



software

object classes,
algorithms

databases
with audio and
video material

**ideational
videogame
space**

w 2

Thought-Provoking Play:

Political Philosophies in Science Fictional
Videogame Spaces from Japan

by Martin Roth

world
selected data
assigned to objects
instantiated from
classes

THOUGHT-PROVOKING PLAY

**THOUGHT-PROVOKING
PLAY**

**POLITICAL PHILOSOPHIES IN
SCIENCE FICTIONAL
VIDEOGAME SPACES FROM
JAPAN**

MARTIN ROTH

Carnegie Mellon University: ETC Press

Pittsburgh, PA



Thought-Provoking Play by ETC Press is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License, except where otherwise noted.

Copyright © by ETC Press 2017 <http://press.etc.cmu.edu/>

ISBN: 978-1-387-43880-8 (Print)

ISBN: 978-1-387-43882-2 (Digital)

TEXT: The text of this work is licensed under a Creative Commons Attribution-NonCommercial-NonDerivative 2.5 License (<http://creativecommons.org/licenses/by-nc-nd/2.5/>)

IMAGES: All images appearing in this work are property of the respective copyright owners, and are not released into the Creative Commons. The respective owners reserve all rights.

Contents

Acknowledgements	vii
1. Videogames and Alternative Imagination	1
2. Negotiating Ideational Videogame Space	35
3. Mechapocalypse	69
4. Temporal Alternatives	97
5. Alien Aesthetics	125
6. Violent Technologies	149
7. Breaching Familiar Horizons	177
Appendix	185
Sources	191
About the Author	213
About the ETC Press	215

Acknowledgements

Writing this book was a privilege and now, at the end of the journey, I feel very grateful and fortunate.

Most pressingly, I would like to thank the ETC Press and my editors, Brad King and Drew Davidson, for the opportunity to publish this as an open access work and for their constructive advice and a very smooth and quick publication process. My anonymous reviewers offered invaluable advice and critique, and challenged me to position this research more clearly and voice its implications more directly. This book would not have existed in its current form without you, and I sincerely hope I have heeded some, if not all of your advice. Anna Yeadell-Moore has done an amazing copyediting job on the final version of this book.

These are only the last parts of a longer journey. The core research for this book (2010–2014) was generously funded by the Netherlands Organisation for Scientific Research (NWO), the Japan Foundation and the Leiden University Institute for Area Studies. I am very thankful for their support. It was only possible because of the guidance and trust I received from my PhD supervisors, Chris Goto-Jones and Florian Schneider. Thank you for your critical, stimulating and always supportive feedback and for challenging me to think outside of existing frameworks. The first steps were much easier because I was not alone, thanks to Mari Nakamura, Carl Li and Esther Truijen.

During these years, the Leiden University Institute for Area Studies provided a friendly, stimulating environment for my research. I remember many good moments in the Johan Huizinga building in Leiden—what better place and what better company for this project. The University of Tokyo Graduate School of Interdisciplinary Information Studies offered an equally rich environment for discussions and discoveries. I received invaluable support, stimulation, feedback and suggestions from many colleagues I met in these places, or on other occasions, and from dear friends. In particular, I would like to thank Baba Akira, Bart Barendregt, Jaqueline Berndt, Fujimoto Tōru, Hichibe Nobushige, Rachael Hutchinson, Iwasaki Minoru, Kondo Takako, Zane Krippe, Matsunaga Shinji and the “game studies group” in Tokyo, Ōkawa Masahiko, Sakamoto Akira, Fabian Schäfer, Yoshimi Shun’ya and his “zemi” at

viii Thought-Provoking Play

the University of Tokyo, as well as the late Harold Hays and participants of the LIAS PhD & Postdoc seminar. Watanabe Kazuya, Yamazaki Toshiko and Tateuchi Junko of the Computer Entertainment Rating Organization Japan, as well as Machitani Tarō of the Computer Entertainment Supplier's Association Japan. Hylke de Jong did a great job proofreading the PhD thesis and offered many suggestions that remain in this current text. I would like to also thank my committee for engaging with my work and offering their advice and critique, which was invaluable during my later reworking of the text.

Following my PhD research, I was given various opportunities to discuss and refine my ideas, all of which marked important steps towards this book. In particular, I would like to thank Yoshida Hiroshi and the participants in my intense lecture in the Graduate School of Core Ethics and Frontier Sciences at Ritsumeikan University in Kyōto, as well as Inoue Akito and Martin Picard, for many intense debates and crucial feedback on my ideas. This book would not have taken the current shape without you. It would most likely not exist without the continuous support of my mentors and dear friends, Kobayashi Binmei and Steffi Richter.

My family, who had faith in me and have supported us unceasingly over the years, and many close friends and brothers and sisters in arms, who offered help, advice and, above all, great company: Robert Aust, Moritz & Anne Balz, Michel Beerens, Lindsay Black, Álex Bueno, Fabian Dahlberg, Veronika Darian, Chad Diehl, Esther van Eijk, Daniel Erk, Uta Friedrich, Cissie Fu, Masako Fujita-Dahlberg, Fukuda Masayuki, Fukushima Yuki & Shingo, Patrick Galbraith, Max Görmar, Max & Anne Groh, Erik Herber, Roman Holderbach, Inagami Naomi & Misaki, Itō Yoshinori, Felix Jawinski, Agnese Jesionek, Kashiwazaki Masanori, Kim Eunae, Love Kindstrand, Christoph König, Dorothea Mladenova, Mogami Naoki, who, sadly, has passed away, Peter Mühleder, Michael Nitsche, Ōsawa Toshirō, Maria Riep, Sakai Yasuko, Ibrahim Saweros, Johanna Schumacher, Shidara Naoko, Shōgen, Daniel Soliman, Mohammed Al Sulami, Suzuki Kazuaki, Jan-Noël Thon, Maja Vodopivec and Chris Yap, thank you all! Special thanks go to my brother Daniel and my friends Stephan Leemburg and Andrea Conigli, for your technical support and for dealing with my incomprehensible questions and requests about hardware and software despite your own numerous obligations.

The finish is reserved for Kanako, Otto and Benjamin. Your love, encouragement, support and trust are what keeps me going. Thank you. This book is for you.

Videogames and Alternative Imagination

Videogames invite us to explore and experience a wide range of more or less complex, more or less extensive and aesthetically compelling worlds. Some readers may be familiar with the colorful abstractions and sceneries in the Mario or Sonic franchises, the fantastic opponents and gloomy dungeons of *Dragon Quest*, *Pokémon* or *Dark Souls*, or the vast fictional worlds we can visit in *Chrono Trigger*, *Lost Planet* or *Final Fantasy*. To various degrees, these games offer distinct places and situations unlike many others their players may encounter in daily life. They fascinate and immerse, entertain and educate, or frighten us. In this book, I ask whether videogames can offer experiences that disrupt our perception of the status quo we live in and prompt us to fundamentally rethink the foundations of contemporary life in common. In other words, I explore the potential videogames have as radically political spaces—spaces of political philosophy—that engage with fundamental questions of how we may best live together and, by doing so, may reveal to their players new avenues for our imagination of a radically different, better world.

Why do we need alternatives in the first place? What is wrong with the current version(s) of neoliberal capitalism that dominates most societies and communities around the world? One part of the answer to this question can be found in empirical problems and contradictions in such societies, like the growing precariat and gap between poor and rich, or the devastating and irreversible effects established practices and routines in work and life have on human beings and, more fundamentally, nature. Some of the issues related to the status quo were not as openly visible to me when I started working on this book, like the rise of protectionism and nationalism in Europe or the US, which can be interpreted (not exclusively) as a reaction to the process of globalization and individualization.¹ For Japan, Yoshihara Naoki observes a similar reaction.²

The motivation for this study, however, is not primarily grounded in the above-mentioned findings. It is not so much the threat the status quo poses

2 Thought-Provoking Play

to the empirical world that drives my interest in the political potentials of videogames, but the threat it poses to the imagination. Can we imagine any radical alternatives to the present at all today? Can you? I am having trouble with this task, to say the least. This may be a lack of creativity and knowledge on my part, but the problem seems more deeply rooted than that. Critical theorists and political philosophers have raised warnings about the decline of alternative imaginaries in recent years. Frederic Jameson has convincingly shown that in the case of science fictional literature, even the most radical attempts at imagining otherness are nothing but mirrors of our own situation. In his view, the future is not an imaginary space for alternative scenarios any more, but has lost its potential for change: the unknown future becomes “a new area for investment and for colonization by capitalism.”³ Karatani Kōjin goes one step further. In his two-volume *Structure of World History*, he shows how capital, nation and state have grown into a Borromean ring, in which each part follows its own logic but at the same time reinforces the others.⁴ Karatani claims that this ring is overwhelming, in the sense that we not only lack viable alternatives, but have lost the capacity to imagine anything outside the current system.⁵

According to Jameson and Karatani, the problem is not just whether we find the “best” model for common life, but whether we are able to find any new alternatives to the status quo at all. This claim about our fading capacity to imagine the outside of our present situation may not apply for everybody everywhere. For those like myself, who struggle with it, it implies severe consequences. For, as David Runciman puts it, “[p]olitics is about the collective choices that bind groups of people to live in a particular way. It is also about the collective binds that give people a real choice in how they live. Without real choice there is no politics.”⁶ Those who are indeed unable to come up with viable alternatives to the status quo lack such choices beyond reformatory adjustments and momentary reactions, unless they revert to options that were left behind in the past. This is particularly problematic in today’s challenging times, and the above-mentioned recent developments, although arguably more complex than I can portray here, suggest that many are indeed turning to the past for solutions.

To be sure, alternative imagination does exist. There are various examples of imagining, as well as attempts to practice alternatives.⁷ Yet, given the warnings issued by the philosophers mentioned, any further space that welcomes and stimulates alternative imaginaries has a vital role in sustaining the ongoing political discourse about how we should live together, and enhances the

plurality and diversity of the choices available to us. In this book, I hope to contribute to this search by looking at videogame spaces.

Stimulating our imagination towards alternatives is not as simple as it may sound. It is not only a question of going to places we have not been to or doing things we have not yet done. There are many examples of games doing just that: flying a dragon through the world of *Dragon Quest (Dragon Warrior)*, conquering hostile territory as in *Super Mario Bros.*, or defending the earth from alien invaders in *Space Invaders* are all things we could not have done if it were not for these games. As such, these games potentially stimulate our imagination in the general sense of the faculty that “enables us to envision that reality can be otherwise.”⁸ However, in this book, the imagination I am interested in is more specific than that. It is a kind of imagination that can guide political action towards realizing the alternative imagined. As Raymond Geuss puts it, “[a]ny organized attempt at improvement of our situation will include some at least minimal exercise of the imagination, in that it will require agents to think of ways in which their environment or modes of acting could be different from what they are now.”⁹ Noël Carroll establishes a similar link, arguing that

through the exercise of the imagination we can envision alternatives to what is, especially better alternatives to what is from a moral or a political point of view. Understood this way, the imagination is what makes change—changes in moral and political circumstances—possible. The imagination is what enables us to conceive of a better world and, therefore, is a pre-condition for changing it morally and politically.¹⁰

Without an alternative vision of the world, we are unable to act toward change and improvement. The problem I pose in this book is whether videogames may offer spaces in which such visions are stimulated and can be experimented with. I will look at a series of videogames from Japan in order to verify my theoretical discussion.

Media Specificity

Videogames and “Japan” are not the only possible place to probe for a political contribution in the above-mentioned sense. At the same time, my choice is not a random one. Videogames combine, develop and redefine three significant, intersecting cultural elements presently at work: play, media and computation. In doing so, they offer distinct expressive and experiential spaces. I am not

4 Thought-Provoking Play

inclined to assign any kind of “uniqueness” to videogames—indeed, I am not convinced that such an argument could ultimately withstand logical and theoretical scrutiny. Any idea can be expressed and experienced in a broad variety of media. However, I do believe that any medium or media environment offers distinct spaces of expression and experience, thereby triggering our imagination in a specific way and offering us a certain kind of experience with more likelihood than other media do. For example, the experience and imagination triggered by reading a novel may be very different than that of seeing the movie based on the novel. Like other media, videogames are a host to, but also a vehicle for the imagination.¹¹

As media theorist Matsumoto Kentarō puts it, “Games cannot be reduced to entertainment any more. Studying them means to think about the ‘contemporary relation between human beings and media’, ‘the relation between semiotics theory and media theory’, or even ‘the relation between strangers in cyberspace’, or the communality that emerges there. In this sense, games are [...] a territory in which heterogeneous elements touch each other and interweave.”¹² It is this combinatory character that fascinated and challenged me to explore videogames as a political medium. In Chapter 2, I will take a closer look at its mechanics and dynamics.

In a broader historical perspective, this combinatory character is significant because it seems to respond to a critique of the modern paradigm of art raised in many developed societies during the second half of the twentieth century, and offer a novel avenue for political imagination under contingent, “postmodern” conditions. The crisis of imagination appears to be closely related to a crisis of artistic expression in recent decades. As aesthetic philosopher and cultural theorist Muroi Hisashi notes in the late 1980s, this crisis is closely related to a paradigm shift from the modern, totalizing attitude to the world, to a postmodern attitude of soft, blurry, or, as he calls it, “irresponsible fiction” or “irresponsible sensuality” (*musekinin na kyokō, musekinin na kansai*).¹³ At the same time, it is also a result of a new, networked media landscape, which flattens contents and objects (media), changes the relation between work and copy and questions the relevance of an individual author, who was central to the highly personalized approach of modern art.¹⁴ In other words, neither the individual (all-encompassing, totalizing) opinion of the artist, nor the singular, original work with its “unique” materiality, stand out any more under “postmodern” conditions. Other intellectuals like Azuma Hiroki have made more recent arguments about the shift in popular culture, from a relation between original

and copy, to a relation between non-hierarchical “derivates” without original to begin with.¹⁵

I am not ready to believe in the radical obliteration of materiality that Muroi suggests. However, his point regarding the changed conditions under which art—and thus one potential area in which imagination operates and is set into motion—remains important, not least, because Muroi himself criticizes the response to the changed conditions by “postmodern art,” which he regards as “an attempt to maintain artistic autonomy without upholding its underlying ideals.”¹⁶ Against such decontextualized and thus depoliticized art, he demands that we rethink art in general by moving outside of its rigid, high-cultural territory. Post-art, he argues, is a kind of practice that shares with the traditional notion of avant-garde the aim of constantly challenging its limits and borders, while at the same time, moving outside of the “artistic” and aiming to create “expressions, that are open and welcoming to the outside” (*soto ni hirakareta hyōgen o tsukuridasu*). Most importantly, this practice needs to be embedded into the media network and its politics, disturbing it constantly from within, as a practice of “intervention” (*“kanshō” no jissen*).¹⁷

This reasoning may not appear novel today; indeed, the idea of “disruption” is already mostly embedded into popular discourse and therefore no longer threatening to the established power and the status quo. In fact, Owen counts “disruption” among the contemporary buzzwords, and as central to the doctrine of a new technology elite.¹⁸ In this sense, it is far from self-evident which of the possible paths for art, after the end of the modern paradigm, videogames tread on: the depoliticized “postmodern,” or the more vaguely conceived, blurry “practice of intervention”. Graeme Kirkpatrick, for example, doubts that games have maintained any political force in the modernist sense of critique against the social situation or the world. While acknowledging that games might both be a sign of the present situation and a tool to think through it,¹⁹ he ultimately concludes that the former dominates the experience. Playing games today, Kirkpatrick claims, in most cases does not involve a critical distance, and instead is becoming increasingly “consonant with the experience of work in the networked society.”²⁰ While acknowledging the “disruptive and corrosive potential of play,” Kirkpatrick ultimately insists on the dominance of aesthetic experience and performance over “content” in games: “playing a game involves a kind of distantiation from its narrative components, or conventional interpretations of its symbolic contents. This distance is often open to ironic inflection, although it is rarely (if ever) critical.”²¹

6 Thought-Provoking Play

In this sense, videogames may not be the most likely sources of intervention. Moreover, they are complicit in more general developments in capitalist economies. As Greig de Peuter and Nick Dyer-Witheford show, videogame companies are anything but innocent of the exploitation of creative labor forces.²² Interestingly, the two authors view videogames as “a *paradigmatic media of Empire*—planetary, militarized hypercapitalism—and of some of the forces presently challenging it.”²³ Once again, we find the two possibilities Muroi identified reflected. After all, De Peuter and Dyer-Witheford emphasize the ambivalence involved in contemporary media and videogame culture. Growing out of the military-industrial complex, they were simultaneously developed, in part, by hackers. An exemplary case of industrial exploitation and effective marketing strategies, they also spawned a subversive culture.²⁴ This is mostly true for Japan as well, although I should point out that although the videogame industry has some roots in the import of slot machines for the US military forces stationed in Japan,²⁵ it has not had such strong and direct ties in its later development.²⁶ Their political significance might be found more readily, at least in the case of Japan, by looking at their function in soft power strategies like the “Cool Japan” campaign by the Japanese government,²⁷ their strong influence on copyright and child protection legislation, their use for military training and recruitment, or their educational contribution as “Serious Games” or “Persuasive Games”.²⁸ In any case, the skepticism about the political potentials of videogames in the context of their commercial and entertaining contexts should not be taken lightly.²⁹

In contrast to this skeptical position, I aim to show that popular videogames are not only a “tool to think through” the status quo, but that they can open up spaces for thinking beyond it, although this does not mean that all videogames provide equal opportunities in this respect. If anything, the following analysis of the political possibilities of the medium is meant as a first step toward developing a critical perspective on the specific contribution individual videogame titles do or do not make to alternative imagination.

Nonetheless, I believe that the conditions Muroi identifies for a political artistic practice under postmodern conditions offer guidance in the search for possible spaces of radical political imagination today.

More than that, they suggest that videogames might be an intriguing starting point for this search, because most popular videogames indeed operate predominantly outside of the realm and logic of art. Moreover, videogames offer combinatory spaces in which their own limitations, as well as more general

cultural boundaries, can be challenged constantly on many levels. And they are challenged: At the intersection of technology and content, videogames have evoked a kind of exploratory or “frontier” spirit in their designers, programmers and engineers. Tane Kiyoshi, for example, stresses the effort many creative minds have put into exploring, challenging and repeatedly surpassing the limitations of videogame technologies throughout the history of the medium in Japan.³⁰ Famous videogame creator Endō Masanobu offers a fascinating account of how he and others challenged technological limitations in Japan during the 1980s.³¹

In the context of authorship and singularity, videogames, in a similar manner to film, have not only developed from machines designed from scratch by a few individuals or even a single person—as was the case with *Space Invaders* and its “father” Tomohiro Nishikado—to extensive products that sometimes involve more than a thousand people in the process.³² Jan-Noël Thon observes that

while there may be cases where one person is identified as the single author of a given film, comic, or video game (even though he or she will still commonly not actually be the only person who has contributed to the work in some way), the situation is usually not as clear-cut, and some version of collective authorship—which, more often than not, is situated within and determined by complex and powerful institutionalized frameworks of cultural production—appears to be the default case.³³

He suggests speaking of a “hypothetical author collective”.³⁴ Although the complexities of videogame creation and production are not the focus in this book, I would like to follow Thon’s suggestion to address it, at least in my terminology. For this purpose, I will hereafter address the hypothetical group of people involved in developing, designing, creating, programing, testing and in other ways contributing content to a specific videogame, even if remotely, as “designers”—in part to maintain the language of the medium, and in part to express their “architectural” role in the construction of videogame space, to which I will return below. Moreover, videogames also experiment with the relation between creator (author) and player (reader) and shift their responsibilities for the instantiated work significantly. Furthermore, their spaces are not only built on technology, they are also, partly, instantiated and performed by the computer, as I will argue in more detail in Chapter 2.

In sum, these characteristics do not provide arguments for the “uniqueness” of

8 Thought-Provoking Play

videogames, but they do suggest that videogames might be an intriguing—not to mention challenging—place to look for stimuli to our political imagination. While other recent inquiries into such stimuli have focused more specifically on the rich expressive potentials of avant-garde videogames,³⁵ I intend to look at popular videogames in more detail, in search for the practice of intervention that Muroi demands. This is not meant to deny artistic or explicitly avant-garde videogames their crucial political and formal thrust. Good examples of this force can be found in artistic games like La Molleindustria's *Everyday the Same Dream* or Newsgaming.com's *September 12th*.³⁶ That being said, I believe that popular videogames have a similarly rich and simultaneously more “interventionist” potential due to their position within a field dominated by commercial interests and entertainment. At the same time, those games that predominantly tread the path that Muroi has identified as overtly complicit or even complacent, demand critique. Instead of confronting them with more deliberately political works of art framed in an explicitly political context, and often in opposition to the commercial market, I intend to confront them on their own terms.

