutes a responsible representation of extreme ideologies that doesn’t set itself up for being used as a propaganda tool.

1.4 The nature of representation: ceci n'est pas une Nazi dictatorship

Hearts of Iron IV offers a representation of the Second World War and Nazi-Germany. This fact is clear from the second one opens the game, enters its menu, and is presented with the option of starting in either “1936” or “1939”, and then subsequently must choose a country to play, with Hitler’s Nazi-Germany being placed at the centre of the available options. However, I do need to elaborate on what I mean by the term “representation” in this context. According to Nelson Goodman’s understanding of the concept, representation is not dependent on similarity. For Goodman it is denotation, the fact that signs or symbols refer to something, that is the core of representation (Bale, 2009, p. 41). To put this in practical terms, the in-game representation of Nazi-Germany in *HoI4* is not actually similar to the state of Nazi-Germany that existed during WW2. There is a vast difference between an actual physical country full of real people and a set of signs and images put together on a computer screen in order to convey the idea of a country. While this might seem like a banal insight, it should be kept in mind when approaching the relationship between videogame and reality.

After all, it is this divide between what is being represented and the representation itself that allows players to, in Aarseth’s words, “enjoy symbolic killing [because] the internal value system of scoring points takes precedence over the violent symbolism of the external reference” (Aarseth, 2011, p. 62). Aarseth describes how he himself was reluctant to play a German WW2 soldier in *Return to Castle Wolfenstein* because of the trauma of his family history from wartime Norway, but as he played the game, he came to enjoy it. Like in *Return to Castle Wolfenstein*, the “Nazi-Germany” on display in *HoI4*, then, is an artificial construct of signifiers that denote the historical country without actually copying it. This separation between representation and what is being represented is, perhaps with the exception of white supremacists, an important part of players’ ability to enjoy playing the game. *Hearts of Iron IV* does not offer a copy or illusion of the Second World War, but instead a formal representation that is decoupled from the war itself.

It is worthwhile to bear in mind the differences between copying something and representing it. Copying is a passive process wherein something is merely recreated as-is, while representation is a creative process that requires both an understanding of the subject matter that is being represented and the medium through which that representation is achieved (Bale, 2009, p. 41). The fact that *Hearts of Iron IV* represents World War 2 in way that is

substantively different from the events of the war means that *HoI4* cannot merely be analysed in terms of its relationship to historical events, but must be approached as its own, independent entity that might in some ways go beyond its subject matter, or is at least somewhat detached from it. In other words, the nature of the game itself must be included. The semiotics of the game do not only work to represent the history on which the game is based, but it also works in parallel with the game's structure and mechanics to articulate gameplay, or the game as process (Aarseth, 2011, p. 59). The game as process, built on game structure/mechanics and the game world/semiotics, is what *Hearts of Iron IV* actually is, while the Second World War as historical event serves as the source of inspiration for *HoI4*'s game world.

This understanding of representation does not mean that the relationship between *Hearts of Iron IV* and the Second World War isn't important to fully understanding the game, but it does determine what can be understood as a "truthful" or "realistic" representation of the war. According to Goodman, "realism" is relative, not determined by similarity to or a successful illusion of what is being represented, but instead determined by the system of representation being used and the standards of a given culture or person at a given point in time (Bale, 2009, p. 42). To determine the nature of the game's representation of Nazi-Germany, then, it is necessary to analyse the mode of representation being employed, which is the game itself and its aesthetics.

The divide between the subject matter itself and the representation of it is a crucial part of Gadamer's understanding of representation. However, Gadamer goes beyond this to emphasise the difference between the work itself and the act of experiencing that work. To Gadamer, *Spiel* (which can be translated, perhaps slightly inaccurately, as both "game" or "play") is key (Bale, 2009, p. 39). A *Spiel* goes beyond merely repeating something that already exists and is instead new and creative every time it is being played. In that creative process of play, new insights can be achieved. As an example, Gadamer offers that a drama is both a meaningful entity that can be performed repeatedly, but it is also a *Spiel* because it only exists fully when it is being played (Bale, 2009, p. 40). Each instance of the drama being played is unique. This imposes a limitation on the interpretation of such a work. Any given interpreter only has access to their own experience of the *Spiel*, which is meaningfully distinct from other instances of it. This, of course, also applies to videogames, who by their very nature play out differently in every instance of play. One individual can only approach the game qualitatively based on played instances that they themselves know, either through their own play or through having watched other people play. This will often exclude a wide variety of

instances of play that might, in some cases, differ significantly from the instances the interpreter is aware of.

However, this is not merely a limitation on a single individual's ability to interpret a game. It is also a limitation on the game designer's ability to control the exact, specific chain of events that occurs during any given instance of play. For example, because *Hearts of Iron IV* allows players to "justify war" against other in-game countries and then declare that war, various instances of play can hypothetically feature scenarios such as the UK declaring war on the United States, France declaring war on Spain or New Zealand declaring war on Luxembourg. While these exact courses of events are not specifically designed, the fact that they are possible is a part of the game's design. Additionally, the designers have made it more difficult for democratic countries and easier for fascist countries to justify wars, while also giving out "free" war justifications if the player follows specific courses of action playing specific countries. This guides the player's hand in incentivising some courses of action that allow them to go to war without going through the process of justifying war, which is usually relatively costly in terms of political power, an in-game resource. At the same time other courses of action, such as a democratic United Kingdom declaring war on a democratic France in 1937, are locked off. In other words, the range of options available to the player is a designed work, the "game" as a product that has been designed and sold, while which options the player actually chooses to pursue is the "play", that makes every instance unique. The game's existence is only fully realised while it is being played, but every time that happens, the game differs. Every session of play is a different iteration of the game, and every time the Second World War is being represented in a different way.

1.4.1 The Representation of history

In presenting such a myriad of possibilities, "games do not represent a particular event, but rather a set of potential events" (Šisler, 2016). This differs from written texts and film where, even though the experience of different readers/viewers engaging with the text will differ as they come to it with different backgrounds and perspectives, the text itself remains the same. In videogames, not only do players approach them from different points of view, but the game itself changes in interaction with the player's choices. This less direct authorial control might be part of the reason why historical games are accused of not representing "proper history" in the way historical movies and novels, according to this argument, do (Šisler, 2016). In a historical game, the player is usually allowed to intervene in the chain of events and "change

history”. Because of this, the player is not directly being told history the way it happened, and because the chain of events in a videogame then differs from history one might conclude that the way history is represented in such a game should not be taken as seriously. However, things are not necessarily so simple.

Videogames can give players the opportunity to explore different courses of action in a model world. A historical game can give them opportunities to experiment with different game elements representing that era. With the game itself being constructed as a certain representation of a historical period, when a player gains understanding of the game, they also gain an understanding of history filtered through the game’s perspective. For example, when someone playing *Hearts of Iron IV* comes to understand the relative strength of the in-game French army and German army through play and interaction with these armies, that extends to a perspective on the relative strengths of the real French and German armies of the late 30s. If the game’s strength balance between France’s army and Germany’s army somewhat accurately reflects the balance of power between the two countries in the real world at this time, someone playing *HoI4* can gain a further understanding of the WW2 era than they had before playing. If the in-game strength balance is inaccurate, however, players’ takeaways will be an inaccurate view on history, requiring other historical texts if it is to be corrected. In this way, videogames can communicate a certain view on history that might lead to both understanding and misunderstanding it. This is also true of written texts and film. All these media forms are persuasive in articulating history (Šisler, 2016), and as such their messages on history should be investigated.

Of course, a lot of elements in *Hearts of Iron IV*’s representation of history will vary between playthroughs. For example, in some playthroughs Germany might defeat France and in others France might defeat Germany. This might be seen as muddling what the videogame has to say about the relative strengths of their militaries, but I would argue that, on the contrary, it adds nuance. Šisler argues that “it is of crucial importance to consider not how rule-systems of videogames represent history, but more precisely how they shape, afford and limit possible representations of the latter” (Šisler, 2016). In most playthroughs (at least as long as one is playing with the game’s “historical mode” on), barring player intervention, Nazi-Germany will defeat France and force it to surrender in a course of events that roughly mirrors what happened in 1940. It is up to the player, then, to “change history” if they wish. There are several ways in which this can be achieved, but it requires first understanding the game’s systems and then a meaningful interaction with them. This exposes the player to a more

granular, detailed representation of the WW2 era where understanding a whole range of different game elements might allow them to turn the tide and defeat Germany instead. This understanding of the problems faced by the French in-game will then extend to the player forming an idea of what problems France faced historically in the late 30s. The accuracy of this understanding will probably vary from player to player depending on their prior knowledge. It will also depend on the “realism” of the game elements, as in how well the game uses its mode of representation to successfully illustrate the war accurately. In analysing this, one should bear in mind that achieving representation that is realistic or historically accurate is rarely the only goal of a videogame.

1.4.2 A representation of Hitler, the Nazi government, or Germany?

There is an ambiguity in *Hearts of Iron IV* as to whom the player is playing. Consequently, exactly what the game is representing is at times ambiguous. In short, when playing *HoI4* one can be understood to play as a leader of a country, a ruling elite, or the country at large, and good cases can be made for each understanding. While this is different from a strategy game such as *Crusader Kings II*, where one is explicitly playing as a single individual, I would not claim that it is in any way unique to *HoI4*. However, it is not the uniqueness of this ambiguity that leads me to bring it up. Here, I will explain what I mean by the three different ideas of who the player is playing, before I make the case for why this matters in this thesis.

There are several factors that indicate that the player is playing as the leader of their respective country. When playing as the United States the player has to lobby for majorities in Congress before being able to pass legislation, in the Soviet Union the player is encouraged to purge their own elite in order to root out dissent, and in the German Reich one has to manage tensions between the SS and the conventional military elite. In all cases the player staffs their own administration with different politicians and generals. This type of internal politics is not something a player is confronted with in strategy games such as the *Civilization* or *Age of Empires* series. They indicate that, unlike in some other strategy games, here one is playing as the country’s leader, having to manoeuvre internal disagreements within the ruling elite of the country. Playing as the country’s leader would mean that someone in control of Germany at game start is, in fact, playing as Hitler.

However, the direct control a player has over its country goes beyond what any leader of a country could have. Industry, research priorities, and military tactics are all managed directly. Internal disloyalty within one’s own administration is, with some few exceptions, quite non-

existent. Other members of the administration and military do not operate as independent entities, as they are wont to do in Paradox' *Imperator: Rome*. Based on this, it is perhaps necessary to expand one's understanding of who the player "is" – that one is not playing as a single individual, but as a larger part of a country. It is notable, though, that the player has no relationship with the civilian lives of the country's people, nor are they confronted with the loss of life in any way except the loss of manpower, an important military resource. Unlike games such as *Victoria II* or *Civilization VI*, there is absolutely no representation of country's civilian economy or population in *HoI4*. One way of resolving this tension is to posit that the player is playing as the ruling elite of their country, the "ruling elite" being a combination of their government and military leadership.

Finally, though, this does not necessarily descriptively cover the challenges and interactive opportunities of a *HoI4* player either, because to some degree it goes beyond a country's leadership. When playing as the US, for example, presidential elections are resolved by the player being presented with the option of the Democrat and the Republican candidate, and simply choosing who wins. This gives the player an agency that does not fit with the leader of the country or its elite, but its people. Additionally, in most countries in the game, the player can choose to pursue an alternate government and ideology from the one in power at game start. Germany can, through civil war, be turned democratic or into a monarchy. France can turn fascist, communist, or monarchist. Trotsky can seize power in the Soviet Union. Pursuing these options require the player to take actions that run counter to the interest of their starting leadership while that leadership is still in power, before they are ultimately able to oust that leadership in favour of their preferred new leaders. All these facts point to the player playing as the country itself, in a more abstract sense, or perhaps shifting parts of the country.

I would argue that this ambiguity is, probably intentionally, never really resolved in the game. Instead, all these three ways of understanding the game are, perhaps to varying degrees, true at the same time. Perhaps the most accurate answer to the question of "who is being played" is "whatever part of the country is most relevant at the time". This complicates ideas of representation in the game. When the game presents weaknesses and strengths of Nazi-Germany, are these features of Hitler's leadership, the Nazi ideology, or Germany as a country in this specific historical time? This is not always clear (though sometimes it is). For example, it is harder for fascist countries such as Nazi-Germany to introduce women into the workforce than it is for democratic or communist countries such as the UK and the USSR. In game mechanical terms, fascist countries require a war support level of 89% and surrender progress

above 0, while democracies and communist regimes require war support above 79% and have no surrender progress requirement. The surrender progress difference is key, because it means that Germany cannot introduce women into the workforce before Allies have occupied some part of German core territory, while the other side in the conflict can do this even if they are comfortably on the offensive.

The justification for this is probably the fact that “the participation in work of German women, remained virtually unchanged in 1942 compared to 1939 – a striking contrast to the British and Soviet records of labour mobilization” (Harrison, 1988, p. 187). Here, the game mechanics attempt to represent a certain historical fact that might be known to its players. However, *why* it is harder for fascist countries to mobilise their women is a question that the player is largely left to answer for themselves, based on their own prior knowledge and inclinations. Is it because of their leaders, their politics, or their culture? Is it a feature of Hitler’s leadership, that he was too blinded by fascist ideology to take necessary actions that would help in the war action? Is it because the politics of the National Socialist party did not allow for such a political proposal to be implemented? Or is it because of some cultural difference between Germans and Britons/Russians, where the former were more culturally conservative (also explaining their turn to fascism)? Perhaps it is a combination of all three? The game does not explicitly attribute this trait it claims fascism has to a specific part of a fascist country.

In reality the answer is a lot more complicated than the ones I suggested in the previous paragraph. In fact, “the share of women in the German working population on the eve of war was already higher (36 per cent) than Britain’s wartime peak (33 per cent)” (Harrison, 1988, p. 187). Historian Eleanor Hancock has written an article re-examining the idea that “Nazi Germany failed to mobilise women successfully”, where she notes that “Historians disagree about the National Socialist policy towards women” (Hancock, 1994, p. 43). Now, I do not expect a strategy game such as *Hearts of Iron IV* to accurately and comprehensively portray these kinds of nuanced and complicated historical topics where there even is disagreement among historians. My point is that when looking at the game’s representation of the particularities of Nazi-Germany, there is not always a clear line drawn between Adolf Hitler’s leadership, the National Socialist Party’s ideology, the culture of the German people, or “Germany” as an entity. In *Hearts of Iron IV*, these attributes of Nazi-Germany are merged into one. Different in-game aspects of the country can therefore in some cases be attributed to any one of them.

It should be noted that as an interactive experience, *Hearts of Iron IV* allows the player to deviate heavily from historical events. I will largely be ignoring these ahistorical paths open to the player in this thesis. This might seem reductive, and perhaps even as an affront to the interactive nature of this videogame, but in my view, there are good reasons for this approach.

First, there is a somewhat historically accurate narrative encoded throughout the game, both in the focus trees of different countries and in their incentives and unique challenges and attributes. When starting a new game, a player can choose to play with “historical mode” on or off. If it is on, the AI controlled countries will generally behave in a preset way that mirrors historical events. For the player controlled country, the game usually communicates quite clearly when something is a large deviation from history, as making large decisions differently from history usually means making those decisions outside of the chain of events presented in the focus tree, or it is accompanied by a change in the country’s ideology. In short, it is generally quite clear what the game views as historically accurate.

Secondly, this is a thesis about the game’s representation of Nazi-Germany, specifically. When playing Germany, the largest deviation from historical events the player can choose to take is to overthrow Hitler and the National Socialist government and either install a democratically elected government or a “kaiser”. There is a very clear divide between these two paths, so it is expressively clear that when one has overthrown Hitler one is no longer playing Nazi-Germany – the name of the country even changes. Because speculative alternative history-Germany is not the focus of this thesis I will then presume that the historical path where the Nazi government is kept has been chosen by the German Reich player. When playing the historical German Reich the designers have facilitated a series of actions that are within the ballpark of historical accuracy. There are of course still a lot of smaller choices and actions the player can take that stray less far from history, but still stray from it, nonetheless. Additionally, the outcome of the war is open, with German victory as a real possibility, something that is also ahistorical. These deviations from history that exist within German Reich play will be subject to analysis in this thesis.

Bearing all of the complicated interrelations between the different elements of *HoI4* in mind, however, it is clear that analysis of the game’s representation of Nazism requires an analytical approach that is able to detangle all of the different aspects of the game and tease out how they contribute to the larger picture the game posits. In the next chapter I will lay out my chosen method for deconstructing the elements of meaning in the game, namely neoformalism,

explain how I intend to use that approach, and make the case for why it is the most appropriate approach for this thesis.

2. Method and theory

The method employed in this thesis will be qualitative study in the humanistic tradition. Broadly, it falls within the school of thought defined in *Understanding Video Games* as “Formalism”, which represents “a humanistic approach to media and focus on the works themselves or philosophical questions related to the nature or use of those works” (Egenfeldt-Nielsen et al., 2016, p. 12). The focus of the thesis is, after all, on analysis of one specific game. As such, it is a textual analysis of the game as a text – an approach where theoretical inspiration is commonly drawn from comparative literature and film studies, and the interest of the study commonly is the game’s design choices and meaning (Egenfeldt-Nielsen et al., 2016, p. 11). This thesis falls squarely within this category as described by Egenfeldt-Nielsen, Smith & Tosca. The area of study is the game’s design choices and the meaning created by those choices as relates to Nazi ideology. The theory employed in the analysis has its roots in film studies, although it has been altered in significant ways for it to be transformed into a new analytical approach that is suitable for videogame analysis. I will outline this approach, and the reasoning behind choosing it, in the coming chapters.

2.1 Delimitations and choice of method

The choice of method in this thesis is indivisibly linked to the delimitations made in determining the scope of the thesis, so to fully explain the choice of method it is necessary to make those delimitations clear. I have already outlined the scope of this thesis in chapter 1.1, where I put forth my research question. To reiterate briefly, the simple version of this thesis’ research question is “how does *Hearts of Iron IV*, through its aesthetics and gameplay, deal with Nazism?” In other words, this is an analysis of a specific part of *Hearts of Iron IV* as a text. It is not a study of the *Hearts of Iron IV* community, of Paradox Interactive’s design process, or player interaction with the game. While I did outline some of the white supremacist elements of online gaming communities in general, and the Paradox community in particular, in chapter 1.3, I will not be delving further into these communities in this thesis’ analysis. Their inclusion in the introductory chapter was merely meant to explain the reason why I am choosing to focus on this particular element (Nazism) of this particular text (*Hearts of Iron IV*). This means that this thesis won’t contain any qualitative interviews, field observations, or quantitative data gathering on this community. I will briefly explain why in the following paragraphs.

Qualitative interviews and field observations are methods that can certainly be fruitful in media studies and would probably be necessary in a complete analysis of every aspect of *Hearts of Iron IV*. Qualitative interviews can be used in reception analysis, teasing out what a text means to its audience, and in production analysis, figuring out what considerations are made by the creators before the text is presented to its audience (Østbye, Helland, Knapskog, Larsen, & Moe, 2013, p. 101). The qualitative nature of these interviews means that they are not necessarily generally representative for the entire community, but they allow for a level of in-depth research that is not possible in quantitative approaches.