Japan

If videogames are a distinct but not unique source of imagination, the same can be said of Japan. In the context of my aims, the focus on videogames created (mostly) in Japan is not a necessary, but certainly a deliberate choice. This choice has to do with my research interests and specialization, but it also is a choice for engaging with a particularly vivid and experimental area of videogame production, both with regards to the context of this production and to its technical and industrial conditions. A closer look reveals that even the idea of delimiting the “Japanese” portion of videogames is problematic. Whether we tie the idea of “Japan” to nationality, geography or aesthetics, there are always examples that do not fit the respective categories.³⁷ Nonetheless, I am convinced that a close look at videogames in their specific regional, socio-cultural and historical context is crucial in the search for alternatives. Understanding not only the mechanisms by which games stimulate our political imagination—and where they fail to do so—but also their specific contexts, offers stimulating insights into the potentials such contextualized videogame expressivity has in local and global contexts.³⁸

Regarding the historical and cultural context, Muroi's discussion betrays some of the trajectories in the discourse on “the postmodern,” which is influential in Japan's popular culture and elsewhere to this day. Since the second half of the twentieth century, French poststructuralism and postmodernist dialogs

have had a visible and distinct influence not only on academic and intellectual discourses, but on everyday culture and society, in fields ranging from advertising and architecture³⁹ to subcultures and popular culture, related to anime, manga and games amongst others. The latter have developed a variety of distinct expressive—and economic—styles. The aforementioned Azuma, for example, stresses the importance of databases and characters in cultural production. According to his observation, the structuring function of grand narratives is replaced by a database of cultural elements, which is used to equip characters, thus producing “small” narratives.⁴⁰ Itō Gō and Nozawa Shunsuke refine and stress the importance of characters in contemporary Japanese pop-cultural production and consumption.⁴¹ Otsuka Eiji has repeatedly highlighted the importance of the works’ “world view” (*sekaikan*), which is used to generate a more or less coherent universe.⁴² As Marc Steinberg and others have shown, these concepts serve as a basis for a widely embraced economic strategy, often referred to as “media mix”.⁴³ Rather than offering a detailed account of these insightful thinkers and their work here, I will rely on them in my theoretical discussion and case studies below. For now, the more important point is that these theorists and critics mirror the vivid and widespread developments within Japan’s popular culture of recent decades, of which videogames are an important part.⁴⁴

All the more as the videogame industry and videogame culture in Japan has been growing during a period of economic downturn since 1989, when the country entered what is often referred to as “lost decade(s)”.⁴⁵ During the years of the economic recession, the videogame industry remained relatively strong, not least thanks to innovations in the hardware sector. In this sense, videogames proliferated in a lasting period of aesthetic, cultural and economic uncertainty. In itself, this is not necessarily the case for Japan alone, but it arguably influenced in distinct ways some of the ideas and worlds found in games created in Japan. One example of this is the many games focusing on nuclear weapons and war, like the *Metal Gear Solid* or *Gundam* series discussed in more detail below. Dating simulations like *Tokimeki Memorial* or *Love Plus* offer specific experiences of social, romantic and erotic relationships, and, in many cases, reflect on the society of their times. The historically, culturally and socially contextualized personal engagements of designers, creators and programmers with the world must be regarded as distinct products of the specific situation these people find themselves in. The games I focused on in my case studies certainly are, both regarding the historical and socio-cultural context in general, and, as Tane’s account of the history of videogames in Japan

10 Thought-Provoking Play

suggests, also regarding videogame industry and culture in particular. Although I put little effort into elaborating these contexts in this book, I am interested in the vividness, inventiveness, expressive richness and sometimes ignorance with which videogame designers in Japan—and elsewhere—have responded to the historical developments of recent decades. Their games may speak to local issues as much as to locally perceived problems of global scale.

Play and Utopia

On yet another plane, videogames are a promising medium of political imagination, because they inherit, adapt and reinvent the notion of play, which, in turn, overlaps significantly with the concepts of utopia and science fiction. Examining the radical political imagination found in science fiction and utopia, Jameson claims that utopia is an “imaginary enclave within real social space.” The utopian enclave exists “like a foreign body within the social,” beyond its reach and therefore testifying to its political powerlessness, but nonetheless offering spaces where “new wish images of the social can be elaborated and experimented on.”⁴⁶ For readers who are familiar with early conceptualizations of play, it may not come as a surprise that the courts of justice serve as a historical example of such an enclave for Jameson, and as one of the spaces of play for Johann Huizinga, “in form and function play-grounds, [...] isolated, hedged round, hallowed, within which special rules obtain.”⁴⁷ Huizinga famously regards play spaces as “temporary worlds within the ordinary world, dedicated to the performance of an act apart.”⁴⁸ He further claims that play is a sphere in which “the antithetical and agonist basis of civilization is given from the start,”⁴⁹ and suggests, in the words of Thomas S. Henricks, “that play was once an energizing, even culture-creating activity in the life of societies.”⁵⁰ This conclusion invited substantial criticism for being limited to agonistic games⁵¹ and his rough historical analysis and methodology in general.⁵² However, even if we do not follow Huizinga in his entirety, the widely-shared definition of play as a space apart from the ordinary is strikingly similar to Jameson’s enclave.

Moreover, they potentially share the enclave-like isolation from reality that Jameson regards as a necessary condition for developing utopian and science fictional alternatives to the present from within.⁵³ Similarly, Phillip Wegner identifies utopia as a closure of everyday experience and ideology on the one hand, and abstract theorizing on the other.⁵⁴ Applying Henri Lefebvre’s tripartite model of space,⁵⁵ Wegner claims that narrative utopia derive their critical force from their character as conceived or “pretheoretical” spaces. They

occupy “a middle ground between the phenomenological concreteness of the literary aesthetic and the abstract systematicity of the theoretical,” that is between the representational practices of literature that expresses lived experience, and those practices of theory that attempt to perceive these experiences in an abstract, systematic fashion.⁵⁶ What is more, due to position between these poles, “the displaced or neutral world of the utopia [becomes] a place wherein these [social and cultural; mer] contradictions do not come to a resolution but instead are allowed to play against one another.”⁵⁷

[W]hile crucial aspects of a newly emergent social reality are present in the utopian figure, the relationship between these elements, dispersed as they are throughout the text, cannot yet be articulated. That is, the utopia presents a narrative *picture* of history-in-formation rather than the theoretical *description* of a fully formed historical situation.⁵⁸

In other words, Wegner claims that ensembles or patchworks of existing elements can open spaces that are neither found in our empirical reality, nor accessible to theoretical summary, and which have the potential to point our thinking to new directions. Importantly, he emphasizes the potential for contradiction that these patchworks share. Hence, Wegner can write that “[b]y inserting something heretofore unknown in the world [...] the narrative utopia generates the cognitive space around which new kinds of lived experience and theoretical perceptions form.”⁵⁹

Against this background, play spaces appear as a promising place to look for alternative imagination, or at least as spaces in which new ideas may be elaborated. Moreover, it is tempting to understand videogames as a particular instance of utopian projects, as Alexander R. Galloway remarks:

An argument can be made that all videogames are, at a certain level, utopian projects, simply because all videogames create worlds in which certain laws are simulated and certain other laws are no longer simulated. The freedom to selectively simulate, then, operates in a videogame as the most important scaffolding for utopia.⁶⁰

Enthusiasts embrace these rich potentials of enclosed play and videogames. For example, Jane McGonigal argues that videogames, from small-scale casual cellphone apps to epic massive multiplayer online worlds, can fix or at least enhance our broken reality by offering us more activating, fun, rewarding,

12 Thought-Provoking Play

socially rich and fulfilling challenges than our boring quotidian lives.⁶¹ McGonigal refers to, among other things, the gratifying structure of achievable goals and instant feedback, as well as the joy of collaboration amongst players—of being part of something “epic”. Those of you who have played videogames may know the satisfying experience of beating an enemy boss after several hours of repeated failure, or the joy of a successful coordinated attack in online games. With her discussion, McGonigal takes up a thread woven by prominent play theorists like Friedrich Schiller, Johan Huizinga, Eugen Fink or Bernard Suits, who all identify an ideal version of “unproductive play” as a creative or opposing force in modern life and its constraints and teleological structures. The idea of making life measurable, offering feedback for small tasks, and requesting collaboration instead of competition is certainly appealing and could be put to use.

A powerful utopian vision, this idea, however, disregards the differences between life with its fatal causalities and its endless resources and repeatable, virtual videogame worlds that are played voluntarily and largely abstract the hardships of daily life in their algorithms. While the various types of online games (mmo, social games, etc.) certainly offer vivid spaces of political negotiation and individual identity work, a significant share of research into these worlds suggests that these spaces are often a perpetuation of the discrimination, inequalities and power struggles well-known from outside of game worlds.⁶² On a wider scale, *gamification* emphasizes the activating and motivating potentials of playful and goal-directed scenarios and, at the same time, advocates the deployment of game-like structures in all areas of society in general, and as a new and promising path for business models and consumer products in particular.⁶³ As Galloway remarks, “today, it would be entirely naive to believe that play retains its anti-capitalist or anti-work status.”⁶⁴ Moreover, he revises his above-cited statement about the utopian status of videogames, pointing out that, “the very act of creating an immaterial utopian space [...] inscribes a whole vocabulary of algorithmic coding into the plane of imagination that thereby undoes the play of utopia in the first place.”⁶⁵

Stephen Kline, Nick Dyer-Witheford, and Greig de Peuter, are more pessimistic about videogames and digital technologies in general. They claim that “to the degree that it [digitalization; mer] supplants rather than supplements other forms of sociality and experience, it also contains the seeds of diminishment, atrophy, or attenuation. [...] Interactivity, for example, may not only be empowerment and education, but also loss and amputation, as digital aptitudes squeeze out or devalue other nonelectronic capabilities.”⁶⁶

More drastically, Paul Virilio predicts that the future will be populated by the “the self-sufficient man who, with the help of technology, no longer needs to reach out to others because others come to him. [...] The future lies in cosmic solitude.”⁶⁷ He criticizes virtual play and videogames for replacing the stimuli of the imagination with mechanical instruments and repetition. In his view, the videogame player is “hurried by the machine.” In games, “travelers are traveled. Dreamers are dreamed. They are no longer free to move about, they are traveled by the program. They are no longer free to dream, they are dreamed by the program.”⁶⁸

Virilio denies that videogames afford such freedom, not only because they are predetermined and offer the player a limited number of choices, but because this restriction, in his view, limits the player’s imagination. This is not to deny the attractiveness of virtual life, but, in an inversion of McGonigal, it is a warning about the threat the virtual poses to “non-virtual” life, including our imagination of alternatives. While escapism and addiction to videogames, and their attractiveness over reality, as McGonigal puts it, should not be taken lightly, this critique can hardly be generalized at the present stage. What is more, the dualism of real and virtual seems obsolete and misleading. A more detailed analysis is beyond the boundaries of this book. If anything, then, escapism reminds us of the difference between the potentials of the medium I aim to unveil, and an empirical analysis of the play experience of multiple players. It also serves as a motivation for a more full-fledged analysis of the experience of other players, which I leave as a task for future research.

More importantly, however, is Virilio’s claim that videogames replace the player’s imaginative freedom with machine control. This argument subtracts from videogames what Huizinga and others found fascinating in play, and ultimately rejects my project from the outset. After all, if videogames are only about predefined algorithmic worlds in which the player’s freedom is reduced to reaction, one might think that there is little hope for stimulating alternative imagination. Arguably, the political demand for opening alternatives needs to be reflected in the internal structure of the medium—without meaningful choice on the player side, there is little hope for a political potency. Instead of giving up, however, I propose to take Galloway’s and Virilio’s critique seriously in two ways.

First, it would be naïve to demand utopian solutions to all contemporary problems from a visit to the rich and powerful worlds videogames offer. Reflecting the above-mentioned shift from grand narratives to disparate pieces

14 Thought-Provoking Play

(the “postmodern”), my search does not aim to find “the” ideal alternative to the present, which, in turn, is not identified as “one system,” but rather it is looking for interventions. I return to Galloway for dialectic guidance for this project. While arguing, similar to Kirkpatrick, that “video games are, at their structural core, in direct synchronization with the political realities of the informatic age,” he claims that this is exactly why they can make transparent the otherwise hidden “boring minutiae of discipline and confinement that constitute the various apparatuses of control in contemporary societies.”⁶⁹ Embracing the ambivalence inherent in videogames, Galloway succeeds in identifying some of their most intriguing political and utopian potentials in the most unlikely places. In a sense, his approach is similar to what Frederic Jameson calls the utopian method, e.g. a search for utopian moments that is not afraid to look for them in the most extreme dystopian environments.⁷⁰ It will serve as a perspective for my approximation of concrete videogame titles. Second, Galloway prompts us to take the technology of videogames seriously, if we are to understand the expressive and experiential potentials and limitations of videogame space.

Thus, I do not intend to draw a romantic image of gameplay activities. Nonetheless, I hope to show that the potential videogames have is in their power to stimulate reflection on and reconceptualization of some of the underlying mechanisms and foundations of contemporary life and, through this, point towards new ways of rethinking them.⁷¹ This book remains vague about the position and influence of modern and postmodern elements in contemporary society, culture and politics—these elements are mixed, remixed and interdependent to an extent that, in my view, does not sanction any clear-cut perspectives.

Political Philosophies

The task of reflecting on the fundamentals of life in common is one sometimes ascribed to philosophy and, more distinctly, to political philosophy. Beiner regards the latter as “the privileged intellectual space wherein human beings reflect, *in the most comprehensive way*, on what it is to be human.”⁷² In his understanding, political philosophy is “a dialogical enterprise conducted in relation to superlatively ambitious articulations of ‘the human good’.”⁷³ Judging from his selection of materials, Beiner’s conception of political philosophy remains conservative insofar as he privileges great political thinkers. For him, the dialog of political philosophy remains “a dialogue between epic theorists and epic theories,” who have the will “to articulate single grand thoughts.”⁷⁴ The important contributions to thought and the conception of human life of

such epic figures and theories notwithstanding, I believe that the endeavor of conceptualizing the foundations of life in common is not reserved for great philosophers exclusively. Is it not the tasks of academics and intellectuals to uncover traces of such conceptions in ideas and practices found in various places?

One of the key questions I would therefore like to raise in this book is whether videogames can be a medium of political philosophy in this sense of rethinking the foundations of life in common. In order to avoid jumping to conclusions, it seems fair to consider the possibility that political philosophers are more intentional and “comprehensive” about their task than videogames might be—after all, they are at least in part commodities of entertainment. Therefore, I use the term “political imagination” instead of political philosophy as a marker for alternative imaginaries of any degree that challenge the status quo (and our individual, subjective “non-game reality”⁷⁵) on a fundamental level. In this book, I ask how videogames might stimulate such visions of different, novel conditions, structures, practices and environments for life in common, which might serve as the basis for political action geared towards realizing them. In other words, I insert videogames into the political philosophical dialog.

This is not just a question of whether videogames speak to issues focused on in political philosophical discourses. Against the background of the above-mentioned distinct expressive and experiential qualities videogames feature, it is also a question of HOW videogames engage with this discourse. It should already be clear that the mode of conduct differs significantly from the idea of the epic theorist offering an epic theory. While I have no interest in diminishing such efforts, I nonetheless hope to show that political philosophy can benefit from seriously considering different ideational spaces and different ways of doing political philosophy—ways that maybe closer to the “practice of intervention” envisioned by Muroi. The analysis below suggests that selected videogames indeed bring something to the table of political philosophy. Making use of their distinct expressive and experiential capabilities, they both offer “tactical theories” capable of exposing existing boundaries,⁷⁶ and provide spaces for experimenting with breaking these boundaries. We will not find full-fledged theories of life there, but maybe stimuli for thinking beyond the ordinary are more than enough.

Infusing political philosophy with videogame spaces from Japan, in turn, means that I arrange the videogame spaces I am inquiring about on the same plane as the ideas and theories of the political philosophers that I quote below in

16 Thought-Provoking Play

the analysis. Some readers may notice a bias in the selection of these ideas and theories, which have predominantly developed in the US, Germany, France, Italy and, to a lesser extent, in Japan or other, “non-Western” countries. On some level, I risk falling into the old dichotomy of “Western theory” and “Japanese raw data,” which has been heavily criticized in the past from the perspective of area studies.⁷⁷ Certainly, this project would have benefited from more diverse perspectives on the political philosophical issues I discuss in the following chapters, but this was beyond my capacities.

That said, I am unequivocal on the point that I do not consider the videogames I present as “raw data”. If the convoluted analytical apparatus I apply to the videogame spaces in the analysis suggest such framing, this is largely because they require a kind of approximation that decisively diverges from textual work—which, in turn, appearing more or less self-explanatory, even if it is anything but, is often not mentioned or explained as a specific approach to the materials discussed. However, I hope that the method of analysis employed does not distract or disguise the point I am trying to make: by analyzing them in the context of specific political philosophical problems, I intend to take the videogame spaces seriously as genuine contributions to the discussion of these problems, not as “mere reflections” of the issues in a different medium. Thus, the theories presented below are as much “raw data” for my subsequent engagement with some of the issues underlying contemporary life.

Productive Conflicts

But what should we really expect of videogame spaces? What do I mean by spaces that “stimulate the imagination”? I have mentioned that I am not hoping to find full-fledged utopias in videogames. In fact, Muroi’s analysis helps clarify this point. For, if the crisis of art stems precisely from its totalizing, all-dominating approach to the world, any utopian totality must fall into the same trap. What other ways are there, then, to unsettle the foundations of the status quo and to stimulate us to think beyond it? How, to speak with Susan Buck-Morss, can the experience of videogames “teach us something new about our world, that it shock us out of moral complacency and political resignation, and that it take us to task for the overwhelming lack of social imagination that characterizes so much of cultural production in all its forms.”⁷⁸

I have already pointed out that targeting general notions of the imagination, in the way that Carroll suggests, may not be enough. In fact, Carroll himself grants that imagination stimulated by mass art tends to corroborate the status

quo rather than challenging its foundations. Examining the ways in which mass art features emotions, morality and ideology, he concludes his analysis by stating that, in the attempt to grant easy and wide access, “mass art addresses widely distributed emotions, invokes pervasive moral principles and concepts, and exploits ideological commonplaces because it is predicated on engaging mass audiences. Were mass art to address uncommon emotions, morals, and political convictions, it would not secure mass uptake.”⁷⁹ While I do not want to rule out any possibilities without further scrutiny, the dominance of the familiar over the “uncommon”—to use Carroll’s carefully picked term—suggests that mass art has limited capacities for shock, and, by extension, may not be the most immediate trigger for radical imagination.