Field observation is an approach where the researcher gains access to and participates in the community, albeit perhaps attempts to have passive role in order to impact the community as little as possible, while systematically taking notes and gathering data (Østbye et al., 2013, pp. 110-113). Often it is unavoidable that the very presence of an observant will have some slight impact on the community, which is something that has to be manoeuvred by the researcher. When it comes to the Paradox community, such observation would have to largely take place online, because that's where the community mostly exists (though there are Paradox conventions from time to time). This could confer both advantages, in that truly neutral, passive observation is much easier in online forums where no one can see every person who reads the post, and drawbacks in that there is a degree of separation between the scientist and their research subjects which makes it difficult to observe their genuine human behaviour.

It could also have been possible to undertake data collection on the *HoI4* community by using surveys to be filled out by community members. This is a quantitative approach that is commonly used in media studies (Østbye et al., 2013, p. 135). It is a structured way of gathering data that allows for large amounts of data collection. Using such an approach one could try to gather answers from a representative sample of the game's fan community, and then try to ask academically robust questions in order to determine the prevalence of different political attitudes in the group, as well as the people's attitudes toward the game. This could have been broken down by demographic data, if such data is collected in the survey, and one could also learn about the demographic makeup of the *HoI4* community.

These approaches, then, could certainly have yielded a lot of information about the *Hearts of Iron IV* community, including the white supremacist elements within that community. I think it is unlikely that the white supremacist elements are anything but a minority within the community, and some of the forum activity I point to in chapter 1.3.1 seems to back that up. However, I cannot make a solid academic determination as to the prevalence of white

supremacist attitudes among *Hearts of Iron IV* players without conducting a community study using approaches such as the ones I have just outlined. While I have posited some evidence for the fact that there is some white supremacist activity in the community, the prevalence of these views could be larger than imagined, or they could be even more diminishingly small than the online forum activity seems to indicate. Without statistical evidence we simply do not know.

While it is certainly possible, then, to make a strong case for using these methods to study the *Hearts of Iron IV* community, the reason that they are not employed here is simply that studying that community is outside the scope of this thesis. Delimitations are necessary in order to perform robust, in-depth analysis, and so in order to perform a robust analysis of the *Hearts of Iron IV* game text in the span of this thesis it is in my view necessary to exclude ancillary elements such as the community surrounding the game.

When it comes to whether quantitative approaches could be applied to the text itself, instead of the community, it's worth noting that the general use for quantitative methods of analysis is to uncover structures in the material being analysed, especially if the material is data that can be concretely quantified (Østbye et al., 2013, p. 161). Indeed, there are some elements of *Hearts of Iron IV* itself that could perhaps have been quantified. For example, design elements could be boiled down to data points and then compared to overall trends in design among other strategy games or other games depicting Nazism. Such an approach would be a quantitative content analysis (Østbye et al., 2013, pp. 207-210), and would entail bringing in a host of other text for comparisons. One could also run hundreds, if not thousands, of playthroughs of *HoI4* either with players playing different countries or with the AI controlling every country in order to work out what outcomes occur most often, and thus what outcomes the game is biased towards. Or, to be able to analyse the game's visuals quantitatively, one could reduce its RGB colours to data points and use that data to work out the overall nature of the colours in the game. This approach has been used to colour in games before (Geslin, Jégou, & Beaudoin, 2016).

These approaches are largely not suited to this particular thesis, however. The aim of this thesis is after all restricted to working out the way in which *Hearts of Iron IV* represents Nazism. Quantitatively comparing aspects of the game to other games or texts could provide information about how the game compares to those other texts, but it would be an inaccurate approach to working out how the individual game does one specific thing (i.e. represent

Nazism). Of course, comparisons to other texts can have their place, and will feature in this thesis, but not in the form of quantitative content analysis.

As for the two other approaches mentioned, running hundreds of playthroughs doesn't give a complete picture of the game's representation of Nazism even if it tells us whether the Axis or the Allies usually tend to win the game, as such an approach excludes other elements of the game's representation such as the audiovisuals, as well as the actual game mechanics during play. It focusses solely on the outcome of play sessions. The colour analysis approach, on the other hand, both fails to apply to the entirety of the game's representation of Nazism – it only applies to colour – and additionally it isn't helpfully restricted to the game's representation of Nazism. Instead it considers all of the colour in the game, including colours related to the Allies. Perhaps one could avoid this problem by limiting the analysis to the colour vectors for specific frames of gameplay that relate directly to Nazism, such as the map for Germany or pictures of its politicians, but at that point the analysis can hardly be said to be quantitative. Looking at the specific colours related to Nazism in the game is a form of qualitative analysis that will indeed feature in this thesis.

All these arguments could perhaps be summarised in saying that quantitative approaches are rejected in this thesis for a very simple reason: the research question is qualitative in its nature. It asks how one specific text represents a specific ideological phenomenon. Likewise, more sociological, or anthropological qualitative approaches such as interviews and field observations are not employed here because the subject of analysis is not a community or a culture, but a text. Granted, these other methods could possibly yield interesting findings if they were applied in the ways I have suggested in this chapter, had this thesis been focussed on the game's community instead of the text itself, and quantitatively measuring how a whole wide array of games represents Nazism could perhaps give a broader perspective on Nazism in videogame culture than a thesis focussed on a single game will. A possible counterpoint to the argumentation I have presented here as to why I am not employing these various methods would be to point out all these potential fruitful avenues of research and then ask why a research question that is incompatible with the use of these methods has been chosen.

Solely defending the choice of qualitative textual analysis in this thesis on the grounds that the research question is inherently qualitatively focussed on a single text is an insufficient defence towards this attack, then, because it is circular logic. To say that the research question is chosen to fit a qualitative method could be as true as saying that the qualitative method has been chosen to fit the research question. If the nature of the research question is the only reason

why qualitative textual analysis is appropriate in this thesis, but if not for the research question then other methods would be more productive, then the research question could surely have been rephrased to encompass those more productive methods. Consequently, the phrasing of the research question and choice of method in this thesis, which is the groundwork of the entire thesis, builds on the idea that qualitative textual analysis is a productive form of research and that some things can *only* be learned through this method. In the next chapter I will therefore make the case for qualitative textual analysis.

2.2 The case for qualitative textual analysis

Qualitative textual analysis, from here on simply referred to as textual analysis, is an umbrella term for the study of texts that covers a wide variety of analytical approaches (Østbye et al., 2013, p. 61). To gain increased knowledge of how texts work is one of the important task of media studies, and while some of this knowledge can be gained through quantitative content analysis, textual analysis is integral to gaining a full understanding (Østbye et al., 2013, pp. 61-62). This is true across disciplines, in film studies, comparative literature, and game studies, a fact that is highlighted in *Understanding Video Games*, where textual analysis is denoted as the “common methodology” in analysis of individual games with “theoretical inspiration” from comparative literature and film studies (Egenfeldt-Nielsen et al., 2016, p. 11). There are of course differences across disciplines in how textual analysis is done because the texts are different, but the fundamental principle of qualitatively analysing a single text is shared.

According to Østbye, Helland, Knapskog, Larsen and Moe’s book on methods in media studies, *Metodebok for Mediefag*, textual analysis approaches texts as units of meaning, and often focusses on what is unique about the individual text (Østbye et al., 2013, pp. 62-63). It might study individual elements of the text separately, but to say something about the text’s overall meaning the analysis needs to consider the text as a whole. However, it doesn’t just concern itself with *what* the text is saying, but *how* it is saying it. It is interpretative, in that it seeks to uncover everything that is being communicated by the text, not just its surface meaning (Østbye et al., 2013, p. 63). The fact that textual analysis focusses on *how* texts communicate is as I have mentioned at the core of why it has been chosen as the method for this thesis.

If one agrees with the fundamental premise put forth by Østbye et al., that gaining increased knowledge of how texts work is important (2013, p. 61), then approaching texts using textual

analysis as a method is important, because it is *the* method for working out *how* texts work. It is uniquely tailored to and specialised in this task. What this thesis loses from not gaining quantitative data on the *HoI4* community in order to say something about its demographics, political alignments and view on the game, it makes up for in contributing to a wider understanding not just of how *Hearts of Iron IV*'s representation of Nazism works, but how videogames work more generally. Textual analyses build on each other, in that insights gained from analysing one text can then be applied when analysing a different text. This thesis builds on previous textual analyses in its approach, as will be made clear later, and is hopefully a further contribution to the wider understanding of videogames as texts in its exemplification of how one can understand specific elements of a specific game. In other words, the value of textual analysis as a method is its depth, which unlocks understanding that is impossible in more surface level approaches. This is the fundamental philosophy behind qualitative methods at large.

According to professor Jostein Gripsrud, there are three core interpretative strategies in textual analysis: the symptomatic approach, which understands texts as manifestations of society, the sympathetic approach, which is an affirmative interpretative strategy that tries to as loyally as possible discern the meaning intended by the creator of the text, and finally an objectifying approach where the text is considered as an autonomous entity (Gripsrud, 2015, pp. 150-152). Gripsrud argues that rather than attacking the different approaches as invalid because of their individual shortcomings, it is most productive to see all three positions as having some value, and then vary which approach one relies on the most depending on the text that is subjected to analysis. The text is heavily influenced its creator, produced in a societal context beyond the individual's control, but then often consumed by its audience in a context isolated from its creator (Gripsrud, 2015, pp. 152-153). Before moving on to discuss the specific approach chosen for this thesis, which does fit relatively neatly into the third category outlined by Gripsrud as it treats the text as an autonomous entity, I would note that this array of possible strategies in analysing a text speaks to the versatility of textual analysis. It's a method that can deepen not only our understanding of how texts work, but also how creators can produce texts that communicate specific messages with intentionality, as well as exemplifying and expressing the wider societal and cultural context in which the text is produced and consumed. However, this thesis is concerned with *how* a text works, and as such the focus of the thesis will be placed strictly on the text itself as an entity.

2.3 Choosing an approach

The analysis in this thesis will predominantly build on the neoformalist approach to games outlined in the thesis *Neoformalist Game Analysis: A methodological exploration of single-player game violence* by Jasper van Vught (2016). In his thesis, van Vught makes the case that the two most established approaches to game analysis, ludology and proceduralism, are limited when it comes to formal analysis of games. Instead, he imports the neoformalist approach from film studies, with some necessary reservations, and repurposes it to fruitfully analyse the formal components of videogame violence. In this chapter I will briefly outline the key arguments for this approach, and specifically why it is the most useful approach here in this thesis. I will start with the arguments for why ludology and proceduralism are not the correct approaches for this thesis, and then present arguments for why neoformalism is. Additionally, I will be looking into some of the caveats that must be considered when importing an analytical approach from a different discipline. Finally, I will outline this new game formalism as proposed by van Vught.

2.3.1 Considering ludology and proceduralism

In summary of van Vught's appraisal of ludology, which he has extensively sourced by drawing on the works of various prominent ludologists, the principle idea of ludology is that "games should first and foremost be studied as games, which requires a focus on the essential features of games" (Van Vught, 2016, p. 5). In answering the ontological question about what these features are, ludology has reached the conclusion that "the rule system is the single distinctive feature" of games. This leads to various ludologists arguing that analysing audiovisual representation "is 'secondary' to a more important rule-based structure" at best, and "just a waste of time and energy" at worst (Van Vught, 2016, p. 6).

As van Vught demonstrates, this essentialist view has grown out of a historic concern with "differentiating the discipline of game studies from other paradigms (mostly narratology)". Aarseth has written that: "Games are not a kind of cinema, or literature, but colonizing attempts from both these fields have already happened", and Juul "even developed a game called *Liberation* to have players experience what it is like to [...] 'defend games from the imperialism of a thousand theories'" (Van Vught, 2016, p. 7). In Juul's game, the player must shoot down different theoretical approaches that try to colonialise game studies.

While ludology has been successful in developing new analytical tools and an independent academic tradition for the analysis of games, the problem with this defensive attitude towards the exchange of ideas with other disciplines is that if taken to the extreme it will ultimately harm game scholars' ability to fully analyse every component of videogames. As van Vught writes, "for a study of violence in games, that rules system is just that: one component" (2016, p. 8). While the rule system is definitely at the heart of videogames, in order to comprehensively analyse every aspect of a videogame's representation of violence, in his case, or indeed Nazism in mine, it is necessary to treat the audiovisual elements of the game as worthy of analysis in their own right, and not just as completely secondary to the rule-based structure.

Many of these aspects of ludology that makes it unsuitable for the type of analysis this thesis sets out to accomplish are different in proceduralism. Proceduralism is an approach that focusses not on "how games work", but on "what they do" (Van Vught, 2016, p. 9). It puts "more focus on the semantic layer of games", while still accounting for their rule-based nature, and it "does not aim to construct an ontological domain for games set apart from other media nor is it institutionally motivated" (Van Vught, 2016, p. 9).

This sentence articulates both the usefulness of proceduralism in general, and at the same time why it is not the approach chosen for this specific thesis. While analysing the meanings of games and how games are tools for expressing ideas can certainly be productive, the aim of this thesis is to study how Nazism is portrayed in *Hearts of Iron IV* by looking at formal devices, but not necessarily reaching a conclusion as to what that portrayal means. In other words, the question being asked is "how does the formal elements of *Hearts of Iron IV* construct a representation of Nazi-Germany", not "what does the representation of Nazi-Germany in *Hearts of Iron IV* mean?" Because of this, this thesis requires an approach that is more concerned with form and less concerned with meaning.

2.3.2 A Third Camp: Neoformalism

Neoformalism, as it is outlined as a possible approach for game analysis by van Vught, seems to offer the appropriate toolset needed to achieve this analysis. In film studies, where it was established by Bordwell & Thompson, it "focusses on the film as a system, and tries to analyse how the different elements in the film system function in the overall form" (Van Vught, 2016, p. 12). If anything, an approach to art that focuses on it as a system is even more appealing in game analysis than it is in film, as games are fundamentally systemic in nature. In fact, games

have been described as systems in game studies for a long time, albeit in a more literal manner than the metaphorical use of the term in neoformalist film studies (Van Vught, 2016, p. 72). Van Vught also points out in his thesis that neoformalism has seen quite little application in videogame studies. Hopefully, my thesis will be able to provide an additional example of why neoformalism can be a productive way to approach videogames.

In his introductory sub-chapter on neoformalism, van Vught provides three reasons for why he is exploring this as a new approach instead of altering already existing approaches in order to fit the goals of his thesis (Van Vught, 2016, pp. 12-17). First, he argues that altering ludology to focus equally on game rules, narrative and stylistic components would hollow out the approach altogether. Doing this would threaten the integrity of ludology as a distinctly unique approach in opposition to narratology and semantics. Secondly, he argues that “replacing proceduralism’s focus on meaning with a focus on function messes with proceduralism’s foundations”, changing the basic assumption of the approach (Van Vught, 2016, p. 13). Thirdly, van Vught writes that ludology and proceduralism both “appear to have broader aims which are not conducive for an analysis of a single game object or a component of that object”. Ludology claims itself as a general theory of games and proceduralism aims to explain games as particular manifestations of processes that exist across media. These broader aims, van Vught argues, makes it “easy to lose track of the particularities of the games and game sequences under investigation” (Van Vught, 2016, p. 14).

By exploring neoformalism as a different approach to games, then, comprehensive formal analysis of games can be achieved while still leaving the integrity of these two existing approaches intact. Instead of watering down the distinctness of ludology, or altering the very core of proceduralism, a new approach that is tailored specifically to broad formal analysis, and that treats all elements of the game as equal can be employed. Additionally, neoformalism “is not a general theory of films” (or, indeed, games), but it is instead “a humbler approach” that focuses on the specifics of the piece of media that is being investigated, and flexibly adapts itself to suit that piece (Van Vught, 2016, p. 14). This flexibility is appealing in an analytical approach to videogames because videogames are so incredibly diverse in nature. The differences between games like *Pac-Man* (Namco, 1980), *Civilization VI* (Firaxis Games, 2016) and *Legend of Zelda: Breath of the Wild* (Nintendo EPD, 2017) are so great that in order to fully meet each game on its own terms, the approach used needs to be somewhat adaptable.

As I have previously mentioned, however, it is problematic to import an analytical approach from a different discipline. Aarseth warned about this in his first Game Studies editorial back

in 2001: “To see computer games as merely the newest self-reinvention of Hollywood, as some do, is to disregard those socio-aesthetic aspects and also to force outdated paradigms onto a new cultural object” (Aarseth, 2001). Van Vught concedes that “his warning should not be taken lightly. Videogames are not films” (Van Vught, 2016, p. 15). It is therefore necessary to modify the neoformalist approach to films significantly to apply it to games. Many formal devices are fundamentally different between the two: films do not have rule systems, and their aesthetics differ from videogames. Hopefully, the analysis in this thesis will serve as a practical demonstration of how neoformalism can be tailored to the uniqueness of videogames, rather than being an imperialist attack made by film studies that seeks to define videogames as simply a new kind of cinema. It is worth noting that the neoformalism in film studies that this thesis draws on was itself developed based on a Russian Formalist movement in literature studies (Van Vught, 2016, p. 33). Importing and then adapting an approach from a different discipline is nothing new.

In addition to this, although Aarseth passionately defends of the uniqueness of videogames, there is still some aesthetic kinship between videogames and film. The extent to which this is true varies wildly from game to game. While *Tetris* (Pazhitnov, 1984) is very different from films, games like *Red Dead Redemption 2* (Rockstar North, 2018) explicitly acknowledges its cinematic inspirations by including a “cinematic mode” in the game that is supposed to make the game feel more like a movie, and *L.A. Noire* (Rockstar North, 2011) allows the player to play the game in black and white to make the game feel like a film noir from the 40s or 50s. Of course, these explicit homages to cinema do not mean that even these games are completely similar to films. The anonymous film critic “Film Crit Hulk” has argued in *The Observer* that the cinematic mode in *Red Dead Redemption 2* expresses a fundamental misunderstanding of what is cinematic:

The game, whether it means to or not, is saying you can just put black bars on something, allow a user to randomly change angles, and the visuals inherently become cinematic. To be clear, they don't (Film Crit Hulk, 2018).

Perhaps it would comfort ludologists who obsessively want to maintain a clear divide between film and videogames to know that, for some film critics at least, the feeling is mutual. I do not disagree that the aesthetic differences between the two are significant and fundamental. However, similarities exist, for example in aesthetic concepts such as iconography, music, and lighting. In games that are in some ways closer to cinema, the iconography might resemble films (*Red Dead Redemption 2* is heavy on Western iconography), and music might be similar to or even lifted directly from films (see Star Wars games such as *Star Wars Jedi Knight II:*

Jedi Outcast (Raven Software, 2002)), although the functions music serves can be different between the two media. Finally, the placement and colour of light sources can carry significance in both forms, even though interacting with a space lit in a certain way and watching an image lit in a certain way are fundamentally different experiences. *L.A. Noire* tries to recreate some of the lighting schemes seen in old noir films, but the fact that the player can simply move around blunts some of the aesthetic expressiveness of that lighting – the player can simply choose to look at something from a different angle, where the light falls differently. Thus, the lighting of *L.A. Noire* is both similar and different to film.

Hearts of Iron IV, being a grand strategy game taking place on a world map, is less similar to cinema than games such as *Red Dead Redemption 2* and *L.A. Noire*. For the purposes of developing a uniquely videogame-focused neoformalist approach, this might be a good thing. It necessitates an analytical approach that is clearly distinct from film theory, because a completely film theory based approach that is not modified in order to suit the particularities of videogames in general, and specifically *Hearts of Iron IV* itself, cannot be successful in analysing such a wildly different work. However, I do posit that in this thesis, as van Vught argues for his analysis, neoformalism’s “flexible and heuristic nature” makes it possible to morph it into an approach that is appropriate and interesting (Van Vught, 2016, p. 15).