One version of a more radical shock is the mechanism of cognitive estrangement widely discussed in the context of literary science fiction and narrative utopias. Jameson regards this as “a critical and analytical method” that answers “the universal ideological conviction that no alternative is possible, that there is no alternative to the system.”⁸⁰ In other words, they disrupt our common perception and our resignation.⁸¹ An early and influential explanation of the mechanisms that achieve this disruption is that respective works need to confront their readers with a plausible alternative, thereby producing what Darko Suvin calls “cognitive estrangement.”⁸² This alternative, according to Suvin, is constructed by deploying a so-called *novum*, something new and unfamiliar, as carefully and rigorously as possible to the entire fictional world.⁸³ While still very useful with regards to the mechanism of estrangement and its complexities, Suvin’s concept, in a certain sense, leaves us at an impasse. For, while he stresses the importance of totality in the sense of a comprehensive application of the *novum*, others, like Jameson or Muroi, have observed the failure of totalizing engagements. According to Jameson, the utopian genre can only solve this problem by means of its formal ability to draw together diverse existing elements to generate new contradictions and to imagine the other by shifting the known.⁸⁴ In other words, Jameson suggests a shift from an engagement with the totality of a work, to the relation between the elements involved in a work. Japanese writer Abe Kōbō seems to second this approach, placing the aim of estrangement at the center and the “scientific manner” or “totality” of the engagement in the periphery.⁸⁵ Against the background of the combinatory character of videogames, this appears a helpful suggestion.⁸⁶

A similar notion of contradictions sourced in a drawing together of disperse elements is also central in the writings of Theodor W. Adorno. Adorno remains one of the most provocative and critical thinkers of the potentials and dangers of

18 Thought-Provoking Play

art and culture, despite his tendency toward elitisms and his arguably arrogant and sometimes apparently ignorant, generalizing dismissal of mass culture,⁸⁷ jazz music and especially “the other” of extra-European art.⁸⁸ Geuss observes that Adorno emphasized the importance of art with its potential for internal criticism and its ability to produce something new, against the tendency of the Enlightenment rationality toward universal instrumental reason and its repressive homogenization, which he rejected. For Adorno, he claims, art and culture are political if they resist being reduced to instrumental categories, and, in fact, in the way they resist categorization as such. Instead, Adorno labored to “defend what he calls ‘the non-identical’: the unique, the qualitatively specific, the unrepeatable, the ‘other’, that which cannot simply be seen as just one more indistinguishable specimen of a general category, interchangeable ad libitum with any other specimen. This ‘other’ is that which slips through the network of our concepts and theories.”⁸⁹ It is here, I argue, that we can find traces of a more prospective project in Adorno’s writing. Adorno believed that “[o]pen thinking points beyond itself” and that culture and art succeed when they promote such thinking.⁹⁰ Taking a critical, in some instances perhaps unjustified position toward popular culture, he challenged culture and art to contribute to a free society of “autonomous, independent individuals who judge and decide consciously for themselves.”⁹¹

Adorno insisted on the importance of individual “*Phantasie*” as necessary condition for “new” thoughts or productivity as “the ability to bring forth something that was not already there.”⁹² Translated as “imagination” in his English translations, *Phantasie* is a faculty that “might of its own accord gather together the discrete elements of the real into its truth.”⁹³ In other words, *Phantasie* refers to a way of accessing the inner logic of a work that includes a “sensuous moment” beyond measurability and physical evidence. As a counter-concept against Enlightenment rationality, *Phantasie* is not limited to “scientific rationality” and rejects purely schematized imagination, although not entirely detached from cognition. Importantly, he believed that culture and art can stimulate and trigger *Phantasie* by challenging us with internal conflicts. These conflicts, neither solved within the work, nor obvious, confront the individual with a new situation, demanding independent thought and autonomous judgments. In other words, Adorno did not demand of the author to present (utopian) alternatives or estranging worlds built on novelty. Rather, he locates the potential for productivity in the subject appropriating conflict-laden culture and art.

Claiming that such conflicts are only possible in “wholeness,” which is another way of saying internally, he rejects distinction in general, be it between theory and practice, mass culture and high art, work and free time, or between society and art/culture, as a regressive means (of capitalist society in particular) to avoid internal contradictions and conflicts and to ultimately incorporate the now detached realms into its mechanisms of production for a consumer society.⁹⁴ Here, the trends towards universalization, categorization and homogenization are exposed as concrete mechanisms in modern capitalist societies. For Adorno, art and culture are, at least potentially, spaces of resistance against these trends, by way of conflicts that cannot be subsumed in existing categories.

Thanks to this detour, I am now able to further specify the vague notions of otherness and disruption, thus answering the questions posed above at least tentatively. Both Jameson and Adorno stress the importance of rearranging—or drawing together discrete elements—in a novel, disruptive way. Jameson regards the resulting otherness and its disruptive act against the status quo as such as the final goal of this patchwork. Adorno, on the other hand, identifies the target of political art as our imagination that is stimulated by the unsolved conflict the patchwork confronts us with. He is interested not only in the tensions within a work and the otherness (conflict) they give birth to, but in their significance as confrontational moments with an audience used to easily access “mass art” in Carroll’s sense (see above). For the purpose of this book, I propose to adopt his standard. In other words, otherness is understood hereafter as unsettling internal conflicts that are potentially productive due to the challenges they pose to those experiencing them. Because they do not provide easy answers, such conflicts prompt the player to think for herself. As a result, they might be capable of challenging us to reflect on and rethink the foundations of our present life.

Crucially, this understanding of the medium’s political potentials frames these conflicts as neither ubiquitous, nor abstract or timeless. Instead, these conflicts are, in part, a result of a specific game’s position in and entanglement with historical, social, political and cultural contexts, both in the broader sense and with regards to game culture. Moreover, players experience them—or not—against the background of their own contexts. A conflict can only arise if the player recognizes it as such. Furthermore, I suspect that it is difficult to experience the same conflict twice in the same game. What is more, the player might—purposefully or not—ignore the conflict in favor of other pleasures derived from playing. This implies that my own gameplay experience, which serves as central empirical basis for the analysis, is one of many possible ways

20 Thought-Provoking Play

of experiencing videogame spaces. The argument I make in this book is thus not that every player experiences the conflicts I identify in the analysis. Instead, these are conflicts that I have personally experienced at play, against the background of my interest in their possibility. As such, they serve as examples of the political potentials—the potentials for productive conflicts—that videogame technology offers. While a more detailed discussion of the conditions of such experiences of conflict remains a task for the future, I will return to the methodological implications of this framing in the next chapter.

Science Fiction and Other Selection Criteria

Given the sheer number of games released in Japan, the question remains, where to start. If my answer to the question “why Japan” did not satisfy you, the following engagement might not either. In the end, it is one deliberate but not necessary choice. By way of transparency, I would like to offer an account of how I determined the selection I subsequently discuss—I do so rather more urgently now, since it is a choice of games for analysis that might appear surprising to some readers. After all, given my references to the many intriguing experiments done in the neighboring fields of anime and manga, such as visual novels and dating simulations, most of the games I explore are more remote to these fields.

Several assumptions, requirements and limitations guided this question. My initial guiding assumption was that I might be able to identify examples of productive conflicts more easily in videogames that aim to reflect on or critique the present status quo, which led me to singling out the group of videogames explicitly engaging with science fictional themes and methods. This choice is related to my general interest in conflicts, which, in turn, is related to the quest for not just any alternative imaginaries, but such imaginaries that may help guide us toward a better life in common. Arguably, the conflicts games confront us with might be more effective, or at least easier to identify in this initial exploration, if they are not driven by magic and fantasy, but remain somehow connected to our empirical surroundings. Given Adorno’s notion of *Phantasie*, this evaluation is open for discussion and further scrutiny.⁹⁵ In fact, if we were to extend the view to forms of social interaction between players, to take just one example, I suspect that science fictional tendencies might become less relevant as a marker for the political. However, instead of looking at the expressivity of networked and online worlds and the multiplayer experience, I decided to start with the more contained field of single-player game modes and their experience. In this context, the political potential of conflicts is less a result

of specific kinds of social interaction with other players, and more a question of the relation between the player's everyday reality and the alternative situation or world in which he or she plays. Disruptive conflicts and stimuli of alternatives have to be recognizable and recognized as such if they are to be engaged with.

The field of science fiction is relevant here because it makes the inquiry of total otherness and its relation to the status quo—its “recognizability” from our present position—its central motive. Science fiction has to be distant and detached enough from the present to confront us with otherness, but not so distant from the known that it turns into implausible fantasy or risks alienating the reader.⁹⁶ The genre has been widely discussed by political thinkers precisely because it remains plausible to some extent, detached from our experience but at the same time upholding a connection to our empirical reality.⁹⁷ The underlying assumption shared by many science fiction authors and theorists is that the genre derives its critical, disruptive momentum from its negotiation of plausibility with regards to the social realities its readers live in,⁹⁸ and its playful, poetic and speculative manner and “fundamental *hospitality to otherness*.”⁹⁹ Looking at the above-mentioned approaches to defining science fiction by Suvin and Abe, a widely shared standpoint is that the genre draws its force not so much from the scientific rigor of its content, but from the “novum” it introduces and from the careful scientific method by which the novum is applied, and by which, therefore, such otherness is welcomed, constructed and ultimately deciphered by the audience.¹⁰⁰

Whether the distinction between science fiction and other genres is as clear-cut as Carl Freedman and others portray it or not, cannot be answered in this book. Nonetheless, science fiction is central to negotiating plausibility.¹⁰¹ Plausibility, in turn, can be suspected to be an important factor in determining the political character of the imagination it stimulates and confronts us with, or at least the likelihood of it being recognized. As such, science fictional videogame spaces are a likely place for the kinds of conflicts I am interested and will serve as a starting point for my exploration. This may appear problematic, given that it is debatable whether science fiction amounts to a videogame “genre”. In fact, Dominic Arsenault concludes from his analysis of the academic and popular use of the “genre” concept and existing taxonomies in the context of videogames that this use is imprecise, intuitive, far from rigorous in its classification and different across media and disciplines.¹⁰² If anything, he identifies a dominance of gameplay as a structuring factor at the highest level, expressed in genres like “Action,” “Adventure,” “Strategy” or “Shooter.”¹⁰³ Against this background, I will refer to science fiction as a theme and select those videogames that

22 Thought-Provoking Play

predominantly engage with this theme, by following its logic of constructing and confronting us with plausible otherness.

Second, I assume that some of the most intriguing popular videogame spaces, with regards to experimenting with the boundaries of the medium and hosting disruptive conflicts, may appear during a time in which a rich set of expressive means is available for exploration by a maximum number of parties. In the case of Japan's industry, one such time is from the mid-1990s to the mid-2000s. In the wake of the economic breakdown in 1989, new consoles like the Game Boy (1989), the Super Famicom (SNES, 1990), the Playstation (1994), the Nintendo 64 (1996), SEGA's Dreamcast (1998), and the Playstation 2 (2000) offered a greater breadth and depth of expression, while maintaining a comparably low entry barrier, thus inspiring designers to develop more diverse, experimental games.¹⁰⁴ According to Nobushige Hichibe, the development costs of new, original titles rose significantly since then. He observes that the videogame industry increasingly avoids the high risks of original and innovative ideas, instead favoring series, remakes and adaptations from other media. Due to the high initial costs, small- and medium-size companies are increasingly forced out of the market or turn into suppliers for the bigger players.¹⁰⁵ In this sense, an aesthetically rich but still "affordable" period of videogame development appeared interesting to look at. As you may know, a great many consoles were in the market during these years. However, the statistics of all releases in Japan since the 1980s, listed on the Japanese Media Art Database, indicate that the Sony PlayStation and subsequent products in the PlayStation series were particularly popular (see Figure 1).¹⁰⁶

In addition to these admittedly vague limitations of scope, some important practical matters further determined the initial selection. Firstly, this research suggested playing the games as its central method. In an academic project, this implies documenting the playing experience as comprehensively as possible and, in my case, the method of choice in this regard was capturing the gameplay. This, in turn, was significantly more difficult with handheld consoles at the time when I conceived this research, making the choice for games available on the PlayStation, PlayStation 2 and PlayStation 3 the most manageable choice to start this work. Trading data collection and research documentation in for an enhanced scope was not an option in the first exploration. There is no theoretical or content-related justification for this limitation—if anything, it offered a similar gaming situation and controller layout. At the same time, some of the games I played were initially not

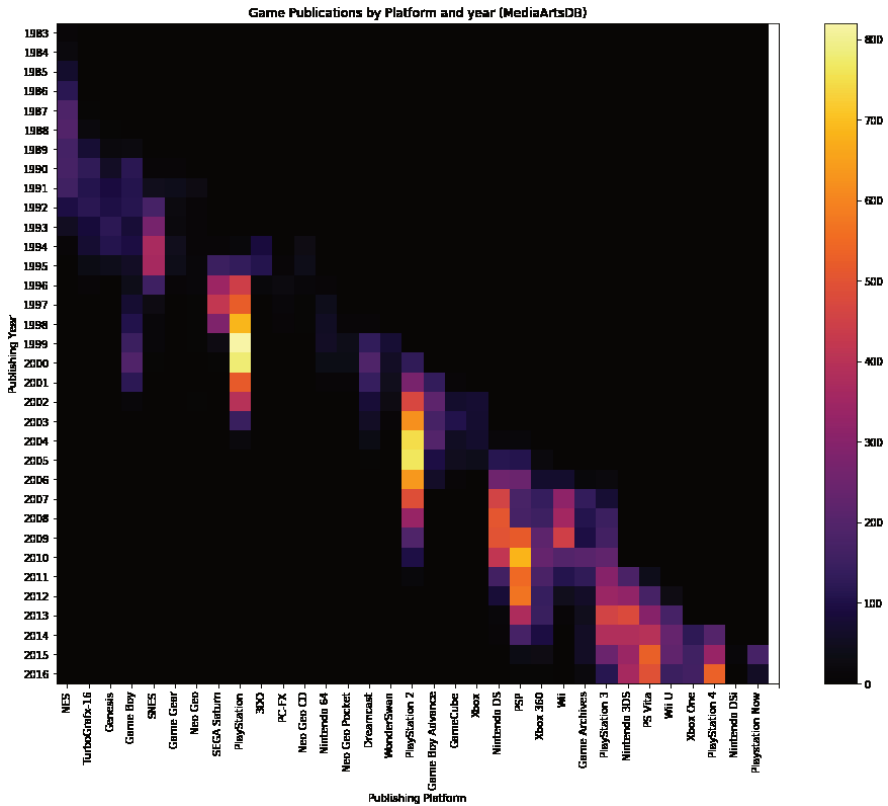


Figure 1. Number of releases per platform and year based on the Japanese Media Art Database, created by Florian Rämisch for the project diggr.

developed for these consoles, like *Chrono Trigger*, which first appeared on the Super Nintendo Entertainment System.

In sum, these conscious choices and technical limitations resulted in a relatively well-delineated starting point for this study, which focuses on videogames developed (mostly) in Japan during the 1990s and early 2000s, and that involve a science fictional theme and are published for Playstation home consoles. However, videogames are more diverse and richer than that, and I could have done more to widen the view. More specifically, the selection of games presented below shares literary science fiction’s tendency of catering to male audiences and, to a lesser degree, reflect my own gameplay preferences. By focusing on ludic elements rather than the stories and worlds games present, and thus excluding some of the intriguing examples in the genre of visual novels, I

24 Thought-Provoking Play

skip an important group of videogames in Japan. Other consoles and devices, and contexts, such as the amateur scenes in Japan, are no less interesting.¹⁰⁷

I can only hope that my work and its various biases stimulate and motivate others to dig deeper and explore other parts of gaming culture for their political potentials, with and beyond the context of Japan.

The Structure of This Book

The twofold question this book raises is whether videogames can offer means to create contradicting ideational spaces that direct our political imagination of life in common beyond the familiar, and what specific cases from Japan have to offer in this regard.

One of the main assumptions outlined above is that videogames offer radical potentials because they allow for distinct ways of combining diverse elements and mechanics, whether representational or not, in new, conflicting ways. As such, videogame spaces might also change the ways in which political philosophy is done. This, in turn, means taking them seriously as playful media technologies, as recent scholarship on videogames has rightly demanded.¹⁰⁸ In order to narrow down the potential videogames have to host conflicts, the following chapter will take a closer look at the building blocks of videogame spaces. In this book, videogames are regarded as the sum of all rules inscribed in the software. Based on this definition, I show how these rules demarcate an ideational space characterized by world multiplicity, contingency, partiality and semantic arbitrariness of representation, player enactment and a broad range of variously combined expressive means. Disruptive conflicts emerge from the ways in which designers, player and computer negotiate the myriad elements and expressive features this space may host. In the final section of the chapter, I touch upon the methodological problems my conceptualization of videogame space provokes, offering some suggestions for how to solve them. Primarily, I propose to study games through repeated play, and to enhance the researcher's experience with external data about the game, such as walkthroughs, player discussions and guidebooks.

The third chapter gives an overview of some general tendencies in Japan's videogame culture of recent years and offers an experimental analysis of some popular franchises in the genre of science fiction. This chapter draws attention to the requirements for conflicts and highlights cases in which conflicts fail to develop any radical potential, such as the *Gundam* franchise, *Front Mission*,

Ace Combat and *Armored Core*. As such, the chapter offers a rationale for my selection of cases and serves as a negative foil for the subsequent inquiries.

In Chapter four, I look at the ways in which *Chrono Trigger* and *Shadow of Memories* (*Shadow of Destiny*) play with time. Against the background of Virilio's dromology and his warning against the limitless acceleration of life, I examine how the negotiation between a complex narrative structure created by the designers and player choices confronts the player with a paradoxical temporal multiplicity that challenges our common, linear concept of time that serves as the basis for contemporary life in common. Chapter five deals with the political potential of aesthetic experiences in *Rez*, *The Earth Defence Forces* and *Neon Genesis Evangelion 2*. It asks whether videogames offer ways to alter what Jacques Rancière calls "the distribution of the sensible," i.e. the boundaries of what can be said and thought. Analyzing how the negotiation between the computer and the player can lead to counter-intuitive, uncanny conflicts, I show that these conflicts open our eyes to the non-human other in disruptive ways. In the last case study, I turn to game rules and action (Hannah Arendt, Giorgio Agamben). My exploration of the tension between rules specified by the designers, computer performance and player action created in the *Metal Gear Solid* series shows that the conflicts openly played out in these games offer the player spaces for experiencing (bureaucratic) control and exploring counter-measures. As I show, in rare instances these conflicts give way to an experience of free action.

The three detailed case studies presented in chapters four to six contain cross-references, but each of them investigates a different aspect of videogame space in the context of one or more concrete examples from Japan. Thus, these chapters can be read in any order. I have arranged them so as to gradually move from a more contained relation (in the context of an admittedly highly abstract concept, that of time) toward a more experimental, open constellation of elements and concepts, the contours of which are vague and, at several points, spill over the edge of this book. Taken together, the case studies offer a series of hints for critical engagements with videogames as spaces of political philosophy. Most videogames may not readily help us in our struggle for a better life in common. However, those examples that escape the framework of complicity and representation to offer deeply unsettling, disruptive moments, are worth examining more closely, as they indeed offer some direction for imagining radical alternatives. My hope is that this book may inspire game designers,

26 Thought-Provoking Play

players and scholars to explore these potentials, as much as the limitations, further.

It tries to do so not only in writing. As mentioned above, the analysis in this book relies heavily on my own playing experience of the games. The written text you have before you cannot betray this experience sufficiently, and, more generally put, I am not convinced that any other medium or channel of mode of relating this experience can. Nonetheless, I have tried to convey some of the gameplay I experienced and approximate intersubjective understanding to some extent. The written text conveys only two thirds of the argument I present in this book. The consecutive chapters feature references to short gameplay clips, which I have recorded and edited during my research, and which hopefully make my analysis more transparent and accessible to those readers who have not played the games in question themselves. More importantly, these videos are an attempt at communicating some of the gameplay experience on which the analysis is largely based. Given that I am arguing for the distinct expressive potentials of games vis-à-vis a text or film, I do not imply that the recordings actually betray the richness of the experiences I made. For that, the games need to be played. However, as they at least offer one way of approximating this experience to some degree, I regard them as vital parts of my arguments. In the broader context of this book, they are also a first, very small step toward rethinking what it means to think and philosophize in a space that includes media other than text.

The videos can be found via:

<http://asobiba.de/martin/thought-provoking-play/videos/>

I would like to invite you to watch them and evaluate my findings yourself, even if you know the titles under scrutiny.

Notes

1. This tendency has been observed in recent-day Germany, where, according to a far-reaching empirical comparison between 2006 and 2016, both the democratic milieu and more radical forces are growing (Decker, Kiess and Brähler, *Die Enthemmte Mitte*).

2. Yoshihara [吉原], *Komyuniti Sutadiizu*, 144–46. A similarly hostile reaction to the

“globalization” of a specific idea of (Western) modernity can be found condensed in the symposium “Overcoming Modernity” held in Japan in 1942. This event brought together a number of leading Japanese intellectuals of the time who shared the urge to conceptualize alternatives to Western-style modernization. A number of these ideas ended up supporting the militarist Tenno state and the imperialism of Japan in Asia.

3. Jameson, *Archaeologies of the Future*, 111, 211, 228.

4. Karatani, *The Structure of World History. From Modes of Production to Modes of Exchange*; a condensed version of the book has been translated by the author: Karatani, *Auf der Suche nach der Weltrepublik*.

5. Karatani, *Auf der Suche nach der Weltrepublik*, 11.

6. Runciman, *Politics*, 10.

7. See for example Graeber, *The Utopia of Rules*, 100–101.

8. Carroll, *A Philosophy of Mass Art*, 79.

9. Geuss, *Politics and the Imagination*, ix–x.

10. Carroll, *A Philosophy of Mass Art*, 79.

11. Think, for example, of the term cyberspace coined by science fiction writer William Gibson, who recalls that new technologies like videogames were among the things that inspired this word creation. Cyberspace, in turn, has served as a far-reaching vision and inspiration for computer and software engineers in many places. Not least, it served as a vehicle for the intellectual and academic imagination. In Japan, I found both examples of “prognostic” engagements with the possibilities and various functions computer technology might have in the future in fields ranging from space and deep sea to medical treatment, crime prediction and traffic (Aijima [相島], *Konpyūta no Kagiri Naki Chōsen*), and critical engagements with a possible future based on computer technology (Muroi [室井] and Yoshioka [吉岡], *Jōhō to Seimei*). The latter is particularly intriguing, as the authors self-consciously frame their exploration as “science fictional” attempt of understanding and critically engaging with the present (Muroi [室井] and Yoshioka [吉岡], 49–50).

12. Matsumoto [松本], “‘Gēmuka Suru Sekai’ ga Motarashita Mono, Motarashitsutsu Aru Mono,” 12, my translation.

13. Muroi [室井], *Posutoōto Ron*, 18.

14. *Ibid.*, 47–49.

15. Azuma [東], *Dōbutsuka suru posutomodan*, 84–95; in English published as Azuma, *Otaku: Japan's Database Animals*.

16. Muroi [室井], *Posutoōto Ron*, 51.

17. *Ibid.*, 53–57.

18. Owen, *Disruptive Power: The Crisis of the State in the Digital Age*, 6.

19. Kirkpatrick, *Computer Games and the Social Imaginary*, 3.

20. *Ibid.*, 25, 162.

21. *Ibid.*, 35, 160–64.

22. De Peuter and Dyer-Witford, “A Playful Multitude? Mobilising and Counter-Mobilising Immaterial Game Labour”; Idem, “Empire@Play: Virtual Games and Global Capitalism.”

23. Dyer-Witford and De Peuter, *Games of Empire: Global Capitalism and Video Games*, xv, italics in the original.

28 Thought-Provoking Play

24. Ibid., xxix–xxx.

25. For example, this is the case with SEGA, which is well-documented on Wikipedia.

26. Picard, “The Foundation of Geemu: A Brief History of Early Japanese Video Games”; Lauteria, “Assuring Quality: Early 1990s Nintendo Censorship and the Regulation of Queer Sexuality and Gender,” 45.

27. “METI – Cool Japan Strategy”; “METI – Content Industry: Current Status and Direction of Future Development”; for a critical discussion, see Oyama, “Japanese Creative Industries in Globalization.”

28. Fujimoto [藤本], *Shiriasu Gēmu*; Bogost, *Persuasive Games*.

29. In their *Ultimate Guide to Video Game Writing and Design*, experienced designers Flint Dille and John Zuur Platten urge their readers to “[r]emember that when you are creating content for an interactive medium like video games, there are expectations on the part of your audience: to be engaged. To be in control. To be playing. Of course, as in real life, control is an illusion or at best, a temporary condition, but it is one that humans like” (Dille and Zuur Platten, *The Ultimate Guide to Video Game Writing and Design*, 2).

30. Tane [多根], *Kyōyō toshite no Gēmushi*.

31. Endo [遠藤], “The Making of 80’s Japanese Games~Create World~.”

32. An example of this is *Final Fantasy XIII* from 2009, for which Mobygames.com offers a credit list with over 1,000 names (“Mobygames: Final Fantasy XIII Credits”). The scale of “AAA” title game development should be palpable from this, even if the list involves some vagueness regarding the area of release and the sources, and granted that some people involved might be listed twice.

33. Thon, *Transmedial Narratology and Contemporary Media Culture*, 135.

34. Ibid., 137.

35. Brian Schrank offers a substantial analysis of avant-garde videogames. He echoes Galloway’s emphasis on the interrogative function videogames can have with regards to society and culture today, calling them “a principle site to expose, unwork, and rethink the protocols and rituals that rule technoculture” (Schrank, *Avant-Garde Videogames*, 4). Schrank distinguishes between radical and complicit, and between formal and political avant-garde games. To me, this distinction is not intuitive and, ultimately, leaves me guessing at the author’s reasons at times. For example, I am not sure what to make of his framing of Wafaa Bilal’s “Domestic Tension” as “complicit formal avant-garde” meaning as a work of “art for art’s sake.” In my naïve understanding of art, a work like “Domestic Tension,” which involved the artist locking himself up in a room with a paintball gun remotely controlled by online “players,” who could shoot him at will, is anything but formal—in particular when intended “to give a face to the Iraq war” (90–91). Radical political games, he contends, “recover something that we have collectively lost: radical play. Radical play destabilizes the entrenched patterns with which culture engages and plays with technology, allowing for alterior patterns to emerge and unrepresented subjects to become visible” (65). Complicit political games deploy “inviting, populist methods rather than the revolutionary tactics of the radical political avant-garde” to create playful attempts at utopia. In this, “the complicit political avant-garde is proactive—it creates the world in which it wants to live” but its works “do not fight to replace the existing” (113, 118–19). Despite its vagueness, this notion of the “radical political” is a helpful characterization of the interest I have in videogames. Rather than readymade visions (fantasies) of a different world, I scrutinize videogames for conflicts that point towards alternatives by destabilizing the existing order. The focus is thus not so much on the outcome, but on the conflict and its potential as such. However, given my argument that conflicts are

possible as a combined result of the game's and the player's specific context, it would be premature to limit the search to games implicitly or explicitly marked as avant-garde.

36. La Molleindustria, *Every Day the Same Dream*; Newsgaming.com, *September 12th*; for other examples, see also "Games for Change."

37. For a discussion of the local and global ties of Japan's early game industry, see Picard, "The Foundation of Geemu: A Brief History of Early Japanese Video Games"; for a discussion of the problem of identifying "Japanese" games by their aesthetic qualities, see Goto-Jones, "Playing with Being in Digital Asia"; for a discussion of the globalization of videogame production itself, see Wolf, "Introduction," 12.

38. For a recent, nuanced and insightful discussion on the challenges "Japan" poses as a conceptual and geographic framework, see Marc Steinberg and Alexander Zahlten's introduction to their edited volume "Media Theory in Japan" (Steinberg and Zahlten, "Introduction.")

39. Kitada [北田], *Kōkoku Toshi Tōkyō*.

40. Azuma [東], *Dōbutsuka suru posutomodan*; in English published as Azuma, *Otaku: Japan's Database Animals*.

41. Itō [伊藤], *Tezuka izu deddo*; Nozawa, "Characterization."

42. Ōtsuka [大塚], *Teihon Monogatariishōhiron*; Ōtsuka [大塚], "Kadokawa Tsuguhiko to Mediamix No Jidai."

43. Steinberg, *Anime's Media Mix: Franchising Toys and Characters in Japan*; Picard and Pelletier-Gagnon, "Introduction: Geemu, Media Mix, and the State of Japanese Video Game Studies"; Schules, "Kawaii Japan: Defining JRPGs through the Cultural Media Mix."

44. Against the background of the influence videogames had in Japan, it appears surprising that Azuma Hiroki laments in 2007 that there is still "surprisingly little work done that looks at 'contents' like manga, anime, light novels or games, as cultural expressions" (Azuma [東], *Kontentsu no Shisō*, 9, my translation). This has changed since, and with more scholars in Japan and elsewhere involved, the field of videogames in Japan is increasingly in the focus of game studies and other disciplines, both in Japan and elsewhere.

45. For a more detailed analysis, see Yoda, "A Roadmap to Millennial Japan."

46. Jameson, *Archaeologies of the Future*, 15–16.

47. Huizinga, *Homo Ludens*, 1970, 28–29.

48. *Ibid.*, 29. In the German version this sentence emphasizes the closure necessary for play even more explicitly, referring to the act as "self-contained" or "finite" [*in sich abgeschlossen*] (Huizinga, *Homo Ludens*, 2009, 19).

49. Huizinga, *Homo Ludens*, 1970, 96.

50. Henricks, "Play and Cultural Transformation," 16.

51. Caillois, *Man, Play, and Games*, 3–4.

52. Henricks, "Play and Cultural Transformation," 16–17.

53. Jameson, *Archaeologies of the Future*, 5.

54. Wegner, *Imaginary Communities*.

55. Lefebvre (*The Production of Space*, 38–40) distinguishes three interrelated, but not necessarily coherent, dimensions of the social production of space, namely "spatial practice," which "propounds and presupposes" social space dialectically; "representations of space" or "conceptualized space," the space of scientists who "identify what is lived and what is

30 Thought-Provoking Play

perceived with what is conceived,” and “representational space,” which is the space as directly lived or directly described. Corresponding to these are different modes of bodily engagement, namely perceiving of social practice, conceiving or thinking of representations of space, and living of lived space. According to Wegner, the middle terms of conceived representations of space “point toward what we [...] conventionally think of as ‘space’ proper, mediating between and drawing all three of the levels together into a coherent ensemble” (*Imaginary Communities*, 14).

56. Wegner, *Imaginary Communities*, xviii.

57. *Ibid.*, 37.

58. *Ibid.*, 38.

59. *Ibid.*, xx.

60. Galloway, “Warcraft and Utopia,” 113.

61. McGonigal, *Reality Is Broken: Why Games Make Us Better and How They Can Change the World*.

62. Embrick, Wright, and Lukács, *Social Exclusion, Power and Video Game Play*.

63. For an overview of the concept, see Walz and Deterding, “An Introduction to the Gameful World.” In Japan, Inoue Akito has published variously on this topic (Inoue [井上], *Gēmifkēshon*). For a critique of the term and its use, see for example Bogost, “Why Gamification Is Bullshit,” in the same volume.

64. Galloway, “Warcraft and Utopia,” 119.

65. *Ibid.*, 120.

66. Kline, Dyer-Witheford, and De Peuter, *Digital Play. The Interaction of Technology, Culture and Marketing*, 36.

67. Virilio and Sans, “//.Dialogues./ the Game of Love and Chance: A Discussion with Paul Virilio.”

68. Virilio’s critique may be understood as part of a more general trend toward privatization that is often connected with a weakening of political activities aimed at improving life in common. Hannah Arendt (1998, 58), for example, positions the private sphere in direct, fatal opposition to the properly political public sphere, arguing that in mass society, “men have become entirely private, that is, they have been deprived of seeing and hearing others, of being seen and being heard by them. They are all imprisoned in the subjectivity of their own singular experience, which does not cease to be singular if the same experience is multiplied innumerable times. The end of the common world has come when it is seen only under one aspect and is permitted to present itself in only one perspective.”

69. Galloway, *Gaming: Essays on Algorithmic Culture*, 89–91.

70. Jameson, “Utopia as Method, or the Uses of the Future.”

71. This means to believe in the power of what Kant calls “regulative idea” and in the principle existence of alternatives we may not yet be able to express fully. With Thomas Nagel, one may hold against sceptics of this position that “to deny the reality or logical significance of what we can never describe or understand is the crudest form of cognitive dissonance” (Nagel, “What Is It like to Be a Bat,” 171).

72. Beiner, *Political Philosophy. What It Is and Why It Matters*, xxiii, italics in the original.

73. *Ibid.*, x.

74. *Ibid.*, xx.

75. Videogame worlds are as much part of our empirical experience as other aspects of life. Throughout this book, the phrase “non-game reality” is used to refer to the world outside of videogames.

76. I borrow the term “tactical theory” from Galloway, Thacker and Wark, who use it to refer to media capable of exposing the boundaries of mediation itself, and with whom I share the aim of trespassing in places outside of common cartography. Galloway, Thacker and Wark, *Excommunication*.

77. Said, *Orientalismus*; Sakai and Harootunian, “Japan Studies and Cultural Studies.”

78. Buck-Morss, *Dreamworld and Catastrophe: The Passing of Mass Utopia in East and West*, 63.

79. Carroll, *A Philosophy of Mass Art*, 413. This conclusion may be in line with Carroll’s broad conception of imagination and his emphasis on the contrast between mass art and avant-garde art (Carroll, 207–9, 242–44).

80. Jameson, *Archaeologies of the Future*, 230–32.

81. *Ibid.*, 231.

82. Suvin defines science fiction as “*a literary genre whose necessary and sufficient conditions are the presence and interaction of estrangement and cognition, and whose main formal device is an imaginative framework alternative to the author’s empirical environment*” (Suvin, *Metamorphoses of Science Fiction*, 7–8, italics in the original).

83. Suvin, 63, italics in the original.

84. Jameson, *Archaeologies of the Future*, 134.

85. Science fiction, Abe claims, is “a question of forming a hypothesis and then seeing to what extent you can erect a new system of rules, utterly different from the existing rules of our everyday lives. [...] When a fresh hypothesis is brought in, the everyday is suddenly destabilized and begins to take on strange new forms. It becomes activated, objectified, and our consciousness is roughly shaken” (Abe, “The Boom in Science Fiction,” 346).

86. With regards to videogames, Bogost touches upon a similar effect in his discussion of the medium’s “procedural rhetorics,” or the way in which videogames persuade by means of their rules.[86] Drawing on Alain Badiou’s idea of the event “which offers a chance to disrupt the state of a situation and reinvent it, wholly anew, under a different organizing logic,” he argues that the procedural rhetoric of a videogame “persuades when it helps discern the eventual site of a situation—the place where current practice breaks down” (Bogost, *Persuasive Games*, 58, 331–33). Unfortunately, Bogost does not pursue this argument much further.

87. Carroll dedicates a long section to analyzing Adorno’s resistance to mass art, arguing that “the interlocking senses of autonomy and freedom that are fundamental to Adorno’s theory of genuine art and to his dismissal of mass art are fragments, albeit distorted fragments, of Kantian aesthetic theory” (*A Philosophy of Mass Art*, 105). The following paragraphs show that Carroll is right in claiming that Adorno demanded of art to invoke independent thought and judgments. However, I hope to show that he formulates this demand for art and culture in general, rather than using it, as Carroll’s discussion of Adorno suggests, to discriminate “mass art” merely due to its status.

88. Geuss, “Art and Criticism in Adorno’s Aesthetics,” 310–11.

89. *Ibid.*, 298–303, 309–10.

90. Adorno, “Resignation,” 202.

91. Adorno, “The Culture Industry Reconsidered,” 106.

32 Thought-Provoking Play

92. Adorno, "Free Time," 193.

93. Adorno, "The Schema of Mass Culture," 63.

94. In "How to look at Television," for example, states that "the present rigid division of art into autonomous and commercial aspects is itself largely a function of commercialization" (Adorno, "How to Look at Television," 159). More generally, this claim appears in his speech on *Free Time*, where he argues that, in modernity, free time is being detached from work life deliberately, in order to make it a target for commodification. Such practice of categorizing and dividing is, in his view, related to the dominant current in society: "the prevalent ethos [*herrschender Geist* ("Freizeit," 648)] is suspicious of anything which is miscellaneous, or heterogeneous, of anything which has not clearly and unambiguously been assigned to its place" ("Free Time," 190). Likewise, his ideal of art is not that of high art, but rather of a field of art that encompasses various forms and contents, because only by containing them, does it allow them to contradict each other. Claiming that art can only be critical of society if it is part of society, not detached from it, Adorno ("Culture and Administration," 116–17) agrees with Paul Valéry that true art can only exist where it abandons its ambition to be art.

95. Indeed, invoking magic and religion can, in some cases, exercise a critical or disruptive force against the status quo. For example, Eugene Thacker and McKenzie Wark convincingly deploy horror fiction and heresies in an assault on philosophy and science. Galloway, Thacker and Wark, *Excommunication*; see also Roth, "Review of Alexander R. Galloway, Eugene Thacker and McKenzie Wark, *Excommunication*."

96. Goto-Jones, "Alien Autopsy," 23. As science fiction author Orson Scott Card puts it, both "science fiction and fantasy stories are those that take place in worlds that have never existed or are not yet known." However, he adds, "science fiction is about what *could* be but isn't; fantasy is about what *couldn't* be" (Scott Card, *How to Write Science Fiction and Fantasy*, 18–22).

97. Freedman explicitly distinguishes science fiction (sf) from other genres due to this quality, arguing that "the SF world is not only one different in time or place from our own, but one whose chief interest is precisely the difference that such difference makes, and, in addition, one whose difference is nonetheless contained within a cognitive continuum with the actual (thus sharply distinguishing SF from the irrationalist estrangements of fantasy or Gothic literature, which secretly work to ratify the mundane status quo by presenting no alternative to the latter other than inexplicable discontinuities)" (Freedman, "Science Fiction and Critical Theory," 186–87).

98. Comparing science fiction to critical theory, Carl Freedman argues that both deploy critique "in order to clear space upon which positive alternatives to the existent can be constructed" (Freedman, 188).

99. Roberts, *Science Fiction*, 148, italics in the original.

100. Suvin, *Metamorphoses of Science Fiction*, 64–65; Abe, "The Boom in Science Fiction," 346.

101. For a more detailed discussion, see for example Pavel, *Fictional Worlds*, 46–57.

102. Arsenault, "Video Game Genre, Evolution and Innovation," 159.

103. *Ibid.*, 155.

104. Hichibe [七邊], "Bunkasōzō No Jōken"; *Idem*, "Possibilities of Sustainable Small-Scale Game Development." Hichibe shows that the average cost of one title doubled from PlayStation to PlayStation 2 (from about one hundred million Yen to two hundred), but multiplied with the birth of the PlayStation 3 generation of consoles and more drastically with the generation that followed.

105. Hichibe [七邊], “Possibilities of Sustainable Small-Scale Game Development,” 171.

106. Rämisch, “Game Publications by Platform and Year (MediaArtsDB).” Created by processing the “Media Art Database.” For more information about the project, see “Diggr – Databased Infrastructure for Global Game Culture Research.”

107. Computer games are an intriguing, highly politically charged field in Japan. In the vivid field of independent productions and amateur activities, for example, some titles reach astonishing levels of popularity. At the same time, these activities constitute a crucial playground for future game designers and programmers which, to some extent, exists outside of market logics and societal restrictions such as videogame rating and censorship. However, due to its subcultural status, this field is less accessible and thus requires a very different approach that is out of reach to this project.

108. Schrank, *Avant-Garde Videogames*, 182–83.

Negotiating Ideational Videogame Space

In this chapter, I take a closer look at the building blocks of the “videogames space,” which will serve as analytic level for my case studies. What is this space, what kind of space is it, and what generates it? Most importantly, in what sense is it welcoming to otherness and disruptive conflicts on a structural level? This is both a question of the general mechanics that contribute or generate videogame spaces and the potentials resulting from the way in which elements are combined in it, and about a detailed engagement with specific elements this space can or cannot host. However, in this book, I focus more on the former question and leave the latter largely to the case studies, during which I will look at specific combinations of elements and their productive effects on the respective videogame spaces.

In the previous chapter, I identified unresolved conflicts as a promising source of a disruption that points beyond critique and might stimulate our imagination of radical alternatives. The search for these conflicts is a search for those moments when the videogame space escapes our colonization, instead confronting us with a profound but simultaneously stimulating uncertainty. Before I turn to concrete case studies, I would first like to address the question of what videogame space is in the context of this book, and how this space may welcome otherness. This is a question of its boundaries and of its characteristics. However, I am not interested in defining videogames comprehensively. Instead, the following chapter aims at shifting the perspective on their space toward their theoretical potential to disruptive conflicts. In other words, I use videogames and the concrete examples I analyze to identify an ideational space that can host such conflicts due to its combinatorial character and building blocks. This space is only one way of looking at videogames among many others, and its definition may well exceed or otherwise fail to match the boundaries of what is considered as a videogame in other perspectives.

The following characterization of videogame space is an attempt to come to

36 Thought-Provoking Play

terms with the dynamic, contingent quality of videogames and the resulting ontological status of videogame worlds. Their worlds are generated by various factors at play. Two worlds generated by playing the same game may diverge significantly. In terms of narratives, games like *Chrono Trigger* offer a great variety of endings depending on player choices, which, as I will discuss later, lead to very different situations and conclusions (see Chapter four). Character and equipment choices, as well as strategic and tactical decisions change the options and gameplay a player experiences to various degrees. Think of the character choices in *Street Fighter II*, for example, which have some effect on how a player plays the game.

However, videogame space is not just an umbrella term for the sum of all choices the player has in a game. I argue that it is a space that emerges from a negotiation between three abstract actors, namely the “designers” responsible for designing and creating a videogame software,¹ the players and the computer. This third actor, the computer, actively contributes to the dynamic, contingent character of a given videogame world. Videogames are more than their program code. This code often does not specify a situation in detail, but provides a framework for it, not unlike a music score. The computer does not just reproduce it (by printing the code on the screen as text). As I will show, it performs this code or score in a specific way, with a considerable amount of “interpretation,” ranging from “programmed randomness” to more or less intelligent decisions.