2.4 The Approach: Game neoformalism

Having explained the rationale for why neoformalism is the chosen approach for this thesis, I will here outline the chief elements of the “New Game Formalism” proposed by van Vught, as detailed in the third chapter of his thesis (Van Vught, 2016, pp. 68-115). It is in this chapter that he makes the adaptation of neoformalism from film to game studies, making essential modifications to the approach in the process. On this, van Vught writes in the chapter’s introduction:

In fact, I believe that, if outlined well, the basic assumptions of such an approach, should allow further generalization to constitute a more general approach to videogames, rather than an approach to game violence in particular. For this reason, I will side-line the violence issue in this chapter, to enable a broader discussion around the weaknesses of available formalisms and the ways in which neoformalism may provide some starting points to construct a more inclusive formalism in game studies (Van Vught, 2016, p. 68).

Thanks to this general approach taken by van Vught, his chapter serves well as the foundation for a formalism that can be used in my analysis as well, even though the analysis of ideology

in a strategy game is different in many ways from the analysis of violence in the types of single-player games van Vught's thesis focuses on. I will now summarise the key elements of the new game formalism he outlines. In the interest of brevity, I will only go through the most important conclusions he reaches, but leave out most of the underlying argumentation that gets him there. The chapter where he outlines this approach is, after all, 47 pages long. Any challenges to the fundamental underlying assumptions behind the approach outlined in this section of my thesis, then, I would refer to van Vught's thesis, particularly the third chapter (Van Vught, 2016, pp. 68-115).

2.4.1 'The Game as System'

In a mediation between the understanding of the film as a system among neoformalist film scholars, and the understanding of game as system among game scholars, van Vught carves out an approach to the game as system that focuses not on the rule systems underlying gameplay, but one where rules and audiovisual clues work concurrently. In other words, "from a neoformalist game perspective, it is the interrelation of system components that should be studied regardless of the internal mechanical interaction that underlies it" (Van Vught, 2016, p. 73). This means that in game neoformalism, a game's interrelating components are studied from a player's perspective instead of looking at the internal workings of the game logic.

Studying a game from a player's perspective does carry with it some fundamental challenges, though. Unlike film, "where viewers only play a role in *the perception of the work*", in games, players "also play a part in *the structure of the work*" because of the games' interactive nature (Van Vught, 2016, p. 73). The fact that the structure of the work itself changes to some degree between play instances, based on input from the player, could arguably undermine such a systemic approach to game analysis. However, van Vught proposes a neoformalist answer to this dilemma: "Rather than considering the game as a neutral platform for idiosyncratic play performances, we should still see the game as an independently existing object that significantly structures its own use" (Van Vught, 2016, p. 75). In all videogames there are restrictions on the configurative actions players can take, and there might also be psychological 'nudges' that encourage one type of behaviour over another. As van Vught writes:

This means that the instance that we perform as analysts shares much (although inevitably not all) of the characteristics of the multiple it came from as long as we are willing to let ourselves be guided by the game's cues. In this way, we can still claim intersubjective access to the game's formal components on the basis of our play instance (Van Vught, 2016, p. 76).

When it comes to *Hearts of Iron IV*, there are specific ways in which that game both restricts player actions and nudges the player in certain directions, both of which will be addressed later in this thesis.

Furthermore, van Vught makes the case that the concept of function is broader in neoformalism than it is for ludologists. He uses a gun as an example: to a ludologist, the gun's 'function' is its in-game behaviour based on the system's rules, but the word does not describe the gun's contribution to the narrative of the game or the way it may trigger emotional responses in players. In a neoformalist approach, however, function does not only refer to "the way something allows for configurative behaviour", but also the way it contributes to the narrative, its intertextual or metatextual significance, its artistic significance, and the emotional response it might evoke. It is a broader conceptualisation of function that includes aesthetics and meaning (Van Vught, 2016, pp. 76-77). It is this understanding of function that will underpin the analysis of the various elements of *HoI4* in this thesis.

According to van Vught, meaning is also included in this broader conceptualisation of function, both "denotation" and "connotation". Denotation involves *referential meaning* that refers to something we recognise from real life, and *explicit meaning* where the game overtly expresses abstract ideas. Connotation involves *implicit meaning*, which is non-straight forward, but implied, and *symptomatic meaning* where the game reflects socio-cultural tendencies. These meanings are, to neoformalists, "building blocks that an artist can use to build a work, rather than something that is ascribed to a work by a user". This makes neoformalism a *poetic* approach. It "takes meanings and other effects as departure points and tries to discover how these are achieved" (Van Vught, 2016, p. 78).

This allows neoformalism to focus on both denotations and connotations equally, rather than focussing predominantly on connotations because those are the meanings that require interpretation. It also prevents analysts from ignoring the explicit, ludic meanings of in-game elements because the analysis does not focus on uncovering implicit meanings in the game, but rather it takes the game as-is and analyses how it works. Both elements differ from proceduralism, where the interpretation of meaning is the stated goal of the approach, and consequently the focus on connotational and implicit meaning is greater than the focus on

other meanings. However, unlike in ludology, a neoformalist approach still accounts for all meanings in the game, not just those with gameplay functionality. It is an inclusive approach that maintains openness to all functions and meanings within the game. Certain functions might be more important than others at different times and in different games, but in neoformalism the importance of functions is determined not by the approach, but by the game (Van Vught, 2016, pp. 79-80).

2.4.2 'Motivations of Game Devices'

In neoformalist analysis, we evaluate the reasons why a device – an element in the text – is present to help identify its functions within the text. To consider these motivations does not require an exact consideration of authorial intent, but instead neoformalists only need “the assumption of agency behind the presence of a device” (Van Vught, 2016, p. 40). In other words, “these reasons are not the reasons given by a maker, but by the user on the basis of the work’s functioning” (Van Vught, 2016, p. 81). This is significant in that it allows for an analysis that does not depend on engagement with the hypothetical intentions of the work’s maker, and that might fall apart if the maker publicly states that they had different intentions than the ones teased out in the analysis. Instead, the motivations of functions are based on the functioning of the work as engaged with by the user, which grounds the analysis in the work itself.

Film scholar Thompson has divided these motivations up into four basic types: *compositional*, *realistic*, *transtextual* and *artistic*. Van Vught summarises these four types thusly:

- Compositional motivation: *justifies the inclusion of the device for its creation of narrative causality, time and space.*
- Realistic motivation: *justifies the inclusion of the device for having the perceiver appeal to notions of the real world.*
- Transtextual motivation: *justifies the inclusion of the device for having the perceiver appeal to knowledge of genre conventions or other intertextual conventions (e.g. previous work by the same actor or the use of certain techniques such as the ‘cliffhanger’).*

- *Artistic motivation: justifies the inclusion of the device for its contribution to the work's abstract, overall shape. This is probably the most difficult type of motivation to define. It would seem that the artistic motivation is often overshadowed by more prominent other motivations and it only really becomes noticeable when the other ones are withheld. Generally speaking, abstract stylistic devices that trigger non-straightforward (symbolic) meanings can be considered to have an artistic motivation. (Van Vught, 2016, pp. 40-41)*

However, van Vught argues that these four neoformalist categories are not sufficient for game analysis, because they are tailored to film and therefore omit configurative user function. Therefore, he adds another category, namely devices' *ludic* motivations (Van Vught, 2016, p. 84). Ludically motivated devices facilitate rule-bound interactions, goal-directed progress, and structured play. This is a narrow sense of play restricted only to 'gameplay', to the exclusion of narrative and somewhat "closer to what ludologists refer to as configurative activity" (Van Vught, 2016, p. 85). Here, there is a clear distinction between ludologists and neoformalists: ludologists would probably argue that the ludic motivation is always most important because "they assume configurative activity to be a game's dominant user function" (Van Vught, 2016, p. 85), while a neoformalist would, based on a broader conceptualisation of play, argue against making universal claims as to the importance of motivations. Ludic motivations might be most important at many times in many games, but it is certainly possible for other motivations to come to the fore. Additionally, of course, it is possible for different motivations to co-exist in the same device, meaning the device then serves multiple purposes at the same time.

The operative method of analysis in this thesis will be to break down the game's devices – its units of meaning – and then work out what they do, individually, based on their motivations and effect. Then, gradually, as the analysis progresses, the sum of meanings put forth by these different devices will add up to the complete representation of Nazi-Germany in *Hearts of Iron IV*. There is one final stop before proceeding to the analysis itself, however, and that is a short chapter where I define some of the terminology that will be employed in this thesis.

2.5 Terminology

For the purposes of clarity, it is necessary to define some of the terms that will feature throughout this thesis. Words can have contested meanings, both in academia and in wider society, and consequently it should be defined what is meant by them specifically in this thesis to avoid misunderstandings. A significant amount of my terminology has already been

established in the previous chapter on the neoformalist approach, and therefore I won't reiterate what I mean by devices and motivations of devices here. This chapter is only to offer some further clarifications before my analysis.

2.5.1 Game terms

Several concepts and mechanics in *Hearts of Iron IV* are named after real life concepts, but their meaning vary slightly from the meaning these terms might have in other contexts. "Manpower" refers the number of people a country has available for its military at any given time. "Economy law" refers to a set of policies that can be selected in the game that signify how militarised a country's economy is. "Technologies" are sets of bonuses and access to new types of military equipment that are unlocked throughout the game. Examples of such technologies are "nuclear reactors", "Spitfire" and "concentrated industry III". Outside of the game, these words generally refer to complicated concepts, but in *Hearts of Iron IV* they refer to concrete sets of bonuses affecting the game.

I will also be using "player" as a general term for any human person playing the game and "AI" as a term for the code that controls countries not played by a human. I will be referring to *Hearts of Iron IV* both by its full name and its abbreviation, *HoI4*. I will also be referring to its production company, Paradox Interactive, simply as Paradox.

2.5.2 Political terms

Several of the terms I will be using in referring to political concepts in the game have disputed meanings in political science. As such, there is need for clarification in what I mean by them here. Now, this thesis is not a political science paper, and it is far outside its scope to engage in a discussion about the nuances of various forms of Nazism, fascism and totalitarianism.

Here, I will be using the terms "fascism", "communism" and "democracy" as umbrella terms that refers to those ideologies as presented in *Hearts of Iron IV*. In *HoI4*, set in the 30s and 40s, Norway, Sweden, the UK, France, and the United States are "democratic" countries, the Soviet Union is "communist", and Germany, Italy and Japan are "fascist". Political scientists might take issue with these as simplifications, but when using these terms, I am operating based on the understanding established by the game for the sake of clarity between the game text and this thesis. Furthermore, "Nazism" will refer to the historical ideology in Germany under Hitler, or the brand of fascism that relates to the German Reich in *Hearts of Iron IV*. At the same time, contemporary far-right extremists are referred to, interchangeably, as neo-

Nazis, white supremacists, or alt-right. For more information on these communities I would refer to chapter 1.3.

I will be using “Nazi-Germany” to refer to the historical country of Germany under Hitler, while “the German Reich” refers to Germany as a playable entity within the game *Hearts of Iron IV*. The reason for this is to maintain a distinction between the two. As I made clear in chapter 1.4, the “German Reich” in *Hearts of Iron IV* is a representation of a Nazi dictatorship, but it is still distinctly and meaningfully different from the real thing. In *HoI4*, “the German Reich” is the term used for that country, which is the reason why I will be using that term for the game’s representation of the country. Nazi-Germany, and other terms such as The Third Reich or Hitler’s Germany, will be referring to the real, historical country of the past.

3. Neoformalist Analysis of *Hearts of Iron IV*'s Aesthetics

“Aesthetics” is a complicated term with a myriad of definitions. To functionally approach the aesthetics of *Hearts of Iron IV*, it is necessary to establish a working understanding of what I mean when using the term in relation to this videogame. Terry Eagleton writes in *The Ideology of the Aesthetic* that “Aesthetics is born as a discourse of the body. The vital distinction the term signifies for its inventor, Alexander Baumgarten, is not between art and life but between the material and the immaterial” (Eagleton, 1989, p. 75). This understanding of aesthetics means that in contrast to ethics, reason and other purely metaphysical concepts, aesthetics exists in our sensory perception of the physical world, and as such is the foundation of our interpretation of reality. In other words, the analysis of aesthetics is the analysis of that which is experienced through our senses and how meaning is constructed during those sensory experiences.

In *Understanding Videogames*, the aesthetics of videogames is defined as “all aspects of videogames which are experienced by the player, whether directly – such as audio and graphics – or indirectly – such as rules” (Egenfeldt-Nielsen et al., 2016). This is in line with aesthetics signifying the material, distinct from the immaterial. The aesthetics of a videogame is the material game itself: the light of its images and the sonic waves of its sound. While the game’s rules might be understood as a theoretical construct, the player’s interaction with the rules while playing the game is concrete and physical. “When X button is clicked, Y happens”. “I can move this unit here, but not over there”. The sensory experiences of game are designed to articulate rules-based interactions, and as such the audio-visual elements and the rules themselves become inseparable, constituting the game’s aesthetics.

I will base my aesthetic analysis of *Hearts of Iron IV* on this understanding of aesthetics as the comprehensive set of sensory impressions experienced when playing the game. It’s worth noting that every single aesthetic element in a game has been meticulously created and combined by the game’s designer(s), and as such, all aesthetic elements have been made with intent. As discussed in the earlier chapter on representation a game is a thoroughly designed work that is then experienced through differing instances of play, which means that a historical videogame offers a comprehensively curated rule-based interaction with history. In this chapter I will analyse how the aesthetics of *Hearts of Iron IV* work to portray Nazi-Germany

during the Second World War. I will be looking at the audio-visual elements of the game, as well as its rules and gameplay.

3.1 The Core Mechanic

According to Salen and Zimmermann, “every game has a *core mechanic*” (Salen, Tekinbaş, & Zimmerman, 2004, p. 316). They define a core mechanic as the fundamental play activity that a player performs repeatedly. This can be a single action, such as running, or multiple actions that add up to a compound activity. The core mechanic “contains the experiential building blocks of player interactivity”. They use StarCraft, a real-time strategy game, as an example, writing: “the core mechanic combines resource management with wargame strategy and rapid mouse and keyboard command skills” (Salen et al., 2004, p. 317). This is somewhat, though not entirely, similar to the core mechanic in *Hearts of Iron IV*. In *HoI4*, the core mechanic combines various types of resource management with diplomacy and wargame strategy. Micromanaging units is optional, but does help winning wars more effectively. It does however not necessarily require rapid clicking, as the game speed can be adjusted and even paused at the player’s leisure, at least in singleplayer.

As I have described in my chapter on method, in neoformalist game analysis game mechanics are one of the core building blocks that create meaning within a game. A neoformalist game analysis would be incomplete, in my view, without considering the implications of the core mechanic. In this chapter I will therefore consider the relationship between the core mechanic of *Hearts of Iron IV* and Nazi ideology. However, the components that make up the game’s core mechanics are quite intricate, so it is necessary to maintain focus only on those aspects that can be tied to representation of Nazism.

I would argue that the game mechanics in *Hearts of Iron IV* construct their representation of Nazism both directly and indirectly, and that those two ways are distinct from one another. The direct constructions are things such as the in-game attributes tied to fascist ideology, the traits of Nazi leaders, and other modifiers directly related to Germany and its regime. In short, these are the parts of the rule-based logic of the game that are explicitly tied to Nazism. The indirect elements of the game’s understanding of the ideology are ones where the rule in question works the same for all countries, no matter their ideology, but other aspects of the game lead to different outcomes for fascists than for other countries.

For example, the resource and trade system in the game follows universal rules. Generally, the same equipment requires the same resources no matter what country one is playing. Natural resources are scattered across the world map in a predetermined fashion. What resources a country has available comes down to geography, based on the game designers' estimation of where those resources were produced during the period in which the game is set. Resources that a country needs but does not produce, including oil to fuel tanks, airplanes and ships, needs to be imported from other countries through the trade system. This system is largely identical for all countries.

However, Germany often ends up with dire resource shortages for one simple reason: a country cannot import resources from countries it is at war with, and Germany usually ends up at war with all other significant resource producers on the planet: the US, the Soviet Union, and the colonial empires of Britain and France. For example, while a country such as France is able to compensate for its lack of oil by importing it from the US, which has oil aplenty, Germany has no such alternative and needs to conquer territories containing oil or hope that Italy or Japan does so. Alternatively, the Germany Reich can focus significant parts of its industry on constructing synthetic oil plants, allowing it to produce fuel independently, but this comes at an opportunity cost of other things that could have been constructed instead, and can hardly match the oil supply available to someone who can simply import oil from the United States.

This difference between the Allies and the Axis is not presented by the game as directly inherent to their ideologies, because the game mechanics governing this are presented as equal no matter which country one is playing. However, indirectly, it could be said to demonstrate how the excessively aggressive foreign policy favoured by fascists can lead to a diplomatic isolation that puts their country at a disadvantage on the world stage. Of course, it is possible to simply read this as an illustration of how worldwide colonial empires will naturally have access to the most resources, and while that certainly is a part of it, the point here is that even a small country on the Allied side, such as Belgium or Norway, can import needed resources from their allies. Because the German Reich is the aggressor, forcing the rest of the world to unite in opposition to it, they have few friends to help when they run out of resources.

In this chapter I will first be going through direct representation of Nazism expressed through game mechanics in a section on politics and diplomacy. Then, I will proceed to cover some of the indirect ways in which Nazism is represented through the game's resource management systems and its wargame strategy aspect. This should give an overview over the most

important ways in which the game mechanics and rule-based logic of *Hearts of Iron IV* constructs a representation of The Third Reich and its Nazi regime.

3.1.1 Politics and diplomacy

Of all aspects of *Hearts of Iron IV*, the game mechanics related to politics and diplomacy are perhaps those who offer the most explicit presentation of Nazi ideology. In this chapter I will be looking at the game's direct presentation of Nazi leadership, the various modifiers tied to fascist ideology in general and the Third Reich specifically, as well as Germany's focus tree and decisions – essentially a series of political choices available to the player. This should give an overview over the most direct ways in which the game mechanics of *Hearts of Iron IV* represent Nazism.

I would like to note here that most of the game mechanics of *Hoi4* are highly interconnected, and, in fact, most of the political system in the game is essentially a resource management system that interacts heavily with the other resource management systems that I will describe in the chapter after this one. When taking a bird's eye view of how the game is played, the most prominent aspect of its core mechanic is its complex set of resource management systems, after all. This might make a separation between the politics of Nazi-Germany and the economics and resource management of Nazi-Germany in-game somewhat artificial. The reasoning for making this distinction here, then, is not on the grounds of any clear separation between these systems during play, but instead based on the direct or indirect nature of the systems' relationship with Nazi ideology.

To understand how the political gameplay outlined in this chapter interrelates, it is probably helpful to be aware of the most important resource in the political part of *Hoi4*, which is *political power*. Political power is a pool of points, usually gained over time. It is used to change laws, hire staff for government, make political decisions and take diplomatic action. It costs 1 political power per day to “research”, or focus on, “national focuses”, which are essentially an extra tech tree that represents political developments, not science, and unlike the science tech tree, the focus trees are unique for most countries. Because the base rate at which political power is gained is 2 political power per day, and all countries normally keep researching national focuses throughout the entire game (it's usually advantageous, but not required), about half of political power is spent on national focuses while the rest is stockpiled to be used on other political actions. As with all other numbers in *Hearts of Iron IV*, however,

there are modifiers that might reduce or increase the 2-point base rate at which political power is gained.