In sum, this negotiation makes videogame spaces particularly promising and welcoming to conflict. At the same time, such framing demands a serious consideration of the computer, and paying close attention to the technological qualities and building blocks of videogame spaces. Here, I take inspiration from Thomas Lamarre’s groundbreaking work on anime, which he regards as a “multiplanar machine” that is both “technical/material and abstract/immaterial.”² This machine is not limited to the immediate technical system—i.e. the apparatus—but includes the techniques and practices involved in the creative process. In the case of anime, a work thus emerges from the compositing of various planes or layers. Although I do not explore all the planes involved in each case fully in this book, I propose to understand videogames in a similar sense, as complex results of a “machinic” composition. As Lamarre points out, this means exposing the material boundaries of the machine, which afford and limit its space.³

The boundaries I am looking for in the subsequent sections of this chapter

surround an ideational space in which conflicts between various elements and across the different planes combined in games are located. This space emerges from the ways in which videogames combine play, media and computation and, by extension, the various expressive elements and layers, like narrative, rules, video and audio, etc. It also emerges from the dynamic, contingent and repetitive character of the medium. As I will argue below, this characteristic distinguishes videogame space from anime and a variety of other media, because its possibility—and ontological status—hinges on its physical manifestation in specific videogame worlds. These worlds, in turn, depend on their “machine” as much as they depend on the contingency and choices its program affords the computer and the player. The following sections are an attempt to highlight this relation, and to identify the central qualities on which videogame space is built, and from which it draws its potential for conflict.

Rules, Narrative and Representation

In the context of this book, videogames are framed as a combination of play, media and computation. By extension, they are also a rich space of expression, combining video, audio, text, algorithms, narratives, menus, rules and many other elements. The absence of any clear sense of hierarchy or order in this list already suggests that videogames are decisively difficult to make sense of in terms of analytic dimensions and layers. Arguably, this is a second level of combinatorial character—that is, again, not unique but distinct, and certainly with particular effects on the videogame worlds and spaces it affords. Since it is these spaces I am interested in here, I will make no attempt to define videogames as such (many others have done substantial and important work in this direction). Arguably, videogame studies has emerged from an aim to make sense of videogames, and from an urge to identify the specific expressive means the medium features. From early on, game scholars like Markku Eskelinen or Espen Aarseth have pointed out that games are more than text and images.⁴ Jesper Juul has offered an important contribution to the discussion, arguing that videogames are predominantly about rules, and less about fiction.⁵ Even if the infamous dispute between narratologists and ludologists should be read less as one of ideological positions and more as a contribution to mapping different viable approaches to videogames,⁶ the tension between narrative and ludic elements in games has been a central focus in many attempts to define the distinct potentials of videogames.

This discourse has been refined productively by many scholars, who have discussed the representational, simulative and narrative qualities of videogames.

Ian Bogost, for example, emphasizes their rule-based, algorithmic structure, arguing that computers and videogames are “particularly adept at representing real or imagined systems that [...] operate according to a set of processes.”⁷ For Bogost, this necessarily includes representations of culture, society and human behavior.⁸ In other words, he is most interested in the simulative quality of the medium, or on its potential to represent “reality.” Bogost’s view expresses a widely shared understanding of game worlds as representations of (or at least related to) reality. From a different perspective, Grant Tavinor shares a similar interest in representation, albeit focusing on aesthetics. In his inspiring attempt to situate videogames as interactive fictions in a philosophical discourse on art, he justifies their categorization as art through their “representational beauty,” frequently emphasizing their capacity for adequate, realistic representation.⁹ Narratological approaches have likewise contributed much to the understanding of what is going on in videogames. Since the early days of videogame research, the concept of story has been expanded significantly to cater to the dynamic and contingent character of videogame narratives, and the plurality of narrative layers, from the story of the game to the story of the player—the latter not being limited to games in its application. In a nuanced discussion of existing approaches to “represented worlds of literary narrative texts,” Thon recently proposed a transmedia approach to “storyworlds,” which he defines as “normative abstractions about ideal mental representations based on narrative representations.”¹⁰ This implies, according to Thon, distinguishing between “the external medial representation of a storyworld, the internal mental representations of that storyworld, and the storyworld itself,” and taking into account “recipients’ collective mental dispositions, (medium- as well as genre-specific) communicative rules or representational conventions, and (hypothetical) authorial intentions” in any reconstruction of narrative meaning making.¹¹ He draws attention to the difference between storyworld and possible worlds, and between “*locally represented situations* and the more complex *global storyworld as a whole* into which they are combined.”¹²

These theories offer rich inspiration for my approach to videogames. However, in most cases, their focus is on how meaning is (successfully) made. How simulation succeeds in simulating “reality,” how representations succeed in “re-presenting” reality and how stories are successfully reconstructed, more or less coherently, by their audiences and players. In this book, I would like to explore the opposite direction. Instead of looking at the means videogames offer to “re-present” or simulate non-game reality, my focus is on the mechanisms by which their space eludes the known. In other words, I am interested in precisely

those moments when simulation goes sideways, representation fails to re-resent “reality” and storyworlds collapse, while remaining part of the same videogame space. Such moments might confront us with internal conflicts that arise from any combination of elements on or between any of the above-mentioned layers. Why is this shift in perspective so important? Given the initial assumption that it is profoundly difficult to imagine alternatives to the status quo today, one may expect that this task just as troublesome in the videogame medium. To use Jameson’s words, what is at stake in the imagination of the other is nothing less than resisting the colonization by the present. If videogames simply portray what we already know in the same way as we know it, the disruptive, conflicting effect will be marginal, even if the reality portrayed was one we have not experienced ourselves yet (like driving a race car, for example).

As such, the question is how to characterize videogame space in a way that encompasses all possible elements and layers, as well as the ways in which they can be combined to form videogame worlds, asking how these combinations might be host to conflict and challenge meaning, rather than reinforcing its smooth narrative, ludic or representational production.

Reification of Play

Hence, what I am searching for is not boundaries related to any specific perspective on videogames (rules from the ludological perspective, storyworld from the narratological, etc.), but boundaries that define a space in which these different elements and layers can intersect and in which the contingent, dynamic character of videogames is reflected. In order to find these boundaries, I would like to take a brief detour to the concept of play and the ontological possibility of play spaces.

Among several other philosophers and play scholars, Hans-Georg Gadamer discusses this necessary transformation of ideal play into a human activity in more detail. He understands play in general as a “to-and-fro movement that is not tied to any goal that would bring it to an end,” and regards human play as a particular case.¹³ Human play, he claims, always plays “something,” meaning that it is necessarily structured by rules and orders, or, as he puts it, “the way the field of the game is filled.”¹⁴ Whereas Eugen Fink, Ute Saine and Thomas Saine regard play as a mode of human being that rejects the purposive structure of the ordinary and is not afraid of “profound uncertainty,”¹⁵ Gadamer argues that one cannot abandon the ordinary and is

40 Thought-Provoking Play

even in his play, still someone who comports himself, even if the proper essence of the game consists in his disburdening himself of the tension he feels in his purposive comportment. [...] Every game presents the man who plays it with a task. He cannot enjoy the freedom of playing himself out without transforming the aims of his purposive behavior into mere tasks of the game.¹⁶

For him “the space in which the game’s movement takes place is not simply the open space in which one ‘plays oneself out,’ but one that is specially marked out and reserved for the movement of the game. [...] Setting off the playing field [...] sets off the sphere of play as a closed world, one without transition and mediation to the world of aims.”¹⁷ In other words, human play can only exist in a structured form with rules, orders and tasks or “make-believe goals.”¹⁸ This is not to say that such separate spaces cannot, in Roger Caillois’ terms, range in their character on a continuum between the convention-oriented “*ludus*” and the uncontrolled “*paidia*.”¹⁹ However, I do follow Gadamer insofar as I believe that uncontrolled play (*paidia*) in its ideal form can only exist in brief instances. This is another way of saying that in human conduct, ideal play can only exist in its reified form of a game, and must be consciously upheld by the players.²⁰

In its reification, the temporary game world distances the action from the ordinary but never manages to detach it completely.²¹ This framing highlights a significant difference between “conventional” games and videogames. In videogames, rules are indispensable. In their space, “there is no ‘ball’ that can be out of bounds,”²² because the rules are authored by the designers in the program code. To be sure, there are numerous examples of rule changes or reinterpretation in the form of player agreements or norms established in a player community.²³ In other words, the social dimension of the ontological status of a videogame is not lost. However, with regards to the videogame space in which a broad range of elements conflict, the program code or software appears as the most fundamental, and, at the same time, least common denominator. This sum of rules and the space it affords diverts significantly from those of the game intended by the designers, or those agreed on or invented—in addition to the software—by the players.²⁴

As such, the ideational videogame space is different from what Thon calls “*global storyworld*” (see the previous section), because it contains not only the narrative possibilities and the rules of the storyworld, but also all rules related to configuration, like menus and aesthetic representation, like sprites, icons, object shapes and looks, etc. It is also different because, for the purpose of this book, it is

limited to the space created by individual videogames and, as in my concluding chapter, across a videogame series. Finally, while I argue that it is accessed and can be experienced only at play, the space itself does not encompass the “mental representation” within the players, let alone the intersubjective constructions of this space by player communities. Thon points toward such a possibility in his discussion, in particular with regards to the notion of “charity” he adapts from Kendall Walton.²⁵ Enhancing this concept in such ways remains a future task. At this point, I believe it is important to separate and single out the factors contributing to the possibility of the ideational space from the ways in which it is interpreted, communicated or shared by the players. This is also a reason to maintain the singular form when speaking about the “player,” as is the case hereafter, in contrast to the designers, whose collective effort is acknowledged and addressed.

This separation is important not least because, once we move to the level of code, the regular videogame player is (almost) unable to change the rules and datasets inscribed in a software, in particular when speaking about console games. Thus, as far as the software itself is concerned, the rules are upheld by the computer, “freeing the player(s) from having to enforce the rules; and allowing for games where the player does not know the rules from the outset.”²⁶ Michael Liebe claims that while in traditional games, restrictive rules differentiate the game space from ordinary life,

in a computer game everything is programmed, every possible action, every physical simulation, even the boundaries of the virtual space itself. [...] Players do not have to adhere to the code of behavior and the rules, but simply have no other choice than to act within the frame of the possibilities provided by the computer program.²⁷

Juul and Liebe point to an important potential and limitation of the player’s agency. On the one hand, action is confined to what is afforded by the software. This limitation is necessary, because it yields the game goals and the challenge, thus making gaming pleasurable.²⁸ On the other hand, rules may be learned in the process, a point that I will return to later. Within this totality of rules and data inscribed in the software, the player “does not have to artificially limit his action possibilities according to the rules in order to play correctly. Illegal actions cannot be performed or they are automatically penalized. The rule system does not have to be magically upheld by aware players. The rules are upheld by the program code.”²⁹ In his theory of narrative consumption,

42 Thought-Provoking Play

Japanese critic Ōtsuka Eiji suggests an even more radical effect of this structure when he writes that “[t]he program is thus sometimes defined as ‘the regime of all thinkable [in the text, literally “can be memorized,” *souki shiuru*] possibilities within the closed world existing inside the game software’. Each play, on the other hand, corresponds to one of the many individual stories. Using the same software nonetheless produces a different unfolding with each player and each play.”³⁰ While I am not prepared to accept this deterministic view—for reasons already mentioned in the context of Virilio and against the background of my empirical study—I am willing to acknowledge that Ōtsuka illustrates rather well the relation between an individual play experience of one videogame world and the rules this world is generated from. I will return to his theory of narrative consumption in Chapter four.

Overall, this status of the software rules in videogames is central to my interest in conflict and hospitality to otherness, because it implies that videogame rules serve to distance the videogame space from the everyday more decisively than “ordinary” play rules can. Regarding the latter, Huizinga claims that “[t]he play-mood is *labile* in its very nature. At any moment, ‘ordinary life’ may reassert its rights either by an impact from without, which interrupts the game, or by an offence against the rules, or else from within, by a collapse of the play spirit, a sobering, a disenchantment.”³¹ Videogame spaces are less labile than ordinary play spaces.³² I will omit some detail here as I have examined the relationship between play and everyday life in more detail in my PhD thesis, which served as a starting point for this book, and which is available online.³³ What is important is that once the player enters and enacts a videogame, the computer upholds the illusion of a space apart, regardless of the player’s actions.

The videogame space in question here is based on play reified in the sum of all rules authored in the software. This space is ideational in the sense that it is a set of rules or ideas that define a structure and a series of mechanisms through which this structure is instantiated during play-time. This is where the difficulties start. My interest is in the structure and mechanisms inscribed in the software and their potential for conflicts. However, the ideational space of a videogame cannot be reduced to its code without loss. Why not? The software defines a videogame on an abstract level, not only with regards to its rules, but also with regards to the objects of the game world, their behavior and, in most cases, their appearance in the shape of included databases. Yet, these abstract definitions are different from the game worlds a player may encounters at play. Even in the unlikely event that we have access to the code of a game and enough knowledge to make sense of it, it would only reveal the structure

of the game, and would tell us little about the space a specific player experiences at play. After all, concrete game worlds are dynamically generated by the computer, based on the output of programmed algorithms, the data provided as part of the software and the player's input. As Bernhard Rieder and Theo Röhle remark,

[s]ome of the approaches computer science provides us with are positively experimental, in the sense that the results they produce cannot be easily mapped back to the algorithms and the data they process. Many of the techniques issued, for example, from the field of machine learning show a capacity to produce outputs that are not only unanticipated but also very difficult for a human being to intellectually reconnect to the inputs. Despite being fully explicit, the method becomes opaque.³⁴

Moreover, not only does software tell us little about the videogame worlds it affords, it usually also inscribes the possibility of multiple, sometimes strikingly different versions, all of which contribute to the same videogame space. While the rules remain the same, the videogame space may play out differently each time a player plays a videogame. Katie Salen and Eric Zimmerman call this the “same-but-different” quality of games, meaning “that a game provides consistent structure each time same but different experience and outcome every time it is played.”³⁵ They argue that this makes videogames “[...] a powerful engine that sustains and encourages play.”

A look at contemporary software design and its guiding principle of object orientation helps to further scrutinize this characteristic. Object-oriented programming (hereafter oop) follows the idea that a program is most efficiently structured in the form of independent objects that are instantiated and interact during run-time. Bogost mentions four main characteristics of oop:³⁶ It has to follow the principle of abstraction, meaning that programmed objects must be disassociated from any specific use. It has to be encapsulated, meaning that an object's content remains hidden to other parts of the program or system. It has to be polymorphic, meaning that instances of a class can have different behaviors. And it must be based on *inheritance*, meaning that a class can be created from or based on a parent class. These principles hint at the distinction between classes in the program code or software, and concrete instances of these classes during program run-time. A class is defined only once and in an abstract manner. If equipped with variables, the computer can not only create multiple instances of it, but also assign different content to each instance as needed.

44 Thought-Provoking Play

This dual structure of software is not new to information scientists.³⁷ However, in combination with the importance of player input and the dynamic, algorithmic character of videogames, it implies that videogame space, as defined by the sum of all rules in the software, is also the sum of the multiple material realities the software affords. If all the ways that a player can act on the game in each moment are taken into account, their number easily approaches infinity. At the same time, it suggests that the computer is involved in the instantiation and, as I will discuss in more detail below, may not be “neutral” with regards to its outcome.

Taken together, both consequences of the character of software imply that the ideational videogame space I am interested in here is only accessible in its concrete instances at play. In his discussion of *Fictional Worlds*, Thomas Pavel offers a helpful model for a similar problem.³⁸ He regards any number of fictional worlds as members of a universe or set K if they meet the conditions specified by an actual member of K and a relation R of alternativeness. Any world x_1 that is possible given a specific relation R to a given member of K is part of K . According to Pavel, R can follow different conceptions of possibility, such as logical, metaphysical or psychological. However, in my case, the alternativeness of the possible worlds in a videogame is given by the sum of all rules that make them possible. Slightly adjusted, then, I propose to capture the contingency of any specific videogame space by referring to its instances, as it appears to the player at play, with the term videogame world. This world is the concrete, physical instance of the game created in the computer memory a player experiences at play through its sensual representation.³⁹

In sum, the structure of videogame space and videogame world is primarily one of physical rather than theoretical or mental possibility. My examination of the ways in which play is adapted and reified in videogames highlights the influence the player, the designers and the computer have on videogame space and the particular roles each of the actors take on. All three contribute to the instantiation of concrete game worlds at play in different ways. I propose to understand this relation as a constant negotiation between them, which may be different in each videogame, and which I attempt to schematize in Figure 2.

It is this negotiation that, with regards to each videogame, defines and constantly redefines the contours of its videogame space. This space, in turn, is accessible to the player only via a sensual representation, which, as I will explain below, is always and necessarily partial. Importantly, ideational videogame space is not just the sum of all physical videogame worlds instantiated in the

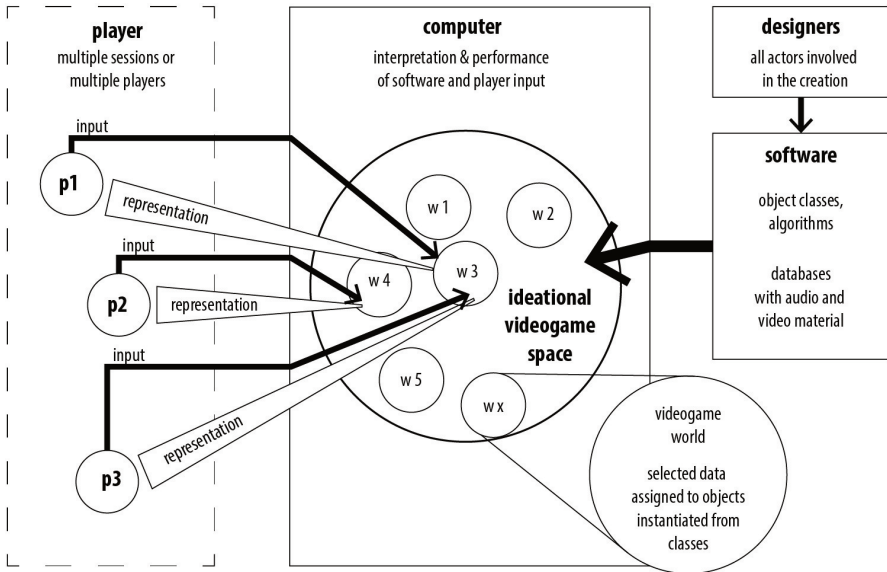


Figure 2. Ideational videogame space as negotiation.

negotiation between player, computer and the designers, who have inscribed the rules the software. It is also the sum of all possible relations between these worlds, between the elements within any of these worlds or between or any specific situation experienced as part of one such world. This relation between and across the various elements and layers is what makes ideational videogame space a potential host of conflicts. One such abstract potential for conflict is already discernible from the “same-but-different” quality of videogames: if we can experience the same game world twice in alternate versions, these versions might be different, to the extent that the difference creates a tension between them. This may be said about individual scenes as much as it applies to entire games, whether it is regarding character development in role playing, multiple endings in a story, or other elements of a videogame.

In the subsequent sections, I will explore how each of the three actors contribute to the negotiation and identify other potential sites of conflict.

Designers and Expression

The importance and status of rules in videogames should already indicate the crucial role the collective I call designers have in shaping its ideational space. It may be helpful to look more closely at the various expressive means at

46 Thought-Provoking Play

their disposal. In the attempt to establish videogames as a distinct medium in its own right, much attention is directed to the rules, as the main expressive element of games. Bogost emphasizes the potential games have due to their “procedurality,” meaning “a way of creating, explaining, or understanding processes.”⁴⁰ He goes as far as to claim that, in videogames, “image is subordinate to process.”⁴¹ This view is representative of a widely shared conviction that, in videogame space, rules are superior to other elements.⁴² According to Juul,

[r]ules and fiction compete for the player’s attention. [...] However, it is not possible to deal with fiction in games without discussing rules. The fictional world of a game is projected in a variety of ways—using graphics, sound, text, advertising, the game manual, *and* the game rules. The way in which the game objects behave also influences the fictional world that the game projects. Though rules can function independent of fiction, fiction depends on rules.⁴³

He adds that “[o]n a formal level, games are *themable*, meaning that a set of rules can be assigned a new fictional world without modifying the rules. [...] Nevertheless, fiction *matters* in games and it is important to remember the duality of the formal and the experiential perspectives on fiction in games.”⁴⁴

Procedures and algorithms doubtless constitute a central element of videogame expressivity. The focus on procedures seems even more plausible, considering that they also regulate sensual representations and organize the image or representation. Thus, representations might be understood as subordinate to process. However, I maintain that the procedures or processes, as they exist in the software, are not sufficient to afford gameplay and its experience. On the contrary, they depend on images, audio and haptics to be perceivable and intelligible for the player.⁴⁵ Rules and procedures need to be represented in order to be experienced and engaged with by the player.

A brief consideration of the various versions and interpretations of the well-known game *Tetris* shows that the sensual representation of the rules can have a deep impact on the ideational content of a game. From a perspective on games as interpretations of experience, Janet Murray argues that *Tetris* is “a perfect enactment of the overtaken lives of Americans in the 1990s—of the constant bombardment of tasks that demand our attention and that we must somehow fit into our overcrowded schedules and clear off our desks in order to make room for the next onslaught.”⁴⁶ Juul remarks that this is one possible,

allegorical reading of the game, albeit not a very convincing one.⁴⁷ On the other hand, it should not be too difficult to imagine a version of *Tetris* where the falling bricks look like documents and files, and the bottom of the playing space resembles a desk. Inverted, this means that the experience of a game can change profoundly with its respective skin—particularly in the case of abstract games, mechanics and rules can be deployed for expressing various meanings. Thus, even if videogames are flexible and “themable” in terms of their representation, specific themes can have a strong influence on their ideational content, and its perception and experience.⁴⁸ Molleindustria’s *Queer Power* is a case in point.⁴⁹ The game is built upon the structure of a conventional fighting game, but the skin of its characters, all naked and some visibly aroused, and the fact that the usual fighting action is replaced with various forms of sexual intercourse and other sexual practices, turns its gameplay into an entirely different experience.⁵⁰

To the extent that it operates from inside videogame culture and reflects on the generic conventions of this culture, *Queer Power* may be regarded as an intervention in Muroi’s sense, although it is admittedly situated in an outspokenly artistic and avant-gardist context. Here, the theme is much more central to the game’s argument than the procedure.

Extending these findings to videogame expression more generally, I propose to regard their expressivity, in principle, as generated from a flexible combination of multiple elements. In this, I agree with Souvik Mukherjee, who regards the aim of any nuanced approach to videogames “is not to privilege any univocal model—be it the game rules, the story, or the code.”⁵¹

Against this background, Bogost’s above-cited preference for rules and simulation is somewhat surprising, given that he offers a more flexible, inclusive framework for such expression in his notion of *Unit Operations*.⁵² Outlining this concept, demands that “[we] should attempt to evaluate all texts as configurative systems built out of expressive units.”⁵³ Bogost thus argues for a broadly defined analytical approach to contemporary media products that views them as results of “unit operations,” meaning a “configurative system, an arrangement of discrete, interlocking units of expressive meaning.”⁵⁴ This approach derives its strength and flexibility from the postulated openness of the “unit,” which, according to Bogost, can be anything from a single physical element to a complex thought or structure consisting of multiple interconnected units.

The concept of unit operations points to a dynamic generation of game worlds created by spontaneously deriving meaning from the interrelations of the

various discrete components inscribed in their software.⁵⁵ This includes elements familiar from other media, such as narrative structures and textual descriptions, images, or movies (cut-scenes), but also distinct elements like game rules, goals and player actions. The question of how these elements are related to each other is intricate and, arguably, dependent to a degree on the individual title. The aforementioned examples further alert us to the possibility that the different expressive elements available to designers may become sources of conflict juxtaposed with each other.

What are the boundaries of such expression? Other than the necessity to remain intelligible (and thus winnable), videogame space is not limited to the physical environment in the same sense as conventional games are, because it is fictional, digital and virtual. In conventional games, the player is part of the physical spaces of the game. In videogames, he or she is physically positioned outside of these boundaries, connected to the game space only through remote control. Whereas player actions take place within a system to which Newton's laws of force, impulse and reaction apply, the mechanics of videogame space do not have to obey such limitations. In videogames, the player environment and the videogame space are different material realities—they both physically exist but are not continuous. The player's actions are translated and transposed to be meaningful within the differing physics and laws of the game world. For Kirkpatrick, this implies that “the ironic distance or gap between what the player is doing (with the controller) and what the screen is representing is ineliminable.”⁵⁶ Considering the importance of immersion and flow in contemporary game design, I am not ready to subscribe to this conclusion entirely. That said, the gap between player and game world at least potentially allows for distancing—or even detaching—the game space from a player and his or her everyday experience. In the process, it also becomes susceptible to conflicts. A good example of this experience of detachment is the game *Echochrome*, which invites the player into a “physically impossible” world not unlike the impossible constructions by M.C. Escher;⁵⁷ nonetheless, it is actionable and intelligible at play.⁵⁸

A similar arbitrariness characterizes the semantics of the videogame space. As mentioned above, its representation is not bound to the rules of representation we are used to, but rather to those indeterminate, flexible rules applied to fiction in literature or film. A representation might be deployed in order to make the object meaningful from our point of view, but it may also have no purpose or defy our expectations—doors that cannot be opened, cars that cannot be driven.⁵⁹ With respect to its representation, the videogame space or its

objects may appear contradictory from a perspective grounded in our everyday experience and, where they are directed towards goals, even contradict fictional coherence. Furthermore, both representations and objects may have different features over time or depending on the player's actions or perspective.⁶⁰

With regards to the expressive features available to the designers, videogame spaces are distanced from “non-game reality” from the start. Whereas, for example, utopian narratives require a distancing mechanism, like an imaginative journey through space or time, whereby the reader is prepared for the otherness of what is to come,⁶¹ the creation of videogames is likely to reverse this process. Instead of offering explanations for the difference between the player's space and the game world, many games introduce some familiarity based on our non-game empirical reality and on other games and conventions in order to become intelligible and playable. One of the most explicit examples of this is the strong tendency toward realistic representations and toward simulation. Such realism strengthens the status of a game as mass art in Carroll's sense, increasing mass accessibility through commonplace references to game genre conventions and known natural and social laws. In turn, it serves to reduce their distance from the known.⁶²

Despite these tendencies towards realism, videogames are, in principle, not bound to our familiar physical and social laws. A good example in this context is the game *Katamari Damacy*, which rearranges the relation and behavior of a broad range of objects well-known from everyday life.⁶³ Infused with puns and hilarious dialogs, *Katamari Damacy* is a comical game that requires the player to create a “lump” (in Japanese *katamari*) by rolling over all kinds of objects usually found in our homes and living environments, not unlike creating a giant snowball. Starting with pencils and other office supplies, the player ends up integrating large animals, cars, houses and more.⁶⁴

The effect on the gameplay experience is striking and, in a sense, playfully disruptive. As Brown puts it, “[d]islocated from their familiar contexts, they become elements in a dynamic game of reordering the universe.”⁶⁵

Yet, the detached, virtual character of games does not mean that anything is possible. It seems appropriate to point out some of the limitations of videogame expression. Videogames can target our sight, hearing and touch, they can convey complex narratives and rapid, emergent movement; and they afford player action and reaction. They can push our emotional buttons by presenting adorable or scary creatures and, more generally, experiences ranging from

50 Thought-Provoking Play

boring, joyful and empowering to horrible and angst inducing. The intensity of shooter games and the adrenaline that fast-paced action can induce are comparable to or maybe even stronger than what any other medium can offer.

Some theorists go as far as to argue that games can even convey the experience of extreme “real-life” situations. Bogost makes an argument in this direction in his discussion of the game *9-11 Survivor*, in which the player is spawned in random locations in the burning World Trade Center towers in New York on the day of the horrible attacks of 2001 and has to escape—sometimes without any chance of succeeding. He claims that the game offers an “embodied experience of the procedural interactions between plane, building, and worker” and a “careful treatment of victim’s actual and potential experiences.”⁶⁶ Here, Bogost certainly points to the crucial fact that videogames can deploy the variability of their procedures in ways capable of generating intense experiences and make arguments through non-repetitive repetition. However, I am skeptical about the physical dimension of this potential. Despite involving button-mashing and player input, I believe that videogame experiences are still predominantly cognitive, and by no means comparable with the actual experience of life-threatening situations human beings experience, with all their immediacy and physicality. After all, their largely virtual character makes transgressing physical and social laws possible in the first place, as it frees the player of some of the consequences otherwise attached to specific actions. Nonetheless, or maybe because of this “virtual character,” emotions in games play an important role. Tavinor, for example, highlights their important function of filtering and channeling the player’s attention and actions.⁶⁷ If emotions, as he argues, indeed “help to bias the choice over options so that efficient decisions can be made” in videogame space, in which our emotional buttons can be pushed “in absence of the consequences with which they are usually associated,”⁶⁸ they require more care than I have given to them by solely tracking my own experiences. More so, if we consider their relation to action, about which Perron states: “Emotional action tendencies are felt as impulses and urges to act in one way or another until an emotional episode is closed due to a change of situation.”⁶⁹ While I include the emotional dimension of videogame play experience in my later analysis, this aspect is certainly worth revisiting at a future moment.

In sum, videogame designers can deploy expressive variety in a materially and semantically flexible way. Unbound by familiar physical and social laws, they determine the rules and dynamics of a game, as well as the range of variations of each element within it (i.e. possible player input, avatar actions,

shapes and colors of trees, etc.). As the word “range” already suggests, this determination is often far from fixed. Videogames are not only expressive spaces, we also need to enact their worlds. In his insightful discussion of “Gamic Action,” Alexander Galloway emphasizes this centrality, claiming that “*videogames are actions*” insofar as they “exist when enacted. [...] With video games, the work itself is material action. One *plays* a game. And the software *runs*.”⁷⁰ Importantly, Galloway distinguishes videogame action into machine acts and operator or player acts. In the next two sections, I look at the contribution these two actors make to the negotiation of videogame space.

Computer and Performance

First, I would like to turn to the role that the computer plays in turning ideational videogame spaces into concrete game worlds. As already mentioned, Galloway regards the computer as a second agent. He states that in videogames, “software instructs the machine to simulate the rules of the game through meaningful action.”⁷¹ However, the designer’s instructions inscribed in the software can remain rather vague, so to speak. In combination with the contingency of the player actions and the indeterminate character of the software algorithms, the involvement of the computer shifts the designers’ role from an artist of a work of art to an artist of a variable structure. This distinguishes videogames and other software-based media creations from “linear” media, like printed text or film, on a material level.

In order to explain this shift, a brief excursion to Carroll’s ontological effort toward defining the “moving image” may be helpful. Among the necessary conditions for something to be a “moving image,” he counts that its performance tokens have to be generated by a template that is a token, and they cannot be artworks in their own right.⁷² In his view, play performances are tokens generated by interpretations. By contrast, Carroll regards the performance of moving images (the showing) not as artistic, but as a technical engagement with an apparatus. I disagree with the observation that the technical process of performing a moving image—and other kinds of media, for that matter—cannot also be considered as part of the artistic process, as, for example, Lamarre suggests with his “anime machine”. Nonetheless, Carroll’s terminology may serve as a starting point for the consideration of the generative process of ideational otherness in videogames.

In analogy to the moving image, videogame software can be conceived as template created by the designers. This generative process, however, differs

from that of the moving image, because it involves a two-step mediation by the computer, which cannot be reduced to a technical engagement in Carroll's sense. In the first step, the computer compiles the source code written by a programmer, creating a program or template that can be executed. During runtime, the computer generates a concrete instance of the designer's ideas from this program template (or rather, from a token of it). Due to the variability and contingency of the ideational videogame space, this generative process arguably involves a degree of machinic interpretation—terms in computer science like “interpreter,” which, according to Wikipedia, refers to a program that “executes, i.e. *performs*” a source code, reflect this characteristic.⁷³

Interpreting and performing the instructions in the code, the computer adds to the artistic process both during the generation of the template (the software), and during its instantiation in concrete game worlds at play. This differs from a general assumption about the influence of technology on content, for example in the sense that the token of a moving image is transformed by a machine during its performance. Such performance can be regarded as a projection in the common geometrical sense. If there is a large hole in the screen or if the projector of a film moves too slowly, it will likely have a similar effect on the entire performance and can easily be reproduced on a material level—print is a good example of this. In contrast, the performance of a videogame template during play is based on variable structures and indeterminate algorithms—most famously, random functions. Philosophically, we might debate whether terms like randomness or contingency are applicable in this case. Nonetheless, this interpretation by the computer generates materially different performances, both in the sense that the computer memory is filled with different data, and in the sense that the players are confronted with different game worlds or situations during play. Moreover, in its multiplicity, these performances involve transformations of the coded template the designers does not have to—and in certain cases might not even be able to predict or imagine beforehand.

As I have discussed elsewhere, Lev Manovich observes a similar effect in his analysis of Photoshop.⁷⁴ He shows that while filters like the “wave filter” are designed to simulate realistic effects, the range of input allowed can lead to unexpected, non-periodical, abstract effects when the algorithm is fed parameters outside of a “natural” range.⁷⁵ In other words, by playing with the parameters of algorithms originally built to represent some physical or human law or theory, it is possible to generate structures and visualizations that exceed our initial imagination.

As Rieder and Röhle point out,

[e]ven in purely deterministic systems, small variations in the data or in system parameters may have far-reaching consequences, especially when techniques have a high iteration count, that is, when results are an aggregate of a very large number of individual calculations. What we are trying to say is that certain techniques imported from the computer sciences may never be understood in the same way we understand statistical concepts like variance or regression because there no longer is a ‘manual’ equivalent of the automated approach.⁷⁶

This un-imagined generation, of course, also offers itself to be deployed in rules-based contexts, such as object behavior or artificial intelligence, which leaves the biggest part of the decision-making to the computer.

A good example of this can be found in “hack ‘n’ slash” games like *Sengoku Musō* (*Samurai Warrior*), in which the player is frequently confronted with large numbers of enemies. **Example 2.1** shows that, while all these enemies follow more or less complex behavioral patterns, it is rather unlikely that any specific situation the player encounters or its representation on the screen, was fully imagined by the designers when creating the game.

In all cases, the designers do not have to think about the results of a specific calculation, but only need to care about the flawlessness of the algorithm and the range permitted for the parameters—the actual calculations are made by the machine. Many of us have experienced the downside of this: a file that cannot be opened, a button that cannot be pressed, a program that freezes and erases your research paper. These are usually not instances of computer disobedience, but rather results of strict rule application, or total algorithmic bureaucracy. The reality that even intense testing, debugging and software patches cannot prevent such errors, testifies to the fact that the designers and programmers are not always fully in control of their complex creations.

As the sum of all worlds it facilitates, videogame space can be characterized as an ideational space that does not fully originate in the designer’s imagination. Concrete worlds and particular sites are, to a degree, unimagined, and thus, by extension, so is the ideational space they are part of. It allows the designers to author variable, contingent ideational structures or meta-ideas (character classes, the choice of difficulty and its effect) and to define their possible content (the appearance of a specific character, the levels of difficulty available, etc.). The

concrete game world a player encounters, including its representation at any given moment, is determined at play, based on player and computer acts. The computer enacts the code as it is, with all its flaws, glitches, contradictions and bugs—unintentional mistakes in the program or rule system. At the same time, the computer is also responsible for interpreting player input. In a sense, the machine becomes a particular kind of artistic device in its own right, a non-human player who performs the program code and plays with various kinds of input to generate concrete manifestation of the variable ideas authored by the designers. In this sense, any concrete game world is not the result of a designer's creation alone, but of a negotiation between the designers (authoring the game, i.e. the sum of all rules in the software) and the machine (performing these rules). With regards to productive conflicts, the unimagined quality of videogame space suggests that, in a certain sense, this space might indeed escape the known and even our imagination. Whether this stimulates us to think outside of the status quo, or whether it merely reduces imagination to a machine logic, remains to be seen.

Player and Input

The player has a say in this negotiation. Player input is one of the most basic features of videogames—without it, playing would not be possible.⁷⁷ At the same time, player input helps generate one instance or world from the myriad possible worlds a videogame space hosts. It affords choices about a world's direction and character, from difficulty and sound volume, to narrative paths or the choice of looks and weapons. Due to the same-but-differentness and saving features in many games, a game space can be visited repeatedly and enacted differently each time, thus allowing for the exploration of multiple instances or worlds—a practice arguably at the heart of gaming. As I have argued above, the “same-but-different” structure already offers a potential site of conflict, further amplified by the possibility to save a game and experience difference versions of particular sites and situations. However, beyond its impact on world plurality, player input is also a potent source of conflict. Geuss claims that “[t]o act is in an important sense always to create something new, an object, a change in an existing situation, a new reality.”⁷⁸ This is true in a literal sense in videogames, since they allow the player to act physically on their worlds and shape or alter their materiality.⁷⁹ How does such action contribute to the experience of conflicts? Does it help confront them, explore them or even create them? Or is videogame play reactive and bound to options defined beforehand by the designers, as Virilio and others have argued?

I have already mentioned the potential of exploring a game world without knowing the rules and effects of one's actions, and the limitation of player action as being constrained by the possibilities authored in the software. In conventional games, the conscious effort of maintaining the rules is a struggle against the intrusion of the ordinary. Freed from this challenge, videogame players are confronted with another task. In the absence of total knowledge about a videogame space and its inhabitants, players are prompted to explore and map the ideational space of a game. In this mindset or mode of playing, the rules themselves become subject to play: boundaries are sought out, the complex interplay of rules is exploited to create new strategies and even worlds unforeseen by the initial design. Talmadge Wright, Eric Boria and Paul Breidenbach show with empirical evidence that “[p]laying is not simply mindless movement through a virtual landscape, but rather movement with a reflexive awareness of the game’s features and their possible modifications.”⁸⁰ Flanagan goes as far as to claim that “[t]he digital ‘magic circle’ that players enter is an open environment focused on experimentation and subversion.” She observes three critical practices central to play, namely: “unplaying” (enacting forbidden scenes and alternative scenarios), “reskinning” (altering characters or objects) and “rewriting” (redefining play from within).⁸¹

In addition, the sensual representation a player experiences is often partial, both with regards to the underlying system, which is not fully revealed, and with regards to the “physical” representation of a game (maps, environments, etc.), which often remain fragmentary and temporary. This additional “filter” of partial representation, through which the player accesses the game world and its underlying space, further amplifies the experimental character of videogame space and helps to cue playful exploration. Given the arbitrariness of videogame representation, this partiality can involve dynamic selection and transformation, which is to say that a player might be confronted with different sensual representations of the same world.

Enhanced by the partiality of its sensual representation in concrete game worlds, videogames confront us with “unknown” spaces that invite exploration and experimentation. Insofar as such activities can result in vastly different versions of the game world or specific situations, they can be considered important constituents of potential conflicts between these worlds and situations. More generally, the double structure of absolute limitation, on the one hand, and vagueness and flexibility with regards to rules and representations on the other, opens up a space that affords speculative, non-predefined player action. In *The Aesthetics of Music*, Roger Scruton discusses the importance

56 Thought-Provoking Play

of “unasserted thought” and the speculative quality of the imagination. In his terms, “[r]ationality involves the ability to represent to ourselves absent or hypothetical situations, to project our thought in a speculative arch away from the immediate present, into regions which are past or future, possible or impossible, probable or improbable, and from which it returns with insight into the nature of things.”⁸² In a sense, speculations are important in videogame play, because they allow us to project the possible outcomes of our actions in a specific world and speculate about the underlying videogame space. As Juul puts it,

the representation and fictional world presented by the game cue the player into making assumptions about the rules of the game. [...] In video games, the rules are initially hidden from the player—this means that the player is more likely to use the game world to make inferences about the rules. In fact, the player may need a fictional game world to understand the rules. [...] The way a given object or character behaves will characterize it *as a fictional object*; the rules that the player deducts from the fiction and from the experience of the playing of the game will also cue him or her into imagining a fictional world.⁸³

In other words, the appearance and behavior of the game world, and the actions that correspond to input serve as the basis for a player’s assumptions about a videogame space. In videogames, as elsewhere, such speculations always depend on earlier experiences and knowledge. Yet, games confront the player with spaces in which the known rules of our known physical or social reality do not necessarily apply, and with rules that we may not know in their entirety. The game worlds we experience cue us into exploring and speculating about their underlying ideational space. Each of these activities may end up confronting us with versions of the game space that conflict with our earlier experiences or imaginaries. Moreover, the tension between specific rules and their representations might extend into disruptive conflicts that emerge from the difference between our expectations shaped in everyday life and the game world: doors that cannot be opened, weapons that do not harm others, are just two examples of how representations can generate expectations the rules do not fulfil.