Laws and government: Nazi leadership in Hearts of Iron IV

One of the many political decisions a *HoI4*-player needs to make is how to staff their government. Table 1 lists a selection of Nazi leaders from the game, with their type and in-game effects. This list is not exhaustive – Germany does have several other leaders that can be hired. Hiring political advisors and central military staff normally costs 150 political power.

Table 2: A selection of prominent National Socialist leaders and their effects in Hearts of Iron IV.

Leader	Type	Effect
Adolf Hitler	Country leader	Dictator: Political Power Gain: +25%
Albert Speer	Political Advisor (Armaments Organizer)	Civilian to Military Factory conversion cost: -20%
Fritz Todt	Political Advisor (Fortification Engineer)	Land Fort, Coastal Fort and Anti Air construction speed: +20%
J. von Ribbentrop	Political Advisor (Backroom Backstabber)	Political power gain: +5% Ideology drift defense: +15%
Joseph Goebbels	Political Advisor (Fascist Demagogue, Propaganda Master)	Daily Fascism Support: +0,10% War Support: +10%
Martin Bormann	Political Advisor (Silent Workhorse)	Political Power Gain: +15%
Rudolf Hess	Political Advisor (Silent Workhorse)	Political Power Gain: +15%
Heinz Guderian	Military Theorist (Blitzkrieg Theorist)	Army Experience Gain: +0,05% daily Land Doctrine Research Speed: +10% Armor: Max Speed: +10%
Erwin Rommel	Military High Command (Armor, Genius)	Armor Division Attack & Defense: +15%

However, only three political advisors can be hired at the same time, meaning the player has to select the three advisors whose benefits they find the most useful. Therefore, it is not possible for someone playing as the German Reich to accrue all the bonuses listed in Table 3.

This game mechanic carries a lot of meaning with it that can be fruitfully approached from a neoformalist perspective. Its meaning is generally denotational: it is referential, in that it refers to real historical figures, and explicit, in that it attributes to those leaders very specific traits meant to summarise who they were as politicians and generals. Because of this it is possible to link this mechanic directly to the game's representation of Nazism – specifically its historical leadership. The motivations for the inclusion of these leaders in the game is both realistic and ludic: realistic in that helps build an impression of an accurate representation of Nazi-Germany, and ludic in the options for configurative play it offers to the player.

Before moving on to a more detailed exploration of the gameplay implications of these leaders and the motivations for their inclusion and game-logic representation, I would note that semiotically they are not necessarily presented as good leaders of their country. Hitler is described as a “Dictator”, Ribbentrop as a “Backroom Backstabber” and Goebbels as a “Demagogue”. While they all provide positive mechanical bonuses to the German Reich, the language used to describe them does imply that their methods are problematic.

The game mechanics' representation of Adolf Hitler

Unlike the rest of the National Socialist government, there are no configurative activities of play tied directly to Adolf Hitler. Instead, playing as Nazi-Germany will invariably confer a bonus of +25% political power gain attributed to having Hitler as the country's leader. He is predefined and unchangeable. This is unlike games like *Crusader Kings II* and *Total War: Warhammer*, which are also grand strategy games, but there the traits of leaders are changing features subject to interactive play. Because of this non-interactivity of country leaders in *HoI4*, as a device, or a unit of meaning within the game, the motivation for Hitler's mechanical representation is not predominantly ludic. Even though it has a mechanical impact on other aspects of play, it does not in itself facilitate any rule-bound interactions. The effect Hitler has is passive and cannot be interacted with. In fact, out of all the motivations described by film scholar Thompson and game scholar van Vught, the only motivation that can be ascribed neatly to Adolf Hitler's +25% political power bonus is the realistic motivation: it is justified “for having the perceiver appeal to notions of the real world” (Van Vught, 2016, pp. 40-41). This matters because it means it must be taken as a pure representation of the impact Hitler had on Germany as its leader.

To make the significance of this representation of Hitler completely clear I want to describe the impact it has on gameplay in detail. Because of a quirk in how political power gain in *HoI4* works, a +25% increase is even more significant than it might seem at first glance. As I have explained previously, the daily base rate of political power gain for a country is 2, but in almost all cases, 1 point per month is being used on national focuses, leaving a real gain of 1 point per day to be used on all other aspects of the game's political systems. Hitler's +25% increase does not apply to the 1 point gained after national focus progress has been subtracted, but instead to the original 2-point gain. This means that this bonus increases Germany's "disposable income" in political power from 1 to 1,5 – a 50% increase.

It is a very significant bonus, because it allows Germany to change its laws and hire advisors at a much faster rate than other countries, many of which instead have penalties to their political power gain. It characterises Hitler as an effective leader who can move quickly within his administration and "get things done". With this high political power gain, the German Reich can be the first country in the world that increases the mobilisation of its economy.¹ It can staff its government faster than other countries, which can add bonuses to most of the different areas of the game. As the only country in the world it can hire two political advisors of the "silent workhorse" type, where other countries only get access to one or even zero. These advisors grant a further +15% political power gain each, or +30% gain each in real terms after the obligatory national focus cost has been accounted for, further increasing Germany's political power advantage. In short, Adolf Hitler's leadership bonus gives the German Reich a resource advantage throughout the whole of the political system that I will describe further in this chapter.

There is no other way of interpreting the mechanical impact Hitler has than as a positive characterisation of his leadership. This becomes even more clear when comparing Hitler to other in-game leaders: Roosevelt's effect on the US is simply a penalty on diplomatic relations with Germany, which has essentially no impact as those two countries usually end up at war anyway, while Stalin and Mussolini both have zero mechanical impact on their respective countries. In fact, most country leaders in the game do not have any traits. The game portrays Hitler as a uniquely good leader, and this portrayal is not ludicrously motivated, but instead an attempt at an accurate representation of his leadership motivated referentially.

¹ See chapter 3.1.2 for more on the economy.

It's not certain that a characterisation of Hitler that can be boiled down to "better than most other leaders" is so accurate, however. As an alternative to this representation one could read *Blitzed: Drugs in the Third Reich* by Norman Ohler. It describes, based on careful research, how Adolf Hitler was addicted to drugs, and how this addiction kept worsening as the war dragged on (Ohler, 2017). The way Hitler is portrayed in *Blitzed* is to a large degree based on first-hand accounts and the diary and log of Hitler's personal doctor. It is an account of a Hitler that is erratic and increasingly removed himself from the rest of Germany's leadership as his addiction to a cocktail of drugs, that included a form of heroin, worsened. The book provides evidence that Hitler was in cognitive decline throughout the Second World War, and that he was not able to competently and reliably manage the situation he had put his country in.

This is not to say that Hitler's drug addiction needs to be represented in *Hol4* for the game's characterisation of Hitler to be balanced and defensible. It's hardly possible to capture the complexities of a historical figure that is so heavily mythologised and extensively studied as Hitler in a single gameplay trait. We see here how not even a game as intricate and detailed as *Hearts of Iron IV* is not able to capture the full complexity of a historical situation such as the Second World War. Certainly, Hitler's drug addiction could be included somehow. Perhaps his bonus could decrease as the war dragged on, eventually deteriorating into a reduction in political power gain to represent his eventual absence from leadership. But this would remain a simplistic reduction of Hitler as a historical figure.

For example, there is a separate interpretation of Hitler as a historical figure that would still not be included in such a representation. This is the understanding of Hitler as a leader who, by excessive intervention into the strategies of his military leadership, caused the German army to make multiple military blunders throughout the war. As an example of this interpretation I will use a Historynet article written by history professor Jim Lacey, titled *Hitler's Greatest Blunders* (Lacey, n.d.). The article lists "Fails to Take Moscow", "Overvalues Stalingrad as a Target", "Reinforces Africa Korps Too Late" and "Hesitates at Normandy" as some of the blunders it argues Hitler made. How clever Hitler's strategic decisions ultimately were can be argued to no end. Was he right or wrong in deciding that the USSR's oil fields in the south, which would provide much needed fuel for the German war machine, was a more important priority than capturing Moscow? It's difficult to say with any degree of certainty.

Regardless, these strategic decisions are a part of Hitler's persona that is inherently impossible for *Hearts of Iron IV* to properly represent, because it is integral to *Hol4*'s gameplay that such

strategic decisions are left to the player. Forcing the player to make certain strategic decisions to make some statement as to Hitler's strategic decision-making would run counter to the fundamental play activities of the game. Some aspects of Hitler's leadership, and thus of the Second World War at large, then, simply cannot be included in a videogame such as *Hoi4*, and its representation of WW2 will by necessity be incomplete. This isn't necessarily problematic, as any player of *Hoi4* will be aware that they, and not the historical figure of Hitler, are the one making the strategic decisions in-game, and therefore that the outcomes of those decisions are a consequence of their play and not of Hitler's actions.

Ultimately though, the representation of Hitler's leadership that is present in *Hoi4* is a simple reduction to it being "uniquely good" – conferring a rare +25% political power bonus. In my view, while simplification of his leadership is an absolute necessity, this specific simplification can hardly be justified on historical grounds. That Adolf Hitler, throughout the whole war, even at the peak of his drug-induced issues and detachment from reality, and in spite of the vast series of mistakes some historians argue that he made, was a more effective leader of Germany than, for example, Franklin D. Roosevelt ever was of the United States, is at best a dubious historical claim. On these grounds I would argue that *Hearts of Iron IV*, in its game mechanical representation of Adolf Hitler, takes an undeservedly positive view of his leadership.

The Nazi elite

As for the other leaders, unlike with Hitler, their effects in terms of game mechanics are founded more in ludic motivations than realistic ones. They represent an avenue for configurative play open to the player. In fact, their effects are largely the same as the effects of leaders available to other countries. Many countries have access to a "Silent Workhorse" (though rarely two), a "Backroom Backstabber", an "Armaments Organizer", or even a "Fascist Demagogue", granting the same bonuses as these Nazi leaders do, but simply re-flavoured with different names and portraits. It is up to the player to decide when they will spend resources on hiring these leaders, and then which leaders to hire for the limited slots available. The fact that only three political advisors can be hired speaks to the ludic motivation underlying their inclusion. In reality, all of these political advisors were working for the National Socialist government, but in *Hoi4* their primary purpose is to offer decision-making alternatives to the player.

The ludic intention behind their representation makes them a less direct portrayal of Nazi leadership than Hitler is. Hitler offers a +25% political power bonus because he is Hitler,

distinct from other country leaders. Rudolf Hess offers a +15% political power bonus because he is Germany's silent workhorse, identical to silent workhorses in other countries. When hiring Rudolf Hess is not a decision made on the grounds of who he was as a historical figure, but is instead a strategic decision where the player wants to increase his political power gain by hiring an advisor of the silent workhorse type. As such, the function and meaning of the gameplay traits of the rest of the Nazi leadership is fundamentally different from Hitler.

However, three things among the leaders in Table 4 are distinct from other countries, and I would note those differences as presenting a view on what was unique about National Socialist governing. First, as I have already mentioned, there are two "Silent Workhorses", potentially granting a higher political power gain than other countries. Second, Joseph Goebbels is both a "Fascist Demagogue" and a "Propaganda Master". It is rare for a political advisor to be of two types at the same time, and this means that he grants both the +0,10% daily fascism support as a "Fascist Demagogue" and +10% war support as a "Propaganda Master". In short, he is a two-for-one political advisor. Finally, Germany has a Military Theorist who, in addition to the normal army experience gain and land doctrine research speed bonuses, grants an extra bonus to Armor speed, and they have an "Armor Genius" in Erwin Rommel. These two bonuses combined gives the German Reich a unique set of bonuses for their tanks. Added together, these bonuses could be said to portray the German Reich as a country with a politically effective leadership and a formidable ability for armoured vehicle offensives.

The argument that the representation of these leaders portrays the German Reich with a particularly political effective leadership should be moderated somewhat, however. The representation of these leaders is overwhelmingly ludically motivated, allowing for configurative, and to a lesser extent focussed on representation of history. While the differences between Nazi leadership and the leadership of other countries in the game does speak to this, it is worth bearing in mind that these differences are diminishingly small. Generally, the leaders are mechanically identical across countries, just with different names and portraits. One should be cautious in reading too much into small differences, and as such I would here conclude that the representation of Nazi leadership hints at a more politically effective leadership, through minor differences, but that idea isn't expressed particularly clearly.

Laws

There are three laws in *Hearts of Iron IV* that can be changed by the player. These are the conscription law, denoting what percentage of the population is available for recruitment, the

trade law, denoting what percentage of the country's resources are exported, and the economy law, denoting to what degree the economy is mobilised for war. The base rate cost for changing a law is 150 political power, and they are changed in the same screen where the leaders I have just described are hired. This means that in practice the laws are almost indistinguishable from governmental leadership as a part of gameplay – it is interacted with in the same menu and at the same cost. With very rare exceptions the laws available are the same for all countries. Germany does not have any unique laws.

The player's ability to change laws is heavily affected by their country's ideology. Of the four ideologies in the game, democracies are the most restricted in how they can change their laws, and fascist and communist countries are the freest, with non-aligned countries falling somewhere in the middle. Generally, the democracies need to see high world tension or be at war before they can increase conscription significantly and mobilise their economy, while fascist and communist countries can do this at any time. As a fascist country, the German Reich can increase its conscription laws and mobilise its economy early – building on the advantage it has in starting with a higher rate of conscription and mobilisation than any of the democracies. This speaks to an idea of National Socialist leadership as being more firmly in control of their country than democratic governments.

Table 5: "Mobilization of the workforce for war: U.S.A., U.K., U.S.S.R., and Germany, 1939/40 and 1943 (per cent of working population)" (Harrison, 1988, p. 186).

	Year	Group I industry	Armed forces	Total war- related
<i>U.S.A.</i>	1940	8,4	1,0	9,4
	1943	19,0	16,4	35,4
<i>U.K.</i>	1939	15,8	2,8	18,6
	1943	23,0	22,3	45,3
<i>U.S.S.R.</i>	1940	8	5,9	14
	1943	31	23	54
<i>Germany</i>	1939	14,1	4,2	18,3
	1943	14,2	23,4	37,6

To contextualise this in-game portrayal of these various ideologies, Table 6 shows the level of mobilisation in the workforces of different great powers at the beginning of WW2 and in 1943. First, the “Armed forces” column does map quite neatly onto how conscription is presented in-game. It is easy for the Soviet Union to reach a conscription rate above 5%, and Germany generally reaches 5% (relatively close to 4,2) before 1939. The UK, on the other hand, is generally restricted to a conscription rate of 2,5%, while it is hard for the US to increase its conscription rate above 1% early on. These differences essentially disappear after the war breaks out, as all countries are freely able to continually increase their conscription laws. The similarity between the real-world conscription rates in the different countries and the conscription rates that are generally reached in-game speaks to a design philosophy behind *Hearts of Iron IV* that heavily weights historical accuracy.

When it comes to the mobilisation of industry, however, things are more complicated. There will be a deeper delve into the economic differences between the countries in chapter 3.1.2, but here I am interested in looking at the level of political control over the economy. In short, the way in which political control over the economy is presented in *Hearts of Iron IV* is such that the wide-ranging authority of totalitarian regimes makes them able to mobilise for war more quickly, while democracies are barred from mobilising effectively until they are actually at war, presumably because they need some degree of popular support. However, the final level of mobilisation (“Total Mobilization”) is harder for fascist countries to obtain because this law gives a heavy penalty to available manpower that needs to be mitigated by introducing women into the workforce, something fascist countries can only do if parts of their homeland are occupied by the enemy. Democracies can easily introduce women into the workforce, which means that they can enter Total Mobilization with little penalties if they are at war.

Table 7 offers some data for the historical context of this representation. Group I industry was a term the British adopted that referred to all war-related industries. This statistic can therefore be compared to *Hearts of Iron IV*'s economy mechanics, where the percentage of the economy that is mobilised for war is of critical importance. Using the percentage of the population that works in Group I industries is a better point of comparison than the percentage of GNP spent on the military because it captures the on-the-ground reality of the respective economies. Throughout the early 40s, Germany's military spending as a percentage of GNP actually skyrocketed, but, as Harrison notes:

The German failure to expand Group I employment as a whole is in striking contrast to other countries' success, and also to Germany's outstanding record of mobilization of her national income. This paradox must correspond to the fact that increasingly the bulk of Germany's war finance was going to finance a privileged and bloated contingent of military personnel, at the expense of its equipment and industrial supply (Harrison, 1988, p. 187).

In other words, Nazi-Germany did fail to mobilise their workforce for war in a way that corresponded to their enemies. This was not really because of a failure to employ women, who were employed at a higher rate than British women throughout the entirety of the war (Hancock, 1994), but instead because so much of their military spending went into the pockets of their privileged military leadership. According to these statistics, the fact that Germany failed to direct funds to military industrial output because the money was pocketed by their personnel was a severe inefficiency in their political system that crippled their ability to mobilise their economy for war, and it speaks to the National Socialist government actually having less control over where money they spent ended up than democratic and communist regimes.

Now, it is not necessary for a game like *Hearts of Iron IV* to capture every nuance of the historical realities of the period. Differences between historical data and in-game mechanics can be justified as necessary for game balance or streamlined gameplay, important concerns when it comes to game design. However, when analysing the representation of Nazi-Germany in *HoI4* as it is, one should note the discrepancy between the level of political control the German Reich has over their economy in *Hearts of Iron IV* and the level of control they had in reality. There is a notable difference between the way in which *HoI4* presents the German Reich as directly in control of their economy, able to mobilise it more effectively than the UK by 1939 even though the UK in reality was slightly ahead in Group I employment at that time, and how the real-life Nazi-Germany was hampered by a self-serving elite that kept an ever increasing percentage of their military funds for themselves.

When boiled down, then, the representation of Nazi-Germany's economic stewardship in *Hearts of Iron IV*, as compared to other countries, is more favourable than the historical data would suggest. This discrepancy could be chalked up as ludically motivated, striving to create game balance. This thesis will discuss the idea of game balance relating to the game's economies in chapter 3.1.2. For now I would note that the way in which political economic stewardship is represented in the game cannot be seen as only ludically motivated, because it extensively strives to create a representation of 30s and 40s economics and politics that is recognisable in historical data. As such, the overall system of laws in the game is driven by a

realistic motivation, but then due to ludic motivations, as will be discussed in the later chapter, the discrepancy in management and efficiency deviates from historical data. This means that different aspects of the same mechanic have different motivations, complicating what the mechanic communicates when all those aspects are put together. The realistically motivated devices communicate something quite historically accurate, but the ludically motivated aspects of the same devices causes inaccuracies in that historical representation.

Laws and government: simplified in the National Socialists' favour

Taking all of these aspects of the German Reich's in-game government into account, the end result is a portrayal that arguably gives too much credit to the National Socialist leadership. As I have demonstrated, the way in which Hitler is presented in the game is unequivocally positive, something that doesn't necessarily stand up to scrutiny when it comes to historical accuracy. The justification for this representation, then, needs to be something else than an appeal to historical realism, but this one-sided presentation of Hitler is not really integral to gameplay. It can hardly be said to be motivated by anything other than being referential to the historical figure of Adolf Hitler, and therefore it is as a representation of Hitler that it should be evaluated. This is unlike the representation of other Nazi leaders, which is, in my view, essentially neutral, as their inclusion is predominantly ludically justified and they are merely presented as variations of the same types of leaders that all countries have.