I should point out that exploring multiple videogame worlds and experimenting with the mechanics of videogame space is only possible due to the virtual character of any activity within this space. Wright, Boria and

Breidenbach, for example, observe how a *Counter-Strike* player group developed a habit of jumping from houses simply to create versions of the sound of the impact.⁸⁴ Or, take, for example, the counter-intuitive practice of “rocket jumps,” which directs explosives to the ground while jumping, thereby injuring the player character, but also accelerating it. In a sense, this technique has to be discovered by the player, both as a way of moving and in terms of its highly demanding choreography—failing to execute it properly leads to substantial damage. However, if successful, it can propel the player to places otherwise unreachable. Such activities are possible due to the lack of physical consequences on the player.

At play, the player may disregard norms, rules of physics or biology, as well as strategy and goals, purely motivated by the potentials and boundaries of videogame space itself. As Pearce argues, emergent behavior arises from player interaction and is afforded by the play space.⁸⁵ Juul distinguishes between four levels of emergence in rule-based videogames, namely emergence as variation afforded by rules (i.e. in Chess), emergence as non-disclosed patterns that “appear” emergent for the player because they are not explicit from the rules, emergence as irreducibility due to rule complexity, and emergence as novelty due to unforeseen re-combinations of rules.⁸⁶ These categories further support my assumption that any concrete videogame world is the result of a negotiation between designers, computer and player. The designers define the rules and thus the possible patterns of action. In their strict performance by the computer and their creative enactment by the player, these rules may result in unpredictable, novel and potentially conflict-laden sites.

Crucially, videogames offer the player a chance to explore such sites actively and playfully. Whether such “playfulness” is intended by design or a result of playing with the game, has to be judged in each concrete case. Given the numerous recent examples of unpredicted “gameplay” resulting from rule complexity or glitches, it is safe to say that, in effect, some amount of emergence is at work in most contemporary videogame spaces.⁸⁷ Moreover, game designers acknowledge this unpredictability. Salen and Zimmerman, for example, point out that inventing games is neither easy, nor a straightforward process, because “it is not possible to fully anticipate play in advance.”⁸⁸ On the subjective level of player experience, the degree of designers’ intentionality leading to emergent gameplay may not even make a difference—if the situation or world encountered is in conflict with others, or with the experience in everyday life, it might still disrupt and trigger political imagination.

In sum, player action may factor into the generation of conflicts on various levels. Enacting the “same-but-difference” of videogame space, it helps generate various game worlds or versions of in-game situations, between which conflicts may arise. Exploring and experimenting with videogame space through these partially represented worlds, the player maps the possibilities and boundaries of this space. This activity may lead to conflicts caused by the difference between designers’ intention and game world affordances or boundaries, or caused by the difference between game world mechanics and everyday experiences. Given the partiality of videogame space representation, the experience of difference and the conflicts arising from it may lead to what Scruton calls “unasserted thoughts” not only with regards to the game world itself. Rather, I believe that it might also prompt us to reflect on these differences against the background of our everyday experiences and stimulate our political imagination of alternatives.

Studying Conflict

In the preceding sections, I have defined ideational videogame space as the space generated by a negotiation between the player, the computer and the designers, who inscribe the sum of all rules, including the possible relations between all of the elements this space hosts on various levels, in the software. As a constant negotiation, each play grants access to a specific instantiation or videogame world, which, in turn, expands videogame space. Examining some of the central building blocks and sites of such negotiation, I have argued that videogame space is expressively rich and potentially detached from our physical reality and the space of the player with his or her everyday experiences. It does not depend on a conscious effort to uphold its illusion to the same extent as “conventional” play does, and is not bound to the limits of our physical laws, social norms or semantic rules. It may escape the designer’s prediction and imagination, both due to the performative character of the computer enactment, and due to the possibility of emergent player action. It is actionable but not necessarily intelligible or knowable in its spatial entirety for the player, and, due to its virtuality, subject to exploration and experimentation.

While other tensions should not be ruled out, the vast variety of worlds generated in this negotiation are potential sites of conflict on roughly three levels: (1) conflicts in the experience of one world at playtime, including conflicting elements and conflicts between the three actors involved in the negotiation; (2) conflicts between different world versions (w1, w2, ...) within one videogame space, and (3) in-game experiences conflicting with our

“common sense” (the status quo), which would mark the respective game world or space as space of otherness —whether this third category is related to our common expectations toward videogames and genre conventions, or, whether it indeed concerns life beyond gaming, is a question for the empirical analysis.

In the context of this book, this space is ideational, meaning that it is regarded as a space in which ideas are negotiated and in which conflicts may emerge and stimulate our political imagination. At the same time, it is an experiential space that can only be explored and experimented with at play. At least one problem arises from this conceptualization of videogame space: If videogame space hosts a potentially unlimited number of worlds and remains partial in its representation, which, in turn, is not easily reducible to the software code or the run-time data in the computer memory, then how can we analyze it? How does the contingency and potentially infinite plurality of material videogame worlds relate to my claim about potential conflicts, when I admit that other players may experience different worlds?

The latter question regarding the results of my analysis is less troubling. After all, I have already emphasized that the point of this book is not to say that all players must experience the conflicts I identify, let alone start imagining alternative futures immediately. Admittedly, my own experiences of conflict are, to some extent, a product of my particular interest in or perspective on games. Thus, I can merely claim that the games I looked at were capable of hosting such conflicts in my particular case and that this potential might exist in other games and for other players as well. An empirical study of their impact has to follow in the future. The more pressing question is how conflicts can be identified in the first place, given the vastness of most recent videogame spaces.

While different approaches certainly exist, many game researchers agree that playing is the preferred way in which a game space can be engaged and experienced.⁸⁹

Once playing becomes a method, it has to be applied with care and, in the face of the size of many videogame spaces, while taking the constraints and limited time of the researcher into consideration. In my research, I have tried to engage with this problem in two ways. First, my analytic play benefited much from principles often subsumed under the term “grounded theory,” which propagates openness, flexibility, object-orientation and context-awareness.⁹⁰ Hine formulates similar principles for ethnography in virtual spaces, of which she demands that it be an “adaptive ethnography which sets out to suit itself

60 Thought-Provoking Play

to the conditions in which it finds itself.” She demands that such ethnography is mobile, with its object shaped in terms of flow and connectivity rather than location and boundary as organizing principle. Boundaries are not assumed but explored in the process, the idea of a complete ethnography of a given object has to be abandoned, each decision means to reformulate the object itself.⁹¹ This means to record, document, reflect on and analyze playing experiences as far as possible.

Second, where available, I have included additional materials about specific videogames in the analysis, in order to get a better understanding and knowledge of their spaces and the conflicts they might host. As many of the videogame spaces analyzed below offer several dozen to several hundred hours of distinct experience, I have used additional materials such as handbooks, walkthroughs and other player’s comments to expand on and enhance my own exploration of each game (see Figure 3).⁹²

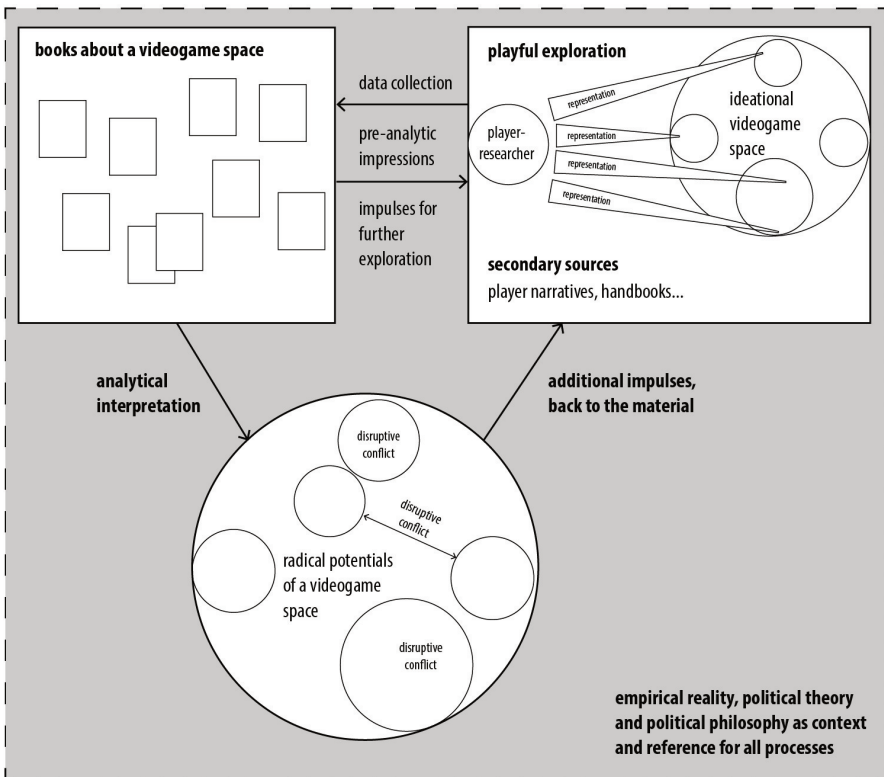


Figure 3. The process of analyzing videogame spaces.

Methodologically, this does not solve the problem of partiality, but it does allow for a rudimentary triangulation of the data,⁹³ thus offering a stronger empirical basis. Furthermore, even though this methodology is not applied as rigorously in the following chapters as I would have liked, I hope it may inspire further experiments and considerations toward more structured and comprehensive approaches to ideational videogame spaces.

Notes

1. As discussed above, the production of a videogame is a complex process involving many parties on various levels and hierarchies, which I cannot do justice to in this book. See Chapter 1, “Media Specificity”.
2. Lamarre, *The Anime Machine*, xxvi.
3. *Ibid.*, xxxi.
4. Aarseth, *Cybertext*; Idem, “Computer Game Studies, Year One”; Eskelinen, “The Gaming Situation.”
5. Juul, *Half-Real: Video Games between Real Rules and Fictional Worlds*.
6. Frasca, “Ludology Meets Narratology”; Frasca, “Ludologists Love Stories, Too.”
7. Bogost, *Persuasive Games*, 5.
8. *Ibid.*, 7–9.
9. This is, for example, the case in his discussion of the rich fictional world of *Grand Theft Auto IV*, of which Tavinor claims that its “interest in creating a more realistic and detailed graphical fictional world—in essence depicting a dynamic modern city in a virtual way—is also one of the reasons that games like *Grand Theft Auto IV* should be considered art” (Tavinor, *The Art of Videogames*, 68).
10. Thon, *Transmedial Narratology and Contemporary Media Culture*, 53.
11. Thon, 51–53.
12. *Ibid.*, 47, italics in the original.
13. Gadamer, *Truth and Method*, 104.
14. *Ibid.*, 107.
15. Fink, Saine and Saine, “The Oasis of Happiness: Toward an Ontology of Play,” 21.
16. Gadamer, *Truth and Method*, 107.
17. *Ibid.*, 107.
18. *Ibid.*, 108.
19. Caillois, *Man, Play, and Games*, 13. In a similar way, Juul (*Half-Real: Video Games between Real Rules and Fictional Worlds*, 28.) argues that “[p]lay is mostly taken to be a free-form activity, whereas *game* is a rule-based activity.” Game scholar Bo Kampman Walther

62 Thought-Provoking Play

(“Playing and Gaming – Reflections and Classifications”) distinguishes play from games, arguing that “[p]lay is an open-ended territory in which make-believe and world-building are crucial factors. Games are confined areas that challenge the interpretation and optimizing of rules and tactics – not to mention time and space.”

20. Notably, most of the above-mentioned thinkers thought and published in languages that do not distinguish between play and games (German *Spiel*, French *jeu*, Dutch *spel*). This may have contributed to *The Ambiguity of Play*, of which Brian Sutton-Smith (Sutton-Smith, *The Ambiguity of Play*, 214) shows that it primarily originates in the rhetoric of play in various fields of study. He states that “it is clear that verbalizations about a ludic experience are not the same as that experience” (Sutton-Smith, 216). By drawing on the distinction between game and play to reorder the complexity of play, I do not claim to solve the ambiguity and diversity of the term and its experience. Rather, this step is geared towards emphasizing the ideational quality of games as approximation of free play embedded in a social context, and their dependence on rules and player commitment.

21. The relation between the game or play space and the “ordinary” is widely and controversially discussed in game studies, where Huizinga’s metaphor of the “magic circle,” or rather, the separateness alluded to this term, has become a central element of disagreement among scholars. Mia Consalvo (“There Is No Magic Circle,” 415), for example, rejects the “magic circle,” arguing that “players never play a new game or fail to bring outside knowledge about games and gameplay into their gaming situations. [...] There is no innocent gaming.” In a keynote given at the second *Under the Mask* conference, Garry Crawford (“Forget the Magic Circle (or Towards a Sociology of Video Games)” 9), points out that videogame players’ and, more generally, “media audiences’ engagement with texts will often live on beyond the screen or page.” He urges the reader to “Forget the Magic Circle” and pay more attention to the interrelation and interaction between games and their social contexts. Jesper Juul (“The Magic Circle and the Puzzle Piece,” 59–60) shares this critique against detachedness and reminds us “that Huizinga describes the magic circle as one type of *social space* among others. [...] The magic circle is a description of the salient *differences* between a game and its surrounding context. It does not imply that a game is completely distinguished from the context in which it is played.” Interestingly, he refers to the impact of social status on playing, arguing that games are not separate because “winning and losing may have social consequences, and players may play accordingly. The most obvious example is playing against a boss or playing against a child, in which case the player may decide that it is preferable to lose the game.” This example arguably offers a strong case for my understanding of play as an ideal to which games aspire. Both players can only “play” the same game on equal terms if they shed their social backgrounds and balance the differences in their ability. In *Spiel als Weltsymbol*, Fink highlights this peculiar dual, illusory [*Schein*] character of the play space, observing that the “thing, *with* which the player plays, and the fellow players, *with* whom he enters the game [*Spiel*], are as real as he is, and belong to the same dimension of reality. Yet, in playing together, they enact [*erspielen*] an unreal play-world.” Although play is constituted by exclusion and interrupts the continuity of purposive action, it still requires real space and real time, “but the space and time *in* the play-world never continue seamlessly into the space and time surrounding it” (Fink, *Spiel als Weltsymbol*, 229, 234, my translation).

22. Juul, *Half-Real: Video Games between Real Rules and Fictional Worlds*, 165.

23. In *Cheating*, Mia Consalvo shows that, despite rigid rule-sets, videogame players nonetheless cheat and “challenge the notion that there is one ‘correct’ way to play a game” (Consalvo, *Cheating: Gaining Advantage in Videogames*, 2). She points out that players have different ways of defining cheating (Consalvo, 87–89). While generally regarded as an act that gives a player an unfair advantage, players’ opinions as to what counts as cheating range from broad definitions like “anything other than a solo effort in completing a game” to narrow

definitions of acts that result in an unfair disadvantage of others, which do not regard the use of cheat codes and walkthroughs in single player games as cheating. Although Consalvo does not make this explicit, the latter definition implies an understanding of single-player games as the sum of all rules in the software similar to my own—anything permitted by the software is part of the game and its ideational expressivity.

24. To stick with Liebe's example, it is quite possible to use the random function of the "deck" in computer *Solitaire* for gambling, if two players decide to bet on the color of the card appearing next. Of course, this is primarily a theoretical point to highlight the flexibility of even the most rigid rule structure.

25. With the concept of "charity," Thon refers to the idea that "recipients will generally try to exhaust every possible alternative explanation before trying to imagine a logically impossible, contradictory local situation or a logically impossible, contradictory global storyworld." (Thon, *Transmedial Narratology and Contemporary Media Culture*, 61.)

26. Juul, *Half-Real: Video Games between Real Rules and Fictional Worlds*, 53–54.

27. Liebe, "There Is No Magic Circle. On the Difference between Computer Games and Traditional Games," 332.

28. Flanagan, *Critical Play: Radical Game Design*, 61.

29. Liebe, "There Is No Magic Circle. On the Difference between Computer Games and Traditional Games," 333–34. For a similar argument, see Campbell, "Just Less than Total War Simulating World War II as Ludic Nostalgia," 186.

30. Ōtsuka [大塚], *Teihon Monogatarihōhiron*, 12–13, my translation. At a later point in his text, Ōtsuka compares creating contents, in particular manga, with a game-like experience. As long as you know the rules, you can create a story based on them (Ōtsuka [大塚], 78–79.)

31. Huizinga, *Homo Ludens*, 1970, 40.

32. In many discussions of play, the concept is indeed defined by its separation from ordinary life. Johan Huizinga defines play as "a voluntary activity or occupation executed within certain fixed limits of time and place, according to rules freely accepted but absolutely binding, having its aim in itself and accompanied by a feeling of tension, joy, and the consciousness that it is 'different' from 'ordinary life'" (47). Roger Caillois, uses the terms free, separate, uncertain, unproductive, governed by rules and make-believe to describe play. (*Man, Play, and Games*, 9–10.) Heideggerian philosopher Eugen Fink regards it not only as detached from, but as opposed to the ordinary (Fink, *Spiel als Weltsymbol*; Fink, Saine and Saine, "The Oasis of Happiness: Toward an Ontology of Play").

33. Roth, "Disruptive Conflicts in Computopic Space."

34. Rieder and Röhle, "Digital Methods: Five Challenges," 76.

35. Salen and Zimmermann, *Rules of Play. Game Design Fundamentals*, 340.

36. Bogost, *Unit Operations: An Approach to Videogame Criticism*, 39.

37. In his innovative approach to *Cybertext*, Espen Aarseth (*Cybertext*, 10–11) claims that databases are an epochal break on the physical level because, through the distinction between interface and storage medium, they signify new ways of using textual material. He argues that, on a semiotic level, cybertexts show a "unique dual materiality" and thus have to be differentiated into surface and deeper layer (Aarseth, 40). Since the early 2000s, databases have gained increasing attention from media scholars and philosophers like Lev Manovich (*The Language of New Media*) or Azuma Hiroki (*Dōbutsuka suru posutomodan*; for the English translation, see *Otaku: Japan's Database Animals*), reflecting their increasing importance and

64 Thought-Provoking Play

pervasiveness (Schäfer and Roth, “Otaku, Subjectivity and Databases: Hiroki Azuma’s Otaku: Japan’s Database Animals”).

38. Pavel, *Fictional Worlds*, 51.

39. As such, the notion of “videogame world” applied here may be compatible with Thon’s aforementioned notion of “locally represented situations” (Thon, *Transmedial Narratology and Contemporary Media Culture*, 47), as long as the focus lies on the representation and its physical quality, rather than the mental projections of the storyworld.

40. Bogost, *Persuasive Games*, 2–3.

41. *Ibid.*, 25.

42. See, however, Miguel Sicart’s (“Against Procedurality”) critique of “proceduralists,” whom he holds to focus too much on pre-structured, “instrumental play.” Drawing on authors like Adorno and Horckheimer, and Fink, he argues that “[g]ames structure play, facilitate it by means of rules. This is not to say that rules determine play: they focus it, they frame it, but they are still subject to the very act of play. Play, again, is an act of appropriation of the game by players.” Sicart’s argument highlights the importance of looking beyond the rule system when analyzing videogame expression, although he exaggerates the limitedness of proceduralist perspectives—emergence, disruption and player subjectivity are far from being ignored by Bogost or Flanagan, whom Sicart mentions as representatives of “proceduralists.”

43. Juul, *Half-Real: Video Games between Real Rules and Fictional Worlds*, 121.

44. *Ibid.*, 199, italics in the original.

45. As Kline et al. note early on, “sometimes the message is the message. To understand video games, we have to look not just at how they alter our perceptions of speed and space but also at how these sensory alterations are associated with and inflected by very specific sets of meanings – about, say, gender, or violence, or consumerism” (Kline, Dyer-Witthof and De Peuter, *Digital Play. The Interaction of Technology, Culture and Marketing*, 37).