The laws, though – the economy laws in particular – again give too much credit to fascist governments. It is a lot easier for fascists generally, Germany included, to militarise their economy than it is for democracies such as the UK, even though this, unlike a lot of other aspects of the game, contradicts historical data. Of course, this is a simplification for purposes of gameplay, as is the representation of Hitler, but in a game that goes to such painstaking lengths in trying to represent history accurately – to such an extent that it is even possible to directly compare in-game mechanics to hard historical data – the precision of their simplifications matter. It is easy for players to read the game as a historical document, because with cursory knowledge of the fact that many of the game mechanics in *Hoi4* are tied to historical facts, players are likely to read the game as a somewhat trustworthy interpretation of history. By striving for such a historical, rather than abstracted, portrayal of the Second World War, the game should shoulder the responsibility that comes with this design choice.

In this representation of Nazi leadership it is easy to see an appeal for the neo-Nazi community described in chapter 1.3.1. Now, this is not to say that the game's overall representation of Nazi-Germany, when taken together, paints a positive picture of them. There are many more

devices, units of meaning, that contribute as building blocks in creating the game's representation of that country in that historical time. However, a player might choose to emphasise what is communicated by certain devices and ignore what is communicated by others, depending entirely on their pre-inclinations. A neo-Nazi player can play *Hearts of Iron IV* and place a lot of emphasis on the perceived superiority of their political leadership in the game but ignore the implications of other mechanical and aesthetic design choices. Therefore, this aspect of the game's representation of Nazism, which on balance is positive, speaks to the appeal the game can have with white supremacists, while at the same time it does not necessarily mean that the sum of the game's representation of Nazism is positive towards that ideology. To work out the sum of the game's representation requires further analysis of more devices.

National focuses: a preset narrative for the German Reich

The national focus trees serve multiple functions at the same time, and understanding those functions is crucial to understand their effect in terms of representing Nazi-Germany. The motivations behind the national focuses as a device within the game are ludic, compositional and realistic (Van Vught, 2016, pp. 40-41). They are arguably also transtextual, in that they are essentially 'tech trees' for politics (*HoI4* also has conventional tech trees representing science), and tech trees are a genre convention in strategy games (Ghys, 2012). Their ludic and compositional functions are tightly interwoven. Essentially, they offer to the player a range of options for courses of action that the player can take, several of which are mutually exclusive options – aka configurative play – but these courses of action are organised in a tree that structures the order in which they can be taken. Because many of the national focuses represent crucially important, game changing events, the way in which the focus trees are structured serves an integral compositional function in structuring the game's narrative. Their realistic function lies in the fact that they, as most parts of this games do, refer to real historical phenomena. In summary, then, the national focus trees allow the player to manoeuvre real historical events, through interactive play, in a way that is structured compositionally to give the game a certain narrative structure.

Additionally, the national focus trees are the one element in *Hearts of Iron IV* that is the most different between countries. All major countries, and many minor ones, have completely unique focus trees that are tailored to their history and political situation. This is distinct from the tech trees, for example, which are largely identical. Many of the most important decisions a player makes in charting out a direction for their country is made in the focus tree. Early in

the German focus tree, for example, there are two mutually exclusive focuses called “Remilitarise the Rhineland” and “Oppose Hitler”. Choosing the first leads down the somewhat historical path of aggressive expansion, which is the one of relevance to this thesis, while the second option triggers a civil war where the player controls the side rebelling against Hitler. Winning the civil war leads to an alternate-history Germany that has been able to rid itself of Nazi leadership by the mid-to-late 30s.

Figure 3-1 shows the sub-branch of territorial expansion that follows from having taken the “Remilitarise the Rhineland” option. Here one can see how a lot of the historical narrative of *HoI4* is baked into the focus trees. This branch starts with “Anschluss”, whose flavour text offers an example of the game semiotically describing the Nazi’s aggressive expansionist tendencies:

The Anschluss, or union with Austria, is a long-held goal of the German people. Although forbidden by the Treaty of Versailles, the time has finally come to bring it about. Let us offer the Austrians a chance at sharing our glorious destiny!

Following the union with Austria (or, rather, annexation of Austria), a wide array of options are opened up to the player. For example, one can demand Sudetenland, which leads down a path where one eventually seizes control over all of Czechoslovakia, as Nazi-Germany historically did. The player can “Demand Slovenia”, then go down a path of either annexing Yugoslavia or sharing it with Italy. The “Reassert Eastern Claims” focus claims Memel for Germany and can be followed by the “Danzig or War” focus. In almost all historical *Hearts of Iron IV* playthroughs, it is Germany completing the “Danzig or War” focus that triggers the outbreak of the Second World War, as this almost always leads to Germany’s invasion of Poland, with Britain and France quickly taking Poland’s side.

The focus tree, then, is an avenue where one can investigate not just how the game understands the German Reich at game start, but throughout the period from 1936 to roughly 1945. Compared to other countries, the German focus tree is heavily littered with aggressive focuses centred on conquest and expansionism. Comparatively, then, Nazi-Germany is portrayed as an aggressive, expansionist country. Interacting with Germany’s focus tree is to a large degree an exercise in deciding which places to conquer in what order – albeit with several focuses geared towards preparing to conquer land also present. The focus tree presents the policies pursued by the National Socialist government as being largely expansionistic, militaristic policies. Many focuses expand the German Reich in terms of territory, which comes at the

opportunity cost of having fewer focuses that improve the efficiency of their economy. This might on its face seem like a fair representation of late 30s and early 40s Germany.



Figure 3-2: The sub-branch of Germany's focus tree that focuses on territorial expansion.

Many of the territorial expansion focuses require a certain number of men to be fielded in Germany's land army, starting at 500 000 for Anschluss, increasing to 750 000 for the various intermediate focuses, and ending at a 950 000 requirement for the Danzig or War focus that

normally triggers WW2. For the player playing Germany, this means that in the early parts of the game they will be rushing to put as many soldiers in the field as possible, with specific targets that they need to hit in order to be able to expand effectively. The fact that fielding more troops allows for very easy early expansion certainly guides the player towards rapid mobilisation. This Anschluss sub-branch is also a very large part of Nazi-Germany's focus tree, so not hitting those land army size requirements relatively quickly can be quite self-defeating. In short, these requirements help make military mobilisation one of the most important goals for a German Reich player. This even further strengthens the view of Nazi-Germany of the late 30s as a country heavily focussed on military mobilisation.

There are other diplomatic actions that can be taken through the focus tree, however. It is not all annexation and conquest. In Figure 3-3 there are options befriending Czechoslovakia instead of annexing their land, or trading Slovakia for Danzig with Poland in order to befriend them rather than invade. There are also focuses for allying Italy and Spain. These might not be necessary to take, as alliances can be achieved through the diplomacy menu, and those countries also have their own focuses for proposing an alliance to Germany. Elsewhere in Germany's focus tree there are focuses for diplomatically approaching the Soviet Union, such as a specific research agreement which allows both countries to get ahead of everyone else in tank research, and of course the Molotov-Ribbentrop pact where the two countries enter into a non-aggression agreement where they share Poland. Taking this focus ensures that once Germany conquers Poland, half of it is immediately ceded to the USSR. Finally, there is a focus for proposing an alliance with the Soviets, although this is much more rarely taken in play than the other two. One can see from focuses such as this, and other alternate history paths, that the focus tree are not simply forcing players to follow a preset historical narrative, but instead does offer quite a few other options from which the player can choose. The German Reich does not need to be uniformly aggressive – though aggressiveness is incentivised, and if one is to complete Germany's focus tree it is inevitable to reach some aggressive focuses.

As I have noted, the sum of internal economic improvement that can be achieved through Germany's focus tree is not as large as the improvements many other countries, such as France and the United States, can make. However, Germany does not start with the same crippling economic penalties that those countries do, so they arguably do not need the same kinds of focuses that improve the state of their economy. A lot of the economic "improvements" other countries are granted from focus trees are, after all, reductions of penalties. Additionally, the German economy expands quite a bit with all their territorial expansion. This is in other words

a difference from other countries, but it is debatable whether it represents a real drawback. The German Reich does stand at an economic disadvantage when compared to the United States and the Soviet Union, which I will come back to later, and the German focus tree is not as heavy on explicit economic improvement as all of their enemies, but this doesn't necessarily make the focus tree an important part of their economic shortcoming.

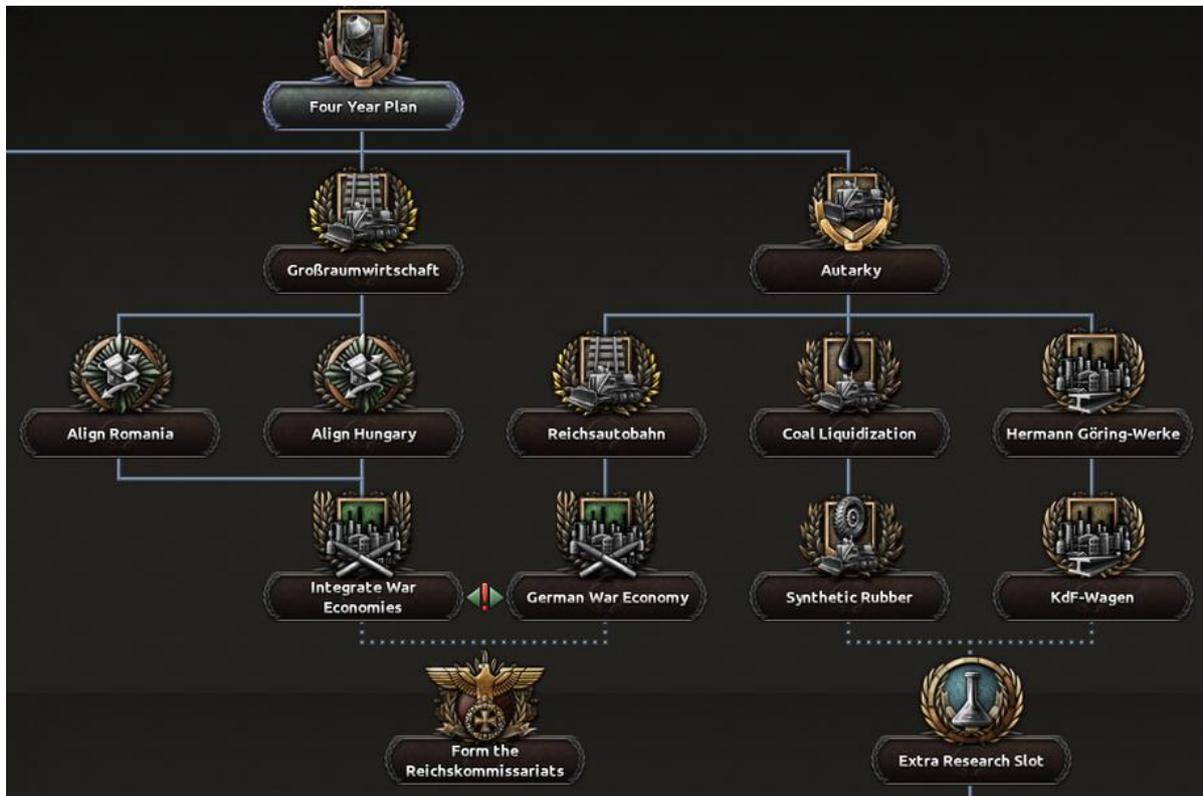


Figure 3-4: The Four Year Plan economic branch of the German focus tree.

There are two unique aspects to the German economic branch worthy of discussion. First, even in this section of their focus tree which is so littered with industrial and research focus, there has been made room for expansion focuses. These are very diplomatic in nature, though. In short, the “Align Romania” and “Align Hungary” focuses make those two countries more receptive to diplomatic requests from Germany and help shift them ideologically towards fascism. After taking these focuses it becomes a lot easier for the German Reich to form alliances with those two countries. Then, the “Integrate War Economies” focus makes Romania and Hungary puppet states of Germany if they are allied. These focuses in other words give the player a cunning way of expanding Germany by gaining two puppet states. This means that a large part of the more economically oriented section in the focus tree also contains important territorial expansion.

Additionally, the “Coal Liquidization” and “Synthetic Rubber” focuses give a huge research boost to synthetic refineries, a +2 rubber output to all synthetic refineries, and a free synthetic refinery to boot. Taken together with the opportunity to puppet Romania, which has huge oil reserves, these focuses can essentially be viewed as a way of addressing the shortfalls of the German Reich’s economic situation in the same way other countries reduce the explicit penalties they suffer at game start. As I will cover later Germany has a significant natural resource disadvantage, and here the player is offered some means of addressing that disadvantage. While the national focuses help structure the narrative of the game, what they are meant to represent is, after all, political action taken by the different countries. It is therefore natural that the different national focus trees offer ways that a country can, politically, address its main challenges.

In addition to these parts of the national focus trees that I have covered in some detail, Nazi-Germany can also pursue branches that improve their army, airforce and navy. While I will not delve as deeply into these parts of the focus tree, I will note that the army and airforce parts of the trees speak to these areas being a distinct strength of the German Reich, and as such they do not contain significant improvements meant to make up for clear weaknesses. The navy tree, on the other hand, recognises that Germany is at an immense naval disadvantage in the game. On its own Germany has virtually no navy, and even with the Italian, Japanese and, if they’re lucky, part of the French navy on their side, they are still severely outmatched by the US and British navies. The question posed to the player in the navy-oriented part of the focus tree, then, is what strategy to adopt in order to make up for this disadvantage. While it is possible in the game to invade the UK by having air superiority, perhaps bombing their navy in the English Channel or fly paratroopers across it, such an airforce based strategy is a lot harder to accomplish against the United States. Getting past the US navy in order to invade their American homeland is perhaps the biggest challenge facing a German Reich player.

The focus tree presents a lot of the big decisions a player must make during the course of the game, and as stated is the aspect of the various countries in *Hol4* that is the most different. Germany’s focus tree speaks to the German Reich being an expansion-oriented country, allowing them to expand into every single neighbour they have on the map at the beginning of the game, and even further after that. The focus tree also points the player in the direction of addressing some of the disadvantages Germany faces against their enemies, but it does not in and of itself solve those challenges. Finally, I would note that unlike a lot of the Western democracies, Germany’s focus tree gives it an incredibly active role in the game. When

French, US and UK focuses are locked behind prerequisites, those prerequisites are out of the player's control, meaning the player must wait until other countries have taken certain actions. Germany's most important prerequisite is how many soldiers they have in the field, giving the player agency over when those prerequisites are met. It is also the speed at which Germany moves through their "Anschluss"-tree, and when they eventually take the "Danzig or War" focus, that determines when the entire world war breaks out. This is of course consistent with the way in which the real start of World War 2 was driven by aggressive action taken by Nazi-Germany. In a videogame, though, this difference becomes a question of player agency. A *Hearts of Iron IV* player is given more liberty in shaping the overarching narrative of the entire game when playing the German Reich than when playing democratic France, Britain, or the United States.

Decisions, national spirits and MEFO Bills

The "Decisions" are a political mechanic that comes in addition to laws, government, and national focuses. They are somewhat similar to national focuses but lack the compositional element as they are not structured in a tree. Additionally, the vast majority of the "Decisions" available to different countries in *HoI4* are identical. In my view, when things are exactly identical between *HoI4* countries, they say little about Nazism specifically and are of little relevance to my thesis. Therefore, I will not dwell on the vast majority of the decisions in the game further than noting that, because of its leadership, the German Reich for the most part has a larger income of political power than other countries. Because taking "decisions" costs political power, this allows them the option to take a lot more decisions than their rivals.

National spirits, however, are essentially static modifiers a country has that are highly specific to each individual country. For example, the US has "The Great Depression" as a national spirit, giving heavy economic penalties. Germany's national spirits at game start are "Bitter Loser", "General Staff" and "MEFO Bills", and each speak to a particular view of the German Reich. The description of "Bitter Loser" is "Bitterness over defeat in the Great War dominates the politics of this nation", and its effect is a +50% ideology drift defence. This means that the ideology of the country is less likely to drift away from the dominant ideology (fascism) than what is the case in other countries. The "General Staff" national spirit represents competence and high level of organisation among the German general staff, giving a +5% to division organisation and a +25% planning speed. These are decent military buffs, and the view here, then, is that the German military at this time was unusually well organised.

Finally, we have “MEFO Bills”. MEFO bills is at the same time both a national spirit and a decision. More precisely, it is a national spirit, and there is an ongoing decision as to whether one wants to maintain that national spirit or end it. It is described as follows by the game:

MEFO bills were promissory notes created by Hjalmar Schacht to enable the government to fund rearmament, acting through the balance sheet entity Metallurgische Forschungsgesellschaft to hide this rearmament from French and British eyes. These bills must be extended for six-month periods, or their recipients will have to be paid when they fall due (Paradox Development Studio, 2016).

The economic benefits of the MEFO bills are relatively strong – a reduction in factories spent on consumer goods and a +25% increase to construction speed for a wide range of buildings. I will come back to the economic importance of this national spirit in the next chapter. The cost, however, is also significant. At the start of the game, MEFO bills maintenance costs 0,20 political power per day. Every 180 days, if the MEFO bills are renewed, this cost increases by 0,15. The cost can be reduced by 0,10 by some national focuses, namely “Anschluss”, “End of Czechoslovakia” and “Fate of Yugoslavia”. This represents the German state grabbing gold from these newly annexed countries to pay off some of their debt. These possible reductions are far lower than the ongoing increases, however, which means that the MEFO bills upkeep will eventually grow to temporarily offset the political power advantage that Germany gets from its leaders.

This is only temporary, though. When the German Reich enters a war, the MEFO bills national spirit is immediately removed - the industrial benefits of it are gone and the political power advantage is regained. After the war a new national spirit, “MEFO Bills due”, appears, representing the fact that it is now time for Germany to pay their debt. This costs -130 political power and increases the number of factories spent on consumer goods by +20% for 170 days. Alternatively, the player can at any time before the war take the decision to stop the MEFO Bills renewal. This immediately replaces the MEFO Bills national spirit with MEFO Bills due. This is an alternative for a player who would prefer a higher political power gain over the industrial bonuses from MEFO Bills and is willing to swallow the heavy consumer goods penalty for 170 days to get there.

MEFO Bills is an interesting mechanic, highly unique to the German Reich. It offers an illustration of the fact that the intense militarisation of Germany during the 30s did come at a cost. Additionally, it incentivises a German rush to war. How long it takes for the MEFO bills upkeep to start outweighing the benefits is a judgement each player has to make for

themselves, but seeing as the cost keeps increasing continually until the national spirit is removed means that eventually it will drive Germany's political power gain down to zero. One can choose to remove this modifier before the war but losing 20% of civilian factories for 170 days is a big economic cost to pay at the time during which all countries, and especially Germany, are trying to mobilise. Rushing to war allows the German Reich to rid itself of the MEFO bill upkeep while deferring the cost of repaying the debt until after the war, when such economic penalties probably won't matter. The game is probably over at that point.

The MEFO bill mechanic helps bring some nuance to the game's representation of Germany's pre-war economy in a way that is integrated as interactive play. It presents a trade-off for Germany's militarisation. It incentivises conquest and war. Additionally, it portrays the National Socialist government as dishonest and manipulative through its descriptive text. It takes some edge off the seemingly neat efficiency that pervades through the rest of Germany's in-game economic management by portraying what is effectively a rapidly growing debt. While this mechanic does not in itself righten the wrongful impression of Nazi efficiency in mobilising their economy that they are granted by their free ability to change economy laws, it helps somewhat challenge the arguably undeserved narrative of National Socialist leadership as strictly positively efficient.

Summary: The Politics of the German Reich

By employing a neoformalist approach to the politics-related game mechanics of *Hearts of Iron IV*, one can see that virtually every single aspect of the game's political gameplay is to some extent motivated by an "appeal to notions of the real world" (Van Vught, 2016, pp. 40-41). They all refer to some aspect of Nazi-Germany's politics. Consequently, they are integral building blocks in constructing the game's total representation of Nazism. The sum total of the various elements I have discussed in this chapter does, in my view, essentially boil down to two core messages being sent about the nature of Nazi-Germany:

First, the mechanics present Nazi leadership, and Hitler in particular, as competent and efficient, and they present their control over the internal workings of their country as absolute in a way that, as I have argued, does not accurately mirror reality. Omitted are the challenges with Hitler's leadership and the fact that vast amounts of their increased military spending went straight into the pockets of privileged war profiteers. The takeaway a *Hoi4* player could have from this, then, is that when compared to other countries, many of which have some economic penalties at the beginning of the game, the Nazi government of Germany did a better

job of managing their economy. This would be an inaccurate view of history, but it is the one presented by the game.

Secondly, the political incentives and opportunities available to a German Reich player presents the country as heavily expansionistic and aggressive. This is a fair assessment of the foreign policy of Germany in the late 30s and early 40s. However, when looking ludically at it, the active role Nazi-Germany had probably has a lot of appeal to a videogame player. When playing as the German Reich, after all, one is the most active country in Europe, setting the terms for a lot of international politics, including the breakout of the World War itself. In contrast to this, the conventional gameplay trajectory of democratic countries such as France, the UK and the US might seem more passive and consequently a lot less interesting. Now, these other countries do have a vast array of options for configurative play, and there are many possible ways in which a player can deviate from history and take a more active role playing as them. Additionally, the challenge preparing for inevitable war with Germany and try to defeat them quicker than what occurred in real life – perhaps without France falling – might also be appealing gameplay to some players. However, the active role of Nazi-Germany is perhaps the most explicitly clear one in-game, encoded within the “historical” focus tree as it is. Ultimately, then, the political mechanics in *Hearts of Iron IV* present Nazi-Germany as efficiently and competently run, and expansionistic in a way that might appeal to players seeking an active play session.

3.1.2 Resource management

“The Economy, Stupid!”

Unlike in strategy games such as *Europa Universalis IV* (Paradox Development Studio, 2013), *Civilization VI* (Firaxis Games, 2016) or *Total War: Rome II* (Creative Assembly, 2013), there are no finances to manage in *HoI4*. There is simply no direct representation of money. Instead, a country’s economy is abstracted entirely as their ‘industrial capacity’, which is measured by the number of factories it has available for construction and production. Industrial capacity is one of the most important signifiers of the relative strength of countries in *HoI4*. Military factories and dockyards produce equipment, airplanes, and ships, while civilian factories construct new factories and other buildings, and can also be used to import resources. A large economy will be able to grow exponentially, as constructing more civilian factories allows for faster construction of even more factories. The country with the most factories will be able to produce the most infantry equipment, artillery, tanks, fighters, bombers, destroyers, and

submarines. Consequently, having the largest industrial capacity is often what wins wars in *Hearts of Iron IV*. As an abstraction of the countries' economies, it is industrial capacity that represents the relative economic strength of the different nations in the game. Comparing the industrial capacity of Germany to other countries therefore gives us an idea of how the game understands the economy of Nazi-Germany.

At the beginning of the game, the United States technically starts with the largest industrial capacity, measured in the number of factories within the country. However, most of this capacity is locked behind two heavy penalties: one is "The Great Depression", a modifier meant to represent, well, The Great Depression, and that it takes years for the United States to gradually get rid of. Additionally, the US starts with an economy law called "Undisturbed Isolation". The economy laws represent the degree to which the economy of the country is militarised. There are no in-game benefits to having a civilian economy. "Undisturbed Isolation" is not only the least militarised economy law in the entire game, it is also unique to the United States, and it takes years before the US is able to upgrade to a militarised economy. Most of these things also apply to the other major democracies, the United Kingdom and France, albeit to a slightly lesser extent.

There are two key aspects to these debuffs to the US economy at game start. First, in virtually all countries in *HoI4*, a certain percentage of civilian factories are used to produce 'consumer goods', which are essentially any non-military related goods. Having a high number of civilian factories producing consumer goods confers zero bonuses, so in terms of game mechanics, consumer goods represent a straight penalty to industrial capacity. The percentage of civilian factories spent on consumer goods is reduced politically by militarising the economy. It's easier for fascist or communist countries to militarise their economies than it is for democracies. As I have mentioned, the US have a uniquely low level of militarisation at game start. However, the democratic countries generally start with more factories than the totalitarian ones.

Comparing the US to Germany offers a prime example of this. Germany starts with 32 civilian factories, 16% of which are spent on consumer goods because their economy is relatively mobilised at the outset, leaving them with 23 factories for constructing buildings and trade. The United States, on the other hand, starts the game with 128 civilian factories, but 76% of them are tied up in producing consumer goods, leaving the player with 24 factories. It's not until the United States eventually mobilise their economy, reducing their consumer goods

penalty to a level comparable to Germany's, that their industrial strength starts having an effect.



Figure 3-5: Germany's construction menu at game start, with 9 factories spent on consumer goods, 1 spent on trade, 15 spent constructing civilian factories, 7 spent on military factories, and dockyards queued up.

Not only does Nazi-Germany start the game at “Partial Mobilization” and are quickly able to upgrade to “War Economy”, but even though Germany in reality was among the countries hardest hit by the Great Depression, they have no “The Great Depression” debuff in the game. Instead, they have the “MEFO Bills” modifier described in chapter 3.1.1. In short, this provides a bonus to factory construction at an ongoing monthly cost of political power. The different economy laws and bonuses between Germany and the US means that when Germany has upgraded to the “War Economy” law, their aforementioned 16% of civilian factories wasted on consumer goods is reduced to 11%. In addition to this, the US has a -35% construction speed penalty to constructing any new factories (when summarising all total penalties and bonuses), while Germany has a +5% speed bonus to constructing civilian factories and a +50% speed bonus to constructing military factories. This discrepancy means that Germany's industrial capacity grows quicker than the US' early on in the game. In turn, this early advantage means that Germany is better served rushing aggressively to war in order

to win before the Allies are able to mobilise their economies. It encourages an aggressive playstyle when playing Germany, with the opposite being true for the Allies.

All in all, Germany has a much larger percentage of their factories available at game start, they have bonuses instead of penalties to further construction, and they have the added benefit of usually being able to annex several of their neighbours before the war even begins, further expanding their economy. In short, the game portrays Germany's economy as of 1936 as more efficient, better run and with more potential for growth than the economies of the US, Britain, and France. If one were so inclined, this could be interpreted as a statement by the game that the Nazi regime was more competent than Western democratic governments, in line with the picture drawn by the political systems discussed in the earlier chapter 3.1.1.

Game balance

Before getting into considering the historical merits of these differences, it is necessary to address what is could easily be considered the main justification for these aspects of the countries' in-game industries, namely game balance. Game balance, the idea that "both sides [should] have the same likelihood of victory, given equal levels of skill" has been described as "the holy grail of game design" (Woods, 2004). In *Hearts of Iron IV* this would mean that the Axis and the Allies should have an equal likelihood of victory given equal skill. However, it is a historical fact that the US economy was larger than the German economy, so the game would lose some of its historical credibility if it did not represent this in some way. Therefore, the US starts with more factories than Germany. To address the issue of balance, then, Germany is more effectively able to utilise its fewer factories.

However, even with the heavy discrepancy in bonuses and penalties to the German and US economies, the game is still not perfectly balanced. When the US is able to get rid of its "Great Depression" debuff and militarise its economy, it usually becomes far stronger than Germany, and this discrepancy in power is even larger when considering the sum of the Axis coalition (including Japan) versus the Allies and Comintern. Late in the game, economic bonuses actually favour the Allies, because it is easier for them to introduce women into the workforce, which is a potentially significant boost to their economy. The Allies also control most of the natural resources in the game, unless the Axis are able to conquer the areas that contain those resources, which usually makes it easier for the Allies to produce larger amounts of military equipment. The bonuses/penalties at game start therefore don't so much balance the game as reduce the gap. Although, of course, it is possible in a sandbox strategy game for someone

playing Nazi-Germany to find ways of outpacing the US economy, or perhaps find a way of defeating the US before the US manages to mobilise.

While the ways in which the economies of the different countries in *Hoi4* are portrayed are in reality not precisely balanced in game terms, the portrayal does carry some merit in terms of historical accuracy. As we can see in Table 8, in the years leading up to the war Germany had the largest military equipment production in the world by far. However, the Allied countries, especially the US, rapidly scaled up their production of military equipment during World War 2 and completely eclipsed the output of Germany and Japan by the time the war ended. In fact, the US quadrupled its output from 1941 to 1942 and further almost doubled it from 1942 to 1943. This trajectory is quite similar to the one commonly seen in *Hearts of Iron IV* playthroughs, as I have previously described. It is a parallel between the game and the real war that Germany quickly finds itself severely outproduced during the early 40s.

Table 9: "Volume of combat munitions production of major belligerents, 1935-44 (annual expenditure in \$ billion, U.S. 1944 munitions prices)" (Harrison, 1988, p. 172). The numbers for 1935-1939 represent annual average expenditure.

	1935-9	1940	1941	1942	1943	1944
<i>U.S.A.</i>	0,3	1,5	4,5	20	38	42
<i>Canada</i>	0	0	0,5	1	1,5	1,5
<i>U.K.</i>	0,5	3,5	6,5	9	11	11
<i>U.S.S.R.</i>	1,6	5	8,5	11,5	14	16
<i>Germany</i>	2,4	6	6	8,5	13,5	17
<i>Japan</i>	0,4	1	2	3	4,5	6

I would argue, then, that *Hearts of Iron IV* to some degree deprioritises game balance in favour of historical accuracy. This results in a fairer representation of the relative strength of Nazi-Germany as compared to its enemies, as historically the Germans were severely inferior to the sum of the opposing coalition. Introducing game balance, while it might certainly be an important aspect of game design, as Woods makes clear (Woods, 2004), decreases the historical accuracy of the game's representation of World War 2. However, *Hoi4* does balance the conflict somewhat, out of concern for gameplay. The end result is that *Hearts of Iron IV*



Figure 3-6: Germany's production tab at game start. A higher number of military factories allows for greater output of equipment, which in turn allows for a larger and better supplied army. Note that Germany's lack of rubber decreases their production of Motorized equipment.

overvalues the economic strength of Nazi-Germany, but it does not overvalue it as much as a game with a strict adherence to game balance would.

The fact that the game is not strictly balanced, but actually favours the Allies, stands as a counterpoint to my earlier claim that the game overvalues the efficiency of the Nazi regime. If one were to only compare the specific way in which the different countries are able to make political changes and mobilise their economies, the result would be a portrayal that is favourable to the Nazis. However, taking the entirety of the economies into account, and putting this into a context where the game has to weigh game balance against historical accuracy, we see that the game does favour historical accuracy enough to forgo some game balance, and indeed portrays the Allies as ultimately economically superior to Nazi-Germany. This superiority is not portrayed directly as a strength of political leadership, but instead as an innate quality of the Allied countries: their economies are larger.

There is an implicit correlation in the game between which countries have the largest economies and which countries are liberal democracies that to some degree balances the more explicit way in which totalitarian countries control their economies much more directly. This leaves the economic aspect of the game heavily open to interpretation for the player: a player inclined towards a liberal democratic mindset might see the way in which those economies are stronger and take that as a representation of the economic superiority of democratic government, while a player inclined towards a totalitarian mindset might see the way totalitarian economies are more quickly mobilised for war and controlled directly by the player and interpret that as a representation of the economic superiority of totalitarian government. Taking this into account, then, the complex game mechanics of *Hearts of Iron IV* that represent politics and economy does not articulate a strong message either way, but is more of a blank slate that a player can easily project their own politics onto.

Logistics

You will not find it difficult to prove that battles, campaigns, and even wars have been won or lost primarily because of logistics.
- Dwight D. Eisenhower

In several ways, The German Reich has a logistical disadvantage to the Allies that reflects their historical challenges. For one, it is hard (though not impossible) for someone playing Germany to match the combined industrial output of the UK, the US and the USSR, even if including Japan and Italy into their alliance and assuming they are able to annex all of continental Europe quite quickly. As I have explained, lower industrial capacity means less

military equipment, which in turn means their army will be either smaller than the enemy's, poorly supplied, or both. The availability of military equipment flows directly from the underlying industry, which has been covered in the previous chapter on the economy. In this chapter, then, I will mainly look at manpower and natural resources. I will not be covering equipment, nor will I cover supply, as the supply mechanic is in my view of little direct relevance to the representation of Nazi-Germany in the game.

Manpower

Germany is at a huge numerical disadvantage in terms of manpower. Manpower is an almost entirely unrecoverable resource in *Hearts of Iron IV* which represents the amount of available able-bodied men that can be sent into combat. As a device, the inclusion of this resource is realistically motivated, in that it tries to represent the historical amount of able bodied men available for military recruitment in the different countries, but it is also ludically motivated in that the management of this resource is an important part of gameplay. Running out of manpower is a huge problem in *Hearts of Iron IV*, as running out of people to send to the frontlines means those frontlines eventually break down.

As a ludic device, manpower offers few interactive options on the supply-side: there is little a player can do to increase their supply of manpower. There is a slow, passive trickle of incoming manpower throughout the game, representing population growth, but this increase is negligible – as well as non-interactive. Occupying new territory does grant some manpower, but usually this is also tiny, because areas that are not considered “core” states in a country grant only a tiny fraction of their normal manpower. The main way of increasing manpower, then, is to change conscription laws. Through conscription laws one can increase the percentage of the population that is added into the manpower pool. Expanding conscription eventually comes at the cost of reduced industrial output as the country's economy presumably becomes starved for workers. It is therefore ideal to keep conscription laws relatively low, if possible.

I would draw the distinction here that expanding conscription does not grow the country's manpower pool in real terms, so much as increasing its access to a predetermined pool. This matters because it means that manpower must be thought of as a non-renewable resource. If 150 000 soldiers are encircled and killed in battle, then there is no way to actually recover those 150 000 lives in *Hearts of Iron IV*. That country's manpower pool is permanently reduced by 150 000, and although expanded conscription might compensate for this, the country's manpower is still 150 000 short of what it would have been without suffering that

loss. This is different from resources such as military equipment, which it is both possible to produce at higher rates than it is consumed and can be conquered from enemies, and factories, which can be retaken if lost, repaired if destroyed, and new ones are constantly constructed. I will come back to the unrecoverable nature of manpower later in the thesis, when I discuss how the enormous loss of human life during WW2 is represented in the game.

When it comes to Germany's manpower disadvantage, it mainly stems from the fact that the populations of the Soviet Union and the USA are far larger than Germany's, thus granting those two countries a much larger manpower pool than Germany has. As with the militarisation of the economy, Germany, and the US start with different degrees of conscription. Germany starts at "Limited Conscription", making 2,5% of its population available for recruitment, with the ability to move quickly to "Expanded Conscription" if desired, where 5% of the population can be recruited. This move is usually necessary because a lot of Germany's political focuses require them to have a certain number of soldiers in the field, as I have discussed in the earlier chapter on Germany's politics. The US, on the other hand, starts at the unique conscription law "Disarmed Nation", where only 1% of the population is available for recruitment, and it is not easy for them to increase that number early on.

Unlike the economic penalties, however, this discrepancy does not really represent a significant penalty to a US player. While the reduced access to factories reduces the economic growth of a country, reduced access to the manpower pool does not affect manpower growth (which is negligible anyway), meaning that the pool is ultimately determined from the start of the game. As long as the US expands conscription at the beginning of the war, which is relatively easy to do, they suffer little opportunity cost from having had their manpower significantly reduced for most of the early parts of the game. The US alone has a significant manpower advantage over Germany that is not reduced in any real way by penalties at game start, and then one could add to that the manpower of the Soviet Union, which is even greater. When stacking up both alliances – adding Japan and Italy on one side, and the British Empire on the other (maybe France, though it usually falls to Germany), the manpower advantage remains clear on the Allied side. In short, there are hardly any ways in which the manpower discrepancy between the Axis and their enemies are addressed by the designers.

Natural resources

Access to natural resources is another huge disadvantage for the German Reich in *Hearts of Iron IV*. While many of the natural resources required for Germany's war machine are within

reach in continental Europe, there are two important exceptions to this: rubber and oil, required for airplanes, cars, and fuel. At the start of the game, there is no rubber being produced in Europe. Most of the rubber in the game world is located in British Malaya and The Dutch East Indies, both of which, as the names indicate, are controlled by the Allies at the beginning of the game (Britain and the Netherlands). The two ways in which Germany can compensate for this are building synthetic refineries and hoping that Japan will be able to grab some of these colonies because Germany can conceivably import resources from Japan.



Figure 3-7: Most of the game's rubber is concentrated in Allied controlled regions in Southeast Asia at the beginning of the game. Rubber is represented by the tire symbol.

When it comes to oil, most oil is located in the United States, which is generally the hardest country for Germany to conquer. The US starts with a total 846 units of oil, which is a huge number when compared to other reserves. Outside of the US, there are non-insignificant

sources of oil in places such as the Caucasus regions in the USSR (143 units), Venezuela (106 units), the Middle-East (111 units combined), and perhaps most importantly for Germany, in Romania (70 units). Germany itself starts with only 3 units of oil being produced in Hannover. Excluding Romania and the Soviet Union, the oil that can be found in the rest of Europe totals only 15 units.

Table 10: "The supply of external resources: net imports of the U.S.A., U.K., U.S.S.R., and Germany, 1938-45 (per cent of national income)" (Harrison, 1988, p. 189). Here we can see historical justification for the US resource advantage in Hearts of Iron IV – they exported more than they imported during the entire war.

	U.S.A.	U.K.	U.S.S.R.	Germany
1938	-2	5		-1
1939	-1	8		1
1940	-2	17		7
1941	-2	14		12
1942	-4	11	9	17
1943	-6	10	18	16
1944	-6	9	17	
1945		11		

Oil is used to produce fuel, and it is essential to have access to fuel throughout the war. Fuel is, naturally, required for tanks, motorised vehicles, ships, and airplanes to run. Winning a war in *Hearts of Iron IV* without these machines is difficult, and nearly impossible when also severely outnumbered in terms of manpower. When playing the German Reich, it is therefore critically important to secure access to oil. The first step here will always be to secure Romania in some way, either by nudging them towards fascism and have them join the Axis voluntarily, or, if that fails, invading them. However, as the war drags on, the demand for fuel will generally grow as more planes, tanks and ships are being fielded on both sides of the conflict, so while securing Romania is relatively easy, it is generally not enough. This is especially true

when fighting against the United States, which has oil reserves that are so large that they can easily field a virtually infinite amount of planes, a massive fleet and huge amounts of tanks all at the same time, while still exporting oil to their allies.



Figure 3-8: The oil reserves in the South of the United States are so large that they represent a practically infinite source of fuel for the Allies.

This shortage in natural resources can be addressed by a German Reich-player in four main ways. First, the resources can be imported from other countries. This is the most reliable way of addressing the problem before the war breaks out, and the least reliable way when the war has begun. The reasons for this are simple: one cannot import resources from a country one is at war with, and the Axis navy is so heavily outnumbered and outgunned by the Allied navy that most trade between the Axis in Europe and any allied or neutral countries around the world is cut short by trade convoys being sunk.

Secondly, synthetic refineries can be constructed. Synthetic refineries produce fuel and rubber, both of the resources that Germany lacks. The problem with this approach is the steep cost of building these refineries, which means that Germany won't be able to produce as many military factories as it otherwise would have. Each refinery grants only a small amount of resources, so many will have to be constructed for this strategy to have a significant impact.

Thirdly, the resource shortage can be addressed through technology. There are technologies that improve fuel efficiency, which means they grant more fuel per oil and more fuel per refinery, and there are technologies that increase the amount of resources gained from each synthetic refinery (up to a maximum of 4 rubber per refinery). The fuel efficiency techs can be combined with any approach, while the synthetic refinery improvements are an important complement to building synthetic refineries.

Finally, resources can be gained through conquering land naturally containing those resources. The problem with this approach is that one generally needs access to the resources before taking the land in order to be able to win the war and take it. This is especially true for Germany, as most of the resource-rich areas controlled by their enemies are far away from their homeland in Europe, and the second easiest continent for Germany/Italy to occupy, namely Africa, contains very little of the two resources Germany lacks the most as well. However, conquest is a necessary way of addressing the ongoing increase in demand for resources throughout the game and has the added bonus of decreasing the amount of resources available to the enemy.

Generally, a viable resource strategy for someone playing the German Reich will have to combine all four approaches that I have outlined here. Hopefully, the outline I have given goes some way in illustrating the sort of strategic decision making the game requires, both generally and specifically when playing as the German Reich.

Summary: what resource management means for Germany

I have extensively covered Germany's in-game resource shortages, both as pertains to manpower and natural resources, because I see these as crucial aspects of the German Reich gameplay experience in *Hearts of Iron IV* and as an important part of the way in which the game presents Nazi-Germany. A player playing as the German Reich will continually have to address negative numbers in the game's resource screen and worry about an ever decreasing amount of manpower, knowing that the democracies in the West will probably never run out of natural resources and the Soviet Union in the East will never run out of manpower. Additionally, I have explained how Germany simultaneously is presented as initially more economically efficient than its enemies, but eventually industrially weaker. There is an underdog-element to the Nazi-Germany we see in *HoI4*, which is certainly reflective of the balance of power in the real WW2 conflict. It is clear that in the conflict between game balance for the purposes of unpredictable and exciting gameplay on the one side, and historical accuracy on the other, the designers of *Hearts of Iron IV* have tried to strike a balance wherein

the two sides are not equally strong – the Axis is decidedly weaker – but it is still legitimately possible for the Axis to win the war.

As I have noted earlier, I would categorise the logistical and economical advantage not as a direct representation of Nazism, but instead as a representation of Germany that indirectly is tied to Nazism. It is perhaps not the Nazi regime’s “fault” that Germany does not have any natural production of rubber and oil, nor that they are so severely outnumbered by the Soviet population. Though, of course, the Nazi’s treatment of their own population is certainly a lot more troubling than what is presented in this game, a point that I will come back to in a later chapter. Additionally, it is arguably not the regime’s fault that their economy is outsized by the combined economies of the UK, the US, and the USSR, even after they unite continental Europe under their banner. These are facts of geography and history that were largely given before the Nazi party took power in Germany. The game itself also presents these as aspects of the country that are by and large unrelated to its regime, but merely facts of the world map. Each in-game state contains a certain number of factories, natural resources and people, which are meant to present historical facts of geography, not consequences of politics. The politics merely determine the access each country has to these pre-existing resources within their borders.

3.1.3 Interpreting Nazism as found in the core mechanic

In this 3.1 chapter I have given an overview over the most important ways in which Nazism is represented in all of those systems that together make up *Hearts of Iron IV*’s fundamental play activity. The core mechanic of *HoI4* is a compound of interaction with a whole array of systems, some of which I have not discussed in much detail here because they bear little direct relevance to the game’s representation of Nazism. Those that do relate to Nazi-Germany, however, create a quite complicated and diverse representation of the ideology and the country. Some elements of the German Reich’s history that are key to understanding it are, however, notably absent from the game’s mechanics. I will return to this when I later discuss what is absent in *HoI4*’s representation of Nazi-Germany.

As for the elements that are present in the game, there are multiple possible ways of interpreting them and the real-world history they relate to. Adding together all the challenges this game puts in front of Germany in terms of geography, economy, and having fewer resources, one might say that they in some way excuse the Nazi regime’s loss in the war. In this view, the defeat of the Third Reich in World War 2 was not a consequence of

incompetence or failures of the Nazi government, but instead a consequence of the fact that the odds were stacked against them from the start. German victory against all of these other great powers would have been an extraordinary achievement. One could even go further and say that the fact that Germany came as close to victory as they did was an extraordinary achievement in itself, and for all the faults of the Nazi regime, it is undeniable that they made the most of what they had. Another possible interpretation is that the actions taken by the National Socialist regime were foolish from the start. Blinded by faith in their own superiority, they were not able to see the balance of power for what it actually was. Unable to recognise their enemies' strengths and their own weaknesses, they made foolhardy decisions that ultimately led to the demise of their regime.

Both of these interpretations are understandable ways of reading *Hearts of Iron IV*, and neither is explicitly embraced or rejected by the game itself. Consequently, one cannot really make a clear determination as to what the game has to “say” about Nazism. Generally, as we can see here, the game mechanics merely presents its representation of Nazi-Germany as understood by the game designers, albeit with the caveat that things are simplified and streamlined for the sake of gameplay. Few overt value judgements are baked directly into the game mechanics themselves, leaving it up to the player to make their own interpretations.

3.2 Audiovisual Style

In addition to the core mechanic, the game's audiovisual style is a significant aspect of its aesthetics. It is in the emphasis on the importance of audiovisual style as a bearer of meaning that the neoformalist approach used in this thesis differs most significantly from ludology. In employing a neoformalist approach to style, I will be looking at various audiovisual elements in order to discern the motivation for their inclusion and their function within the work, ultimately creating an understanding of how stylistic representation is an integral building block in the game's construction of Nazi-Germany. This chapter should demonstrate why an analysis of Nazism in *Hearts of Iron IV* would be incomplete without looking at audiovisual style.

In addition to neoformalist theory, the analysis in this section will also draw on the work of Aki Järvinen in his conference paper, *Gran Stylistissimo: The Audiovisual Elements and Styles in Computer and Video Games* (Järvinen, 2002). It is his stated goal in this paper to “create aesthetically conscious vocabulary with which to talk about games, analyse them, and

moreover, give game design and journalism tools to work with” (p. 114). Järvinen compares audiovisual style in videogames with architecture, where the architectonic style “is a sum of all the individual elements” of audiovisual appearance (p. 114). Likewise, the audiovisual style of a videogame is the sum of all its different audiovisual elements, and a detailed analysis of style will consequently be looking at those elements. In accordance with this, I will be employing the vocabulary and categorisations outlined by Järvinen in my analysis of audiovisual style here.

3.2.1 Dimension and point of perception

According to Järvinen, “dimension and point of perception together make up the game environment’s rough form” (Järvinen, 2002, p. 116). In *Hearts of Iron IV* this game environment is a world map, presented from an isometric perspective. An isometric perspective is one where “one sees characters, houses and other objects from above, from a tilted angle, but in such a way, that the horizon is not visible and the lines of perspective do not converge” (Järvinen, 2002, p. 114). Most of the gameplay, with the exception of all the interactions with various menus, takes place on this isometrically presented map – and generally the map is also visible when interacting with the 2D menus. When interacting with the map, the player is free to zoom out, to the point where the entire world is visible, or in, to focus on troop movement in small, individual provinces.

This dimensionality and point of perspective on a world map are a logical and common approach to grand strategy games. Its motivation, from a neoformalist perspective, is manifold. It is compositional, justified “for its creation of narrative causality, time and space” – or, specifically, space (Van Vught, 2016, p. 40). It is also realistic, appealing to notions of the real world directly by representing the entirety of Earth. Additionally, its motivation is ludic, as this perspective necessary to facilitate the sort of strategic gameplay on which *Hearts of Iron IV* is based. As a design choice, then, the world map perspective is easy to justify. In itself the game’s dimensionality says little directly about Nazism or Germany. However, a consequence of this bird’s-eye perspective is that the player is distanced from the on-the-ground realities of the war. Combat is abstracted to the point where, unlike many other WW2 games, the player doesn’t see soldiers die. Likewise, civilian casualties are not visually present in the game. Such events are implied by changes and animations on the map, such as the mushroom cloud animation that appears when a nuclear bomb is dropped, but never made explicit. Ultimately, the player is not visually confronted with the terrible consequences of the actions taken by the

German Reich's Nazi regime. This is an understandable consequence of *HoI4*'s design as a grand strategy game, but still notable. I will delve further into the elements of World War 2 that are notably absent from *Hearts of Iron IV* in a later chapter.

This distanced, bird's eye view of the war creates a distance between the *HoI4* interactive play experience and the realities of World War 2. It is common for civilian casualties to be excluded from WW2 videogames (Sisler, 2016), but here even military casualties are barely visually represented. Sisler has written of first-person shooter games that the way they rarely feature civilians leads to the following result:

There is no possibility for civilian casualties caused by the players' war efforts. These games thus present a "clean, sanitized and enjoyable" version of war for popular consumption; obscuring the realities, contexts and consequences of war. In other words, first-person shooters do not reproduce the real-world experience of war; instead they theatrically romanticize war (Sisler, 2016).

Sisler did not extend this line of argument to grand strategy games, which might be because it doesn't apply as universally to the genre. Game series such as the *Age of Empires* series and the *Civilization* series do feature civilians who can be harmed in conflict. However, the point does apply to *Hearts of Iron IV* because of its distanced perspective. Perhaps it applies doubly so, because military casualties are hardly represented as well. However, Sisler goes on to note:

The visual "realism" of these games legitimizes these schematizations; recreating the "real" world and obscuring it at the same time (Sisler, 2016).

This point does not apply as much to *Hearts of Iron IV*, for the same reason: the distanced perspective creates a lack of visual "realism", as the word is being used by Sisler. This lack of civilian casualties represented in the war is then not legitimised by a realistic representation of other aspects of the war in *Hearts of Iron IV*. It is all obscured. The "real world" is not recreated at all. Instead the player is treated to a huge world map and a swath of menus. While the representation of World War 2 in *Hearts of Iron IV* is certainly clean, sanitised, and enjoyable in the same way, it does not obscure that fact or legitimise it in the way Sisler argues these first-person shooters do. Consequently, the lack of representation of the holocaust in this game arguably differs from the lack of representation of civilian horrors in games that put the player in a first-person perspective, because in *Hearts of Iron IV* the player is acutely, intrinsically aware that they are distanced from the entire ground level reality of the war.

3.2.2 Visual outlook

The visual outlook of a game is drawn “with so-called textures and polygons” (Järvinen, 2002, p. 117). In short, it is the textures, lights, colours, and imagery that makes up the visuals of the game. Järvinen further adds that the visual outlook can be the result of graphic design, or based on real-life environments and characters on which it is modelled (p. 117). I would take issue with how these are presented as mutually exclusive. Surely, the adaptation of real-life characters and environments into videogame visuals is also a process of graphic design. Even though many of the visual elements in *HoI4* are inspired by different real-life sources, I will still view them as a result of an overarching visual design process. Either way, the visual outlook is an incredibly expressive aspect of a game’s aesthetics.

In *Hearts of Iron IV*, the visual outlook is heavily dominated by a sense of nostalgia. By using toned down brown and grey hues and draping the menus in textures associated with the 40s, including events presented as newspaper articles with black and white photographs on a texture resembling toned paper, the game tries to evoke a feeling of interacting with an analogue, not a digital, world. As devices, the motivation behind these textures and colours are both artistic and realistic. They are artistic in the way they contribute to the overall aesthetic shape of the game, and realistic in their appeal to history. The colours and textures work to provide a romanticised view of the era, transporting the player to a time before the rise of the very same digital technology that is used to play the game. *Hearts of Iron IV* is a period game, comparable to period films. The historicity of the game is made explicitly clear through its visual outlook.

“No Reds in Western Europe”: The Colours of Nazi-Germany

The colour scheme in *Hearts of Iron IV* is dominated by toned down browns, greys, and greens. These colours are largely universal among countries and reflect a view of the war as a dark and drab moment in history. As the game makes clear that World War 2 was the result of actions taken by Nazi-Germany – although the player is free to deviate from this, this is explicitly charted out as the “historically accurate” chain of events in the game’s focus trees – this bleak colour scheme can be seen as a reflection of the bleakness of the war that Germany historically started.

This depiction of the WW2 era can be contrasted with the lavishly colourful Nazi-Germany on display in the ‘dramedy’ film *JoJo Rabbit* (Waititi, 2019). As the production designer for that film explained in an interview, the colourfulness of that film was based on actual

photographs of German houses from that era, and the use of colours in the film was meant to create an environment that felt safe at the beginning, but then deteriorated as the ‘façade’ of the Nazi regime fell away (Ellwood, 2019). As far as historical accuracy is concerned, then, there is no need to choose the browns and greys of *Hearts of Iron IV* instead of the bright reds, blues and greens of *JoJo Rabbit* when depicting Nazi-Germany. This is made clear by the photographs the filmmakers looked at.

Instead the different choices come down to a difference in perspective and function. The perspective of *JoJo Rabbit* is that of a ten-year-old indoctrinated child living in Berlin towards the end of the war. This boy, nicknamed JoJo, has been brainwashed into fully believing in the Nazi regime, and he has no perspective on its ugly brutality and little knowledge of how the war itself is actually going. At the beginning of the film, in his tiny world which consists mainly of just a few blocks in Berlin, everything seems to be pretty much fine. The film then follows him as he grows to understand the ugliness of Nazism, and eventually witnesses the regime’s downfall as the Allies take the city, he lives in. Throughout especially the earlier parts of this film, bright colours are used to intentionally contrast with the ugliness and brutality of the war – something which is hinted at in several ways during the film, but presumably the audience is also already aware of – in order to present the worldview of the indoctrinated boy JoJo.

The radical difference between this representation of Nazi-Germany and the one in *Hearts of Iron IV* serves to illuminate aesthetic choices made in the game. Of course, ‘perspective’ is a different concept in games and cinema. There is a fundamental difference between interacting with games and watching movies in terms of how events and the world are experienced. The gap between *HoI4* and *JoJo Rabbit* is widened further in that *HoI4* takes a bird’s eye view of the war, as I have described in the previous chapter on point of perspective, while *JoJo Rabbit* goes to the opposite extreme by following not just one person, but a small boy whose knowledge and understanding of the events is extremely limited. The colour scheme in *HoI4*, then, seeks to express a more holistic view of the war where the brutality and bleakness of the moment comes to the forefront. There seems to be no façade separating the player from the unfolding war – although it could be argued that the extreme bird’s eye perspective does create a significant distance between the player and the reality of war, which is a tension I will discuss elsewhere in the thesis.

It’s not too difficult to imagine what a more colourful *Hearts of Iron IV* could look like. One needs only look at other Paradox games like *Europa Universalis IV* and *Rome: Imperator*.

Both of these games are similar to *HoI4* in many ways, following a similar Paradox strategy game format, but they are significantly brighter in colour. There are multiple possible reasons for this. One possible reason is that without the harrowing spectre of the holocaust hanging over those two other games there is less need to hammer home the bleakness of those historical events, but instead the colours can be more fun and playful. Another reason might be that unlike *HoI4*, which is intensely focused on one huge war, the two other games are focused on a longer period of time in history and feature a much greater focus on nation-building, diplomacy and other peacetime activities. However, as a counterargument to both these points, *Europa Universalis IV* is a game that mainly covers Europe's colonisation of the rest of the world, which was a brutal event indeed, and *Rome: Imperator* has a great deal of focus placed on the violent expansion of the Roman Empire and the deterioration of its (somewhat) democratic institutions.

The key difference between *HoI4* and these other two games is then perhaps not a lack of brutality and war in the earlier settings, but distance between players/creators and the depicted events. It is the fact that World War 2 and the holocaust are such recent traumas, for large parts of the world at least, that necessitates a sombre aesthetic when one is 'playing around' with the conflict. If *Hearts of Iron IV* were to employ the exact same colour palette as *JoJo Rabbit* to depict the exact same period, the meaning of that palette would fundamentally change. In *HoI4*, that palette would be in poor taste because the implicit meaning of the colours changes between the two works. It is a colour scheme that ignores the bleak nature of Nazi-Germany and the war, which is precisely the point of it in *JoJo Rabbit*, but would be a mistake in *HoI4*. In *HoI4*, the holocaust is not explicitly acknowledged in the game, which is something that will be discussed further elsewhere in this thesis, but the colour scheme does acknowledge the tragic nature of that time in history, and thus implicitly the stylisation does recognise that those events took place.

All countries in the game also have a specific colour on the world map. The colours chosen are very clear in articulating a certain ethical perspective, perhaps unusually so for this game. While the Allies – France, Britain, the United States, and also Poland and Czechoslovakia – have bright blue or red colours, Germany's colour on the map is black. When Germany rolls into Czechoslovakia, Poland, and France, this is visually represented by a dark shadow that spreads across the European continent. The German Reich is, quite literally, a darkness that covers Europe. When the US and Britain later in the game invades Europe and starts retaking territory for the Allies, this is visually represented by small, tiny dots of brightness that light

up where the Allies have landed, and start spreading if the Allies are able to advance. Through its use of colours, then, the game actually takes a very clear side in the conflict.

While the horrific actions of Nazi-Germany are not called out in the game's mechanics, rules or written text, something I will go in detail on later, such events are implied through the colour palette of the game, and particularly the colour chosen for Germany. Playing the game would be a markedly different experience if the colours did not carry these sombre implications, as one could either be allowed to forget how horrible the events that happened during that time were, or perhaps feel uncomfortable in playing a game that seems to entirely brush the darker aspects of the war under the rug. While the exact colours of buttons, menus and countries on the map are largely incidental to the gameplay – change the colours of everything and the game still runs in exactly the same way, all rules and systems intact – they are integral to the player's experience.

3.2.3 Audiovisual Motifs

Järvinen describes audiovisual motif as something that “can be used to explain and evaluate games' audiovisual relationships to other audiovisual media” (Järvinen, 2002, p. 118). In the context of *Hearts of Iron IV*, this would be the game's relationship to other audiovisual representations of Nazism and the Second World War. This means that the previous comparisons between the colour palettes in *JoJo Rabbit* and *Hearts of Iron IV* also relate to audiovisual motifs. In the interest of conciseness, I am choosing to focus my analysis on the one visual motif that is most transtextually recognisable and most prominent in construing the game's presentation of Nazi-Germany. This is, in my view, the game's portrait of Adolf Hitler. Because swastikas are notably absent from the game's design, this portrait is the most distinct and recognisable symbol of Nazism in the game, featuring at the centre of the menu where a player is to choose the country they're going to play, as well as being prominently positioned in the political menu when playing the German Reich.

The image of Adolf Hitler is one of the audiovisual motifs that is easily recognisable from history and can be identified in many other pieces of media that relate to the war. His moustache is iconic in itself. As a device, its inclusion is certainly motivated by a realistic appeal to history. It is also artistically, as it contributes to the overall aesthetic form of the game – along with all the game’s other portraits. In his standard *HoI4* portrait, Hitler is confidently poised with a raised chin and eyes looking upwards. He has a look of determination on his face. He is wearing a leather jacket that broadens his presence within the frame, making him seemingly more imposing. His face is slightly wrinkled, however, which makes him seem a bit old or tired. The colour palette is largely in greys, browns and black, consistent with the overall palette of the game itself. It is an unapologetic picture of Hitler where he projects strength and confidence. It would not be unthinkable for a picture like that to have been used in Nazi propaganda.



Figure 3-9: Adolf Hitler's in-game portrait.

This doesn't mean that the picture should be taken as an endorsement of Hitler, though. For one, his portrait is not significantly more flattering than the portraits of other leaders in the game. Secondly, a player's reaction to and interpretation of this picture will be heavily informed by their pre-inclinations. Most people probably come to this game with such a strong idea of who Hitler was that their impression of him is already set. If one has a strongly negative opinion of Adolf Hitler this picture can easily be read as the portrait of a villain, especially when considering the colours. If one, like the neo-Nazi minority in the *HoI4*-community described in chapter 1.3, has a positive view on Adolf Hitler, it can instead be interpreted as a picture of a strongman to be admired. The most prominent audiovisual motif representing Nazism in the game, then, does not offer a clear value judgment on Nazism, but is open to interpretation by the player.

3.2.4 Soundscape

"The bad guys always get the best music" – Refresh Rejoice (2019), Youtube comment.

According to Järvinen, "soundscapes in games follow closely the distinction between so-called diegetic and nondiegetic sound in film art" (Järvinen, 2002, p. 119). This distinction is not

always as clear as in film, however. Järvinen does write that games where gameplay is based around music or creating music “thread on the border between diegetic and nondiegetic sound as they incorporate the two in real time” (Järvinen, 2002, p. 119), but I would argue many, if not most games, has some sounds that exist somewhere on the border. This is the parts of the soundscape tied to interactions with menus. Game menus are arguably nondiegetic in many cases because they are not directly part of the game world, but instead a type of overlay or separate layer of the game that isn’t part of the diegesis of the world, aka the world as experienced by the characters. Essentially, the menus could be said to be visually nondiegetic in the way that background music is audibly nondiegetic. However, in clicking a button on a menu and hearing a sound as a result of that click there is a clear cause-and-effect similar to diegetic sound, which can be attributed to visual elements the player sees. Though the menu interacted with is not necessarily a part of the game world as experienced by its characters, it is a part of the game environment as experienced by the player. On the basis of this I will operate with a third category of sound, which is semi-diegetic, and refers to the soundscape tied to the game’s user interface.

Diegetic and semi-diegetic sounds of war

By nature of being so removed from the in-world action, not much of the soundscape in *Hearts of Iron IV* is diegetic. The diegetic soundscape is only experienced when the player zooms in on a point of conflict. Then, as one sees small soldiers standing on the map, representing armies, one can hear gunfire and other sounds of war.² While these diegetic sounds bear no direct relationship to Nazism, they are still notable because they are the only clear audiovisual representation of the horrors of war. The sounds are, in fact, quite gruesome. There are gunshots, bombs exploding, and screams of people in pain. It does not sound glamorous or heroic, but gritty and painful. This soundscape offers a notable deviation from the elsewhere lacking direct audiovisual representation of the pain of warfare. Because the way the game’s narrative, through national focuses and ideological traits, is structured, it is made clear that the war is a result of the consequences of militaristic fascist ideology. Therefore, even though these sounds are universal for all countries, not tied explicitly to Germany, the implication is

² Helpfully, an example of this soundscape has been uploaded to Youtube, making it easily accessible: <https://www.youtube.com/watch?v=IEFfoveaYUU> (Fake Comrade, 2018).

that the horrors presented through this soundscape is a consequence of Nazism – at least it was so historically, even if the player has deviated from history in some way.

In addition to this, when a player selects units on the world map, they respond with the sound of a military officer shouting an order.³ These sounds are essentially diegetic, and naturally, when playing Germany, these orders are in German. As a different set of orders has been recorded for many different countries, it could perhaps have been possible to tease out some differences in representation here. However, I find that there hasn't been made much of a distinction between how the military of these countries sounds. Across different countries, the language in which these orders are shouted might change, but their tone doesn't. The ideological difference between these countries never lied in whether or not the military demanded discipline.

As a large part of gameplay is founded on interaction with user interfaces, instead of direct interaction with the world, a lot of the soundscape in the game is what I have termed as semi-diegetic. These sounds have an analogue texture to them. Often when buttons are pressed, the player will hear a heavy, mechanical sound. When changes are made one can hear pencil scratching, as if the interaction is being noted down on a piece of paper. The semi-diegetic UI soundscape of *Hearts of Iron IV* underpins the nostalgic historicity articulated in the game's visual outlook, as I have described previously.

Both the diegetic and semi-diegetic sounds are, as devices creating meaning, clearly motivated by realism. The diegetic sounds portray the realities of war, while the semi-diegetic sounds offer a more abstract impression of what the era sounds like. There are no direct links here to Nazism, so they hardly contribute to the game's direct representation of that ideology, but the diegetic soundscape is notable for its break with the otherwise sanitised representation of the WW2 period offered up by the game. It is a reminder of the horrors of WW2, and therefore implicitly can serve as a reminder of the horrors of Nazism.

Nondiegetic sound – the “Axis theme”

Nondiegetic sound – specifically music – is a huge part of the soundscape in *Hearts of Iron IV*. It is the one constant sound element throughout the entire game. Paradox has even added a “radio”, which is a menu the player can open to choose which parts of the game's soundtrack

³ These unit voices are also uploaded to Youtube, with Germany at the beginning of the video: <https://www.youtube.com/watch?v=EmWaNoSS6E> (TrueLionWithin, 2019).

they want to listen to. As long as the player doesn't choose to do this, however, there are various tracks associated with different things. The music when at war is different from peacetime music, for example. Here I will focus my attention on the Axis theme, as this is the piece of music in the game that is the most relevant to this thesis. It is after all the themes associated with the Nazis.

When Andreas Waldetoft, music composer at Paradox, arrived at the Brandenburg State Orchestra's music hall to record the orchestra score for the Axis (among others) in *Hearts of Iron IV*, the orchestra leader asked him to please not tell the orchestra's players what the music was for. On retelling this story in one of Paradox' development diaries, Waldetoft noted that "I guess "don't mention the war" still holds true in some parts of Germany" (Metal King, 2015).

As a device, the Axis theme is mainly artistically motivated. While it contributes clearly to the overall aesthetic shape of the game, it offers no ludic interactivity and no compositional structure to the game. Instead, the "Axis theme" is a nuanced piece of music which communicates a lot of different things about European fascism.⁴ It is sombre and downbeat, especially when contrasted with the uplifting theme for the Allies.⁵ There is no doubt, when putting those two pieces of music next to each other, who are the "good guys" and who are the "bad guys" in the composer's view. The "German-panzer-on-tracks-going-forward feeling" that Waldetoft went for, according to himself (Metal King, 2015), gives the piece an ominous feel, especially as the violin line gives an ongoing sense of forward motion for the Axis military. The music is also, according to the composer, orchestrated in the style of German composers of that era (Metal King, 2015), and as a piece of classical orchestral music it certainly has a sense of historicity to it. This speaks to a realistic and transtextual motivation behind the music as well, as it makes an appeal to history and to other pieces of music.

At the same time, while the Axis theme has a villainous sound to it, there is also an underlying sense of power, strength, and perhaps even heroism there, achieved through the steady marching theme and the occasional musical climaxes. As a musical piece that tries to evoke the music the Germans themselves listened to in that era, it to a degree evokes the way in

⁴ One can listen to the Axis theme from *Hearts of Iron IV* here: <https://www.youtube.com/watch?v=dZcj56XXrPM> (MasStream, 2016).

⁵ The Main Theme for Allies: https://www.youtube.com/watch?v=xi529HW_gWg (Waldetoft, 2016)

which those Germans viewed themselves. The Axis theme, then, as an aesthetic representation of Nazi-Germany, can like many other aspects of *Hearts of Iron IV* be interpreted in multiple ways by the player: as a presentation of the Nazis as “the bad guys”, as a presentation of the Nazis as “strong and powerful”, or indeed both.

4. Conclusion

In my breakdown of the way in which *Hearts of Iron IV*'s aesthetics represent the Second World War, we see again and again that there are two overarching priorities behind the game's design: fun gameplay and historical accuracy. In neoformalist terms, these are the ludic and realistic motivations. These two motivations dominate every aspect of the game's design from the complex resource management systems to the game's visual outlook and soundscape. On the occasion that these come into conflict with each other it is not necessarily the case that gameplay is given clear priority over historicity, as one might expect from many games. For example, the balance of power in the game is not equal between the Axis and the Allies, making it somewhat harder for the Axis to win. I would argue, though, that while this might run counter to the design philosophy behind many strategy games, it does not detract from the quality of *HoI4*'s gameplay, as nonbalanced gameplay might in itself be a source of fun. The fact that the game is more challenging when the player is "changing the course of history" might make those alternate historical paths more satisfactory when they are achieved.

Additionally, it is not the case that the game makes it as hard for the Axis to win as it was in reality. In fact, the outcome of the real war was essentially decided when the United States joined in 1941, as their industrial capacity was so overwhelming compared to Germany that Allied victory became only a matter of time. We have seen this incredible disparity in industrial strength in Table 11 in chapter 3.1.2 of this thesis⁶, and it is also described in professor Jim Lacey's article on "Hitler's blunders", where he describes the declaration of war on the United States as the biggest one (Lacey, n.d.). In *Hearts of Iron IV*, however, while the industrial capacity of the US is certainly stronger than that of Germany, it is possible for a German Reich player to compensate for this by playing well, especially if helped by a poorly performing US, and so the war is winnable. It is, after all, necessary for the outcome to be uncertain in order for the game to be truly interactive, and also for there to be a challenge when playing the Allies as well. There is, then, an overvaluation of the strength of Nazi-Germany in *HoI4* that is necessary for its gameplay.

Further, it is evident that most aesthetic aspects of the game are not motivated by a desire to take a political stance for or against Nazism. Most aspects of Nazism are more or less neutrally

⁶ Sourced from Harrison (1988, p. 178).

presented. Many of the disadvantages Germany are faced with are not presented as a direct result of Nazi ideology, but rather apolitical historical facts of their geography and situation. Some aspects of the game's representation, such as the portrayal of Hitler and the effectiveness of fascist leadership in controlling the economy, might be, as I have argued, undeservedly positive. However, this "positive" portrayal is never a positive portrayal of their ethics, their worldview, or their actions. Additionally, other aesthetic elements, such as semantic description of Nazis, the aggressiveness baked into the German focus tree, the visual outlook of the German Reich and the music associated with them, codes them as the villains of the game. This coding is somewhat subtle – never so explicit as to clearly portray their cruelty and acts of genocide.

As I have explored the most important devices in the game's representation of Nazi-Germany in the analysis chapter of this thesis, there are two main takeaways. The first is the realistic motivations as outlined by Van Vught (2016, pp. 40-41, 84-85) are behind most devices contributing to the game's representation of Nazi-Germany. This is perhaps not surprising, as Nazi-Germany would be a historical entity that the devices would have to appeal to in order to be relevant to this thesis. What is interesting is the way the realistic motivations in an appeal to the Nazi-Germany from history are balanced against ludic motivations in the game's mechanics and are synergised with artistic motivations in its audiovisual style. The dominance of ludically and realistically motivated devices in the gameplay speaks to a game text that is preoccupied with balancing gameplay and historical accuracy, while the synergy between realism and artistry in the audiovisual style means the game strives to aesthetically embody the historical era it represents.

The second takeaway is that the meanings created by these devices do not add up to a concrete, unequivocal value judgement of the Nazi regime. Instead, I have repeatedly throughout the thesis shown how they can be interpreted in different ways depending on the player's inclinations. Conclusively, the sum of *Hearts of Iron IV*'s representation of Nazism is a blank canvas open for interpretation by the player. I have at multiple points throughout this thesis noted examples where a single aesthetic element might be interpreted in multiple ways depending on the player's pre-inclinations. One example of this from the game's mechanics is the economical balance of power, where one might interpret the German's superior political ability to mobilise their economy early as a point of strength or contrarily interpret their inferior industrial capacity as a sign of their overall military inferiority to the Allies. Examples from the game's audiovisual style are the portrait of Hitler, of which the player's interpretation

will rely heavily on their previous opinion of Hitler, or the Axis music, which can be interpreted as an anthem of villainy, of strength, or both. The game doesn't embrace Nazism, but it doesn't outright condemn it either, and consequently it becomes an apolitical representation of WW2 that leaves the player free to project whatever ideology they want onto the game as they play.

These insights into the main priorities of the game and its open interpretative space are a result of employing the neoformalist approach. As I outlined in chapter 2.3.1, ludology would restrict our focus to mainly analysing devices with ludic motivations, obstructing our view of the fact that many devices are motivated by something else entirely – mainly a realistic appeal to history. A proceduralist approach would be more concerned with what the game means instead of how its devices work, and consequently it would most likely have led to an interpretation of what the game has to say about Nazism instead of uncovering how the way the game works creates an open interpretative space. The neoformalist approach has allowed for an understanding of the units of meaning within the game work together that takes *all* meanings into account, and at the same time is open to how those meanings can be interpreted differently by different players.

It is debatable whether an “apolitical” portrayal of Nazi-Germany such as the one in *Hoi4* is, or can really be, genuinely neutral. Even attempting a neutral, apolitical portrayal of fascist and democratic ideologies does in a sense level the playing field between the two. Western culture is full of examples of films, such as *Schindler's List* (Spielberg, 1993) and *Dunkirk* (Nolan, 2017), books, such as *Blitzed* (Ohler, 2017), and games, such as *Wolfenstein II: The New Colossus* (MachineGames, 2017), which have a wide variety of different clear, negative portrayals of Nazi-Germany and are explicitly judgemental of it in different ways. In such an environment, then, an “apolitical” portrayal might not enter into the discourse as the “non-comment” it is intended to be politically, but instead, by nature of not featuring the clear condemnation that is dominant, it becomes a sort of counterpoint to that dominant narrative. While it isn't saying that Nazism is a “better” ideology, the fact that it also refrains from explicitly stating that Nazism is worse makes it, purely by comparison to other media's representation, seem relatively sympathetic to Nazism.

It's probably unfair to claim that all representations of Nazi-Germany that aren't loud and clear in their condemnation of it then immediately become too supportive, however. There should be room for a wide range of different representations of World War 2. It can't possibly be expected of one single piece of media to be a defining, complete representation of WW2

that completely explains every important facet of that conflict. Instead, a wide array of different portrayals and representations can work together to give people a more complete picture. In a context where so much media is being produced that lays bare the ugly side of Nazism, some representations who aren't so clear might given a pass, as this message is being communicated elsewhere, as long as they do not present an explicitly pro-Nazi counternarrative. There's arguably not that much cause for alarm until a piece of media is outright Nazi-sympathetic, and perhaps has an active effect in radicalising its consumers.

Even so, the fact that a neutral portrayal of Nazism, in relation to other portrayals of the ideology, is one of the most sympathetic forms of portrayal one can get in mainstream culture, might go some way in explaining the alt-right's fascination with this game as described in chapter 1.3.1. While the game doesn't contain explicit support for their ideology, there is space in its portrayal for these players to project their ideology onto it that might not be there in a lot of other representations of Nazism. An alt-right player can interpret Germany's ability to mobilise early as a sign of fascism being a superior political ideology, take the portrayal of Hitler as a pure portrayal of strength and powerful leadership, and read the various audiovisual signs that code the Nazis as the "villains" as instead being appealing and cool.

I am not sure if it is possible for a game such as *Hearts of Iron IV* to entirely shut down the interpretative space open to white supremacists, as its genre – a grand strategy game – demands some level of equivalence between the two sides in order to be functionally playable. As we have seen, the bar for what alt-right communities need to project their ideology onto something is after all so low that they projected it onto Taylor Swift without ever having heard a positive word about their movement from her (O'Neil, 2019). While she fell out of their favour when she denounced them, it's not certain that a game like *HoI4* can distance itself the same way. If the game were to portray the horrible aspects of Nazism that has been omitted, this would be unlikely to deter neo-Nazis from projecting onto the game. The acts of cruelty committed by Nazi-Germany are after all something neo-Nazis support, not something they are opposed to or disgusted by. And in fact, one can see from the response to some of the mods for Paradox games that the portrayal of these actions is something they miss, both in *Hearts of Iron IV* (Tauronsss, 2018) and *Stellaris* (MCV Staff, 2016).

Now, as I have made clear there is plenty of room within the game's representation for an interpretation of its German Reich that is completely opposite to the one white supremacists project. As such, while I have not gathered the external quantitative data necessary to make a definitive claim as to whether or not the game has a radicalising effect in itself, I would say

that based on how the game's representation of Germany is aesthetically constructed I do find it unlikely. The way the player views the in-game Nazism presented here becomes so dependent on their prior opinion of the ideology that for them to start forming a wholly new opinion of it purely through playing *Hearts of Iron IV* does not, to me, seem likely. If they come to the game with a completely neutral opinion of Nazism, and/or little knowledge of it, I do not see how such an open and ambivalent representation can be decidedly formative.

Instead, there is a high likelihood that some radicalisation occurs in the interactions between a subset of the members of the *Hearts of Iron IV* community. This is of course not unique to the *HoI4* community, since as I have pointed to in chapter 1.3 this radicalisation seems to occur in several online communities, especially some centred around gaming. That gaming platforms are actively used for recruitment by the alt-right movement is also demonstrated in *The International Alt-Right: Fascism for the 21st Century?* (Hermansson et al., 2020). The fact that *HoI4* is essentially politically neutral in its representation, but the community around it has members who seem to actively work to spread pro-Nazi rhetoric and propaganda, indicates that work to combat radicalisation should focus on community engagement first. The *HoI4* community doesn't exist in a vacuum, after all, but is reliant on platforms such as Reddit, Discord, Youtube, Steam, and Paradox' official forums.

The rules of conduct on Paradox' official community forums explicitly state that "You may not post or message any material, or links to such material, which depicts Nazi symbols or Nazi propaganda", and for their live events they have an explicit ban of "the public display of swastikas, the SS Totenkopf or other symbols associated with Nazism" (Paradox Interactive, 2019). The explicit address to these things indicates both that this is a problem with their community and that they take it seriously. And in fact, all of the examples of extreme right-wing rhetoric in the *HoI4*-community that I have pointed to throughout this thesis are from unofficial fora, run by fans, on other platforms. As the link between these online "memes" and "jokes" to real-life terror attacks is real and provable, it is possible that both the members of the *HoI4* community, and the companies who run the platforms they use, should consider how much racist vitriol they are willing to tolerate.

4.1 Further research

As the scope of this thesis is limited by necessity there are multiple areas, I have touched on that would benefit from further research. First, further work could be done to uncover the

scope of radicalisation within the *Hoi4* community and other related online communities, as well as the dynamics of that radicalisation. The signs of extremism coming from some of these communities are worrying. Gaining both a broader and deeper understanding of online right-wing extremism would certainly be of benefit to society, as it could hopefully open the doors to combating radicalisation more effectively.

Additionally, further development of neoformalism as an approach to videogames would be productive both in developing game studies as an academic discipline, and in deepening our understanding how games work. In my view it is a sign of robustness if an academic discipline has a wide range of available analytical approaches in its toolbox, and to that end it is productive to develop analytical approaches that can serve as alternatives to dominant approaches such as ludology. And finally, as I noted in chapter 2.2, textual analyses build on each other, and textual analysis of one game can therefore help us understand aspects of other games. Further qualitative textual analysis on even more videogames will therefore both broaden and deepen our understanding of the medium.

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