46. Murray, *Hamlet on the Holodeck: The Future of Narrative in Cyberspace*, 143–44.

47. Juul, *Half-Real: Video Games between Real Rules and Fictional Worlds*, 133.

48. Notably, Bogost’s (*Persuasive Games*, 103–9) own example of the game *Tax Invaders* does not support his claim about the centrality of procedure convincingly. *Tax Invaders* is a reskinned version of the popular game *Space Invaders* created by the Republican party in the US, in which the player controls a graphical representation of the head of George W. Bush and has to shoot down invading taxes (issued by the hostile democrats), represented textual through large sums of money moving towards her. Bogost regards this as a sophisticated example of procedural rhetoric, because “the player completes the game’s argument [here, the conservative anti-taxation position; mer] by firing the projectiles that defend the nation from Kerry’s potential tax plans.” He argues that “*Tax Invaders* takes the metaphor beyond verbal and visual rhetoric,” as it redefines taxes as a foreign, even alien, enemy. Although the game certainly is a striking example of a procedural argument, Bogost himself has to admit that *Tax Invaders* “mounts its argument partly through verbal rhetoric [...] and partly through visual rhetoric.” In order to translate its rule-based system (its procedures) into a political context, *Tax Invaders* relies heavily on both graphical and textual symbols and takes advantage of the meanings represented by the original game *Space Invaders*. Thus, although the rules of the game (shooting down intruding enemies) might be understood as “symbolic structures of a higher order than natural language,” these rules—the procedure—of the game alone are not always sufficient to reframe the game. *Tax Invaders* exemplifies my argument for an inquiry of the way, in which procedural and sensual elements are combined in videogames.

49. Molleindustria, *Queer Power*.

50. For a comment on the game by its creator, see: GAME VIDEO/ART, “Interview: Paolo Pedercini Aka La Molleindustria.”

51. Mukherjee, *Video Games and Storytelling*, 21. Discussing the complex relation between storyworld and representation, Thon similarly concludes that “the way in which storyworlds are represented in contemporary video games cannot and should not be reduced to either interactive simulation or narrative representation, since it is constituted precisely by the complex interplay between these two modes of representation” (Thon, *Transmedial Narratology and Contemporary Media Culture*, 107).

52. Bogost, *Unit Operations: An Approach to Videogame Criticism*. Sharing a quite similar intuition to that of Bogost, Linda Hutcheon (*A Theory of Adaptation*, 31–32) mentions Richard Dawkins’ concept of “memes,” or “units of cultural transmission or units of imitation” as a potentially fruitful approach for adaptation studies in *A Theory of Adaptation*, but does not actively pursue this direction.

53. Bogost, *Unit Operations: An Approach to Videogame Criticism*, 70.

54. *Ibid.*, ix.

55. *Ibid.*, 4–8.

56. Kirkpatrick, “Controller, Hand, Screen: Aesthetic Form in the Computer Game,” 140.

57. “M.C. Escher – Image Categories – Impossible Constructions.”

58. *Echochrome* is a good example of this. For those of you who are not familiar with the game, please have a look at the abundant online footage or the official documentation (“*Echochrome* (Playstation.Com)”).

59. Juul (*Half-Real: Video Games between Real Rules and Fictional Worlds*, 184) mentions the productive, satirical potential of incongruities between rules and fiction, but does not expand on this issue.

60. A freely available multiplayer first-person shooter created by the US military as a recruiting advertisement, *America’s Army* shows that even the appearance of the same object in the same videogame world can differ between multiple users. Although the players are divided into two opposing teams, the respective adversaries are represented as a “threat” to the American army to which all players belong. While fighting against each other, all players are US soldiers, always fighting an external enemy (Bogost, *Persuasive Games*, 77–78).

61. Wegner, *Imaginary Communities*, 17.

62. I am not arguing that realism in games and their qualities as simulations cannot make a contribution to specific aims. Scholars like Fujimoto Tōru (*Shiriasu Gēmu.*) or Ian Bogost (*Persuasive Games*) convincingly claim that “serious games” and “persuasive games” geared towards educating us about a specific subject, situation, or practice can contribute to our understanding of society, culture, and politics, and can convey complex messages in innovative ways. Examples like the games of La Molleindustria or newsgaming.com show the creative potential videogames have to this extent. Rather, my point is that the more a game is aimed towards simulating our empirical reality, the less likely it is to stimulate radical political imagination in the sense in which it is deployed in this book.

63. *Katamari Damashii; Minna Daisuki Katamari Damashii.*

64. For more information and gameplay footage, see “*Katamari Damacy* Game | PS2 - PlayStation.”

65. Brown, *Videogames and Education*, 28.

66. Bogost, *Persuasive Games*, 126–29.

66 Thought-Provoking Play

67. Tavinor, *The Art of Videogames*, 131–46. In this analysis, Tavinor discusses the “paradox of fictional emotions,” i.e. the question “how something that is known to be fictional—and subsequently known to have no real existence—can be the *cause* or *object* of the strongly felt emotions evident in gaming.” Against existing views, he argues that this can neither be explained with the real effort of the player or the real existence of the games as obstacles, nor by referring to concepts like “mistaken beliefs” or “suspension of disbelief,” because “playing a fictive videogame involves an acknowledgement of the fictive status of the game, and so involves the special cognitive attitude characteristic of fictive practice as a whole. [...] Videogames involve us, guided by digital props, imagining or ‘make-believing’ that certain things are the case, and the perceptual properties of these props and our make-beliefs about what is fictional are emotionally affecting. My emotions for the Little Sisters [an example of a non-player-character in the game *Bioshock* Tavinor refers to] are possible because what we imagine is often just as capable of causing emotions as what is believed.” In a later section, he adds that “[i]t is make-believe—both in partially causing our emotions and in conditioning our response to those emotions—that is crucial to explaining how we become *emotionally immersed* in the fictional worlds of videogames.”

68. Tavinor, 131–46.

69. Perron, “A Cognitive Psychological Approach to Gameplay Emotions.” For a more recent and substantial engagement, see Perron and Schröter, *Video Games and the Mind*.

70. Galloway, *Gaming: Essays on Algorithmic Culture*, 2, italics in the original.

71. *Ibid.*, 2.

72. Carroll arrives at these conditions by distinguishing the moving image from play performances. The full definition reads: “[W]e can say that x is a moving image (1) only if x is a detached display, (2) only if x belongs to the class of things from which the impression of movement is technically possible, (3) only if performance tokens of x are generated by a template that is a token, and (4) only if performance tokens of x are not artworks in their own right” (Carroll, *Theorizing the Moving Image*, 66–70).

73. Wikipedia, “Interpreter (Computing),” italics in the original.

74. Roth, “At the Edge of a ‘Digital Area’ – Locating Small Scale Game Creation.”

75. Manovich, *Software Takes Command*, 134–39.

76. Rieder and Röhle, “Digital Methods: Five Challenges,” 76.

77. Juul, *Half-Real: Video Games between Real Rules and Fictional Worlds*, 60.

78. Geuss, *Politics and the Imagination*, ix.

79. There is a crucial difference between such alterations on the one hand, and ripping out pages of a book or censoring its content in some way on the other. Although these practices can be formally described in similar terms, it is crucial that alterations of the physical reality of a work are the central characteristic of videogames and to a certain extent not only intended, but also necessary for play. At the same time, they do not alter the possibilities of the medium irreversibly.

80. Wright, Boria and Breidenbach, “Creative Player Actions in FPS Online Video Games – Playing Counter –Strike.” In their analysis, the authors show how this difference between the videogame as intended by the designers and the videogame world as created by the architects. Most revealing is their account of unpredicted communication practices through which “[t]he dead have found a way of communicating with the living.” They show how, by exploiting the game system, the players have found ways to bypass the intended restrictions of the game. The game does not permit communication between the dead players, who can follow the gameplay through the eyes of any avatar still in the game, thus potentially able to give away enemy positions to their team members. Yet, the designers overlooked the

possibility of voting, a communication tool available at all times. Voting an opponent's position away is not recognized as a rule-breach by the computer, although it might be conceived of as cheating by the human players.

81. Flanagan, *Critical Play: Radical Game Design*, 61, 33–34.

82. Scruton, *The Aesthetics of Music*, 88.

83. Juul, *Half-Real: Video Games between Real Rules and Fictional Worlds*, 176–77, italics in the original.

84. Wright, Boria and Breidenbach, “Creative Player Actions in FPS Online Video Games – Playing Counter–Strike,” 6–7.

85. Pearce, *Communities of Play*, 24.

86. Juul, *Half-Real: Video Games between Real Rules and Fictional Worlds*, 73–83.

87. Discovering and sharing unintentional glitches is an important dimension of explorative videogame play. Today, players are well-aware that their discoveries may quickly lead to updates issued by the designers. See, for example, the VaatiVidya's Youtube video “Dark Souls 3 ► 10 Early Game Secrets.” As predicted by VaatiVidya, the glitch shown in the video was indeed fixed by the time I started playing the game a few weeks later.

88. Salen and Zimmermann, *Rules of Play. Game Design Fundamentals*, 11–12.

89. Kirkpatrick, for example, argues that “it is through investigation of what computer games feel like to play (their aesthetics) that we unearth their political dimension. The most important thing about computer games is not their content, if this is understood to mean a message that is transmitted and then interpreted by audiences.” Consequently, he deems it “necessary to play them to experience their distinctive effects and characteristic limitations” (Kirkpatrick, *Computer Games and the Social Imaginary*, 160–61). Likewise, Espen Aarseth argues for playing as the primary access to videogames: “If we have not experienced the game personally, we are liable to commit severe misunderstandings, even if we study the mechanics and try our best to guess at their workings. And unlike studies of films and literature, merely observing the action will not put us in the role of the audience. When others play, what takes place on the screen is only partly representative of what the player experiences. The other, perhaps more important part is the mental interpretation and exploration of the rules, which of course is invisible to the non-informed non-player. As non-players we don't know how to distinguish between functional and decorative sign elements in the game” (Aarseth, “Playing Research,” 3).

90. Pentzold, Bischof and Heise, *Praxis Grounded Theory*.

91. Hine, *Virtual Ethnography*, 63–65.

92. In doing so, I followed Aarseth's suggestion to study design, rules and mechanics, as well as to observe other players or studying their thoughts about games, where available (Aarseth, “Playing Research” 3), admittedly without knowing of this text at the time of the research.

93. In the context of qualitative social studies, triangulation refers to the use of multiple methods, perspectives or types of data in the research process. This approach is expected to provide a better understanding of complex phenomena and subjects (Rothbauer, “Triangulation”). Summarizing the existing literature, Uwe Flick (Flick, *Qualitative Sozialforschung*, 519–20) refers to four types of triangulation: “data-triangulation,” “researcher-triangulation,” “theoretical triangulation” and “methodical triangulation. He argues that triangulation is not so much an aid to strengthening validity claims (although originally designed as such), but rather an alternative to “validation strategies,” capable of elevating breadth, depth, and consistency of a methodical approach. For example, an empirical study of

68 Thought-Provoking Play

the significance of music in the everyday of teenagers, in which the interviews with the respective age group are complemented with a study of recent trends in popular music, allows the interviewers to ask more precise questions based on his or her first-hand knowledge, to understand the answers given better and to respond to the answers given more adequately, thus potentially offering a deeper insight. Likewise, my exploration of videogame spaces and their interpretation benefited from the knowledge of the games and other players' perspectives and observations.

Mechapocalypse

In the previous chapters of this exploratory search, I have clarified “what” (disruptive conflicts), “how” (playful exploration and additional resources), and “where” (mainstream science fiction (sf) console games published in Japan from the mid-1990s and early 2000s) to look for the political potentials of videogames. It is now time to put the assumptions and theoretical conclusions to a test. The declared focus for the initial search is on popular single-player console games from Japan with science fictional themes and released for Sony Playstation consoles.

With these qualifications in mind, I would like to give a brief overview of some of the tendencies in the Japanese videogame market regarding science fiction. The first thing to say is that there exists little information in accessible form. Online statistics portals like vgchartz.com and the charts found in the annual *CESA Games White Paper* do, however, offer some indication. According to this data, the market in Japan appears to be far less invested in science fiction or realism than that in Europe, the US or Canada.¹ Under the rubric “Past domestic million shipment titles,” the *2012 CESA Games White Paper* lists 204 titles, which I have categorized in Table 1.²

The table shows that more than half of the titles belong to predominantly fantastic franchises, such as *Super Mario*, *Dragon Quest*, *Final Fantasy*, or *Pokémon*. Of the remainder, 51 titles are simulations, 14 are puzzles and edutainment, and 17 titles are implausible or abstract, but do not belong to any of the other categories (music games, titles like *Doraemon*). Of the 204 videogames sold more than one million times in Japan, a total of seven titles shows a sufficient tendency towards sf, namely *Chrono Trigger* and *RESIDENT EVIL 2* (both rank 65 with 2,030,000 units sold), *Resident Evil 3 Nemesis* (rank 111: 1,450,000 units sold), *XEVIOUS* (rank 141: 1,270,000 units sold), *Resident Evil* (rank 164: 1,110,000 units sold), *Parasite Eve* (rank 186: 1,060,000 units sold), and *Metroid* (rank 191: 1,040,000 units). One could argue for

A. Implausible series and franchises	
Mario	29
Dragon Quest	20
Final Fantasy	13
Pokémon	12
Kirby	7
Donkey Kong	5
Zelda	4
Dynasty Warriors	4
SaGa	4
Various (Monster Hunter, Super Smash Brothers, Dragon Ball, Inazuma 11, Yoshi's Island, Kingdom Hearts, Secret of Mana, Arc the Lad)	17
Sub-total	115
B. Simulations (fighting, racing, golf, baseball, mah-jong, horses, etc.)	51
C. Puzzle, Edutainment (Tetris, brain training, languages, etc.)	14
D. Miscellaneous	17
E. Science Fiction	
Chrono Trigger	1
Resident Evil [Japan: Biohazard]	3
XEVIUS	1
Parasite Eve	1
Metroid	1
Final Fantasy VII (counted above under Final Fantasy)	
Sub-total	7
total	204

Table 1. *Sf* among the Japanese all-time million-sellers listed in the 2012CESA Games White Paper.

including *Final Fantasy VII* (rank 14: 4,000,000 units sold) because of its strong science fictional tendency, although most of the *Final Fantasy* franchise shares

the general tendency of Japanese role-playing games mixing sf with fantastic features.³ However, this does not change the fact that science fictional themes play a minor role on the market.

The picture looks slightly more diverse when considering the annual top-100 sales in Japan from 2000 to 2011 as listed by vgchartz.⁴ Apart from the numerous ambiguous role-playing games (hereafter rpg), these charts display a more or less stable 10–15 percent of sf titles for each year. I have compiled the popular sf titles found in this data between 2000 and 2011 in Table 2.

Franchises/Series	Number	Individual Titles	Year
Gundam	39	Dino Crisis 2 (PS)	2000
Super Robot Wars	19	Extermination (PS2)	2001
Mega Man	15	Zone of the Enders (PS2)	2001
Resident Evil [Biohazard]	14	Disaster Report (PS2)	2002
Metal Gear Solid	10	Metroid Fusion (GBA)	2003
Armored Core	5	Classic NES Series: Xevious (GBA)	2004
Ace Combat	5	Famicom Mini: Star Soldier (GBA)	2004
.hack	5	Global Defence Force (PS2)	2005
Sakura Wars	4	Lost Planet 2 (PS3)	2010
Another Century's Episode	4	God Eater (PSP)	2010
Macross	4	Gods Eater Burst (PSP)	2010
Custom Robo	3	Steins;Gate (PSP)	2011
Star Fox	2	Black * Rock Shooter: The Game (PSP)	2011
Front Mission	2	Chikyuu Boueigun 2 Portable (PSP)	2011
Total franchise/series	131	Total individual titles	14
Added total	145		
Tentative scope of the book	119		

Table 2. Sf titles among the top-100 sales between 2000 and 2011 as listed by vgchartz.com.

The data indicates that the market share of Japanese sf videogames is dominated by a few large and long-time franchises on the one hand, and the theme of giant robots, or “mecha,”⁵ on the other. Adapting popular anime content, the titles belonging to *Gundam*, *Another Century's Episode* and *Macross* amount to almost one third (47) of a total of 145 games. Together with other mecha series like the *Custom Robo*, *Armored Core*, *Front Mission* and *Mega Man*, these games represent the strongest current in the field of Japanese sf videogames. Other themes and series like *Resident Evil* (released in Japan as *Biohazard*) or *.hack* are less prominent, and the number of successful individual titles is relatively small.

These findings remain more or less applicable today. They generate the first sample for the consecutive analysis, in which I identify conflicts in some of the major science fictional franchises.

Science Fictional Skins

The statistical data suggests that some of the most popular sf games are adaptations of mecha anime. This is true for *Gundam* games, which are part of the *Gundam* franchise and mostly adapted from the various *Gundam* anime that has appeared since the late 1970s, and the crossover series *Another Century's Episode* (hereafter *A.C.E.*), which adapts story elements, characters and, most importantly, mecha from a wide range of works. According to Linda Hutcheon, an adaptation is an “acknowledged transposition of a recognizable other work or works,” a “creative *and* an interpretive act of appropriation/salvaging” and an “extended intertextual engagement with the adapted work.”⁶ In her analysis, “the adaptive faculty is the ability to repeat without copying, to embed difference in similarity, to be at once both self and Other.” In their emphasis on fluidity and contingency, adaptations can be subversive, because they “destabilize both formal and cultural identity and thereby shift power relations.”⁷

However, a brief examination of the adaptive strategies in *Gundam* and *A.C.E.* reveals the limitations of such subversive potentials in these examples. Covering a broad range of videogame genres and subgenres from first-person and third-person shooters to strategy role-playing games, *Gundam* displays a variety of adaptive strategies.⁸ Titles like *Giren no Yabō* [*Gihren's Ambition*]⁹ or *Ichinen Sensō* [*One Year War*],¹⁰ make a considerable effort to contextualize the gameplay with a narrative corresponding to the anime, thus offering an alternative, more subjective experience of the respective story adapted. In contrast, the majority of games reduces the context to a minimal reference in the shape of a rough narrative framing or by presenting characters, mecha—in *Gundam* called “mobile suits”—and locations familiar from one of the anime. As **Example 3.1** shows, this tendency is particularly strong in the “arcade mode” of the *Gundam VS.* sub-series (hereafter *VS.*).¹¹ While roughly introducing the context of the games in the prologue, these games decontextualize the action from the familiar narrative. This is most striking in the case of “arcade mode,” which confronts the player with a series of loosely connected scenarios. They reduce the link to a vague reference to setting, while at the same time offering

a wide range of correspondingly adapted but decontextualized characters and mobile suits.

In more than one case, the choices available or the results of a mission openly contradict the anime narrative. Such subversion is more actively explored in the strategy rpg of the *SD Gundam GGeneration* series.¹² Offering a high degree of freedom when it comes to choosing pilots for the various machines and mobile suits available, as well as the possibility of convincing less fundamentalist villains to change sides during the battle, these games create situations that deviate from those in original anime. Such deconstructive tendencies are even stronger in the third-person shooter games of the *A.C.E.* series, which combine mecha, characters and story elements from more than one franchise.¹³ As a general tendency, these titles feature an adaptive strategy that reduces the source material to elements of a database shuffled according to need and player choice. Thus, they are examples of postmodern database consumption, a term coined by Azuma. Azuma argues that the trend towards decontextualizing characters from the “grand narrative” culminates in a database of characters and character elements that can be recombined in myriad ways and exist outside any specific narrative context.¹⁴

This tendency towards a ‘databasification’ of decontextualized elements also converges with the themability of games mentioned in the preceding chapter, revealing the mecha and even the characters to be scarcely more than decorative skins. Combining various elements of *Gundam* with the gameplay of the successful hack ‘n’ slash series *Shin Sangoku Musō [Dynasty Warriors]*,¹⁵ the *Gundam Musō [Dynasty Warriors: Gundam]* games¹⁶ deploy this practice most explicitly. *Gundam Musō* confronts the player with epic martial arts battles against several hundred enemy mobile suits and rewards high kill-rates—in stark contrast to the anime, with its emphasis on the psychological struggle of inexperienced civilians forced to fight over life and death and the terrors of war in general. In a different way, the above-mentioned *V.S.* series deploys inter- and intra-game skinning practices, reusing its framework and format (and possibly parts of the software code) in successive titles or deploying a minimal number of stages in a large number of contexts.¹⁷

These observations hint at another dimension of adaptations, namely their economic aspects. In general, economic considerations are certainly a dominant force behind the majority of the *Gundam* games. Hutcheon (2006, 30) grants that “[v]ideogames derived from popular films and vice versa are clearly ways

74 Thought-Provoking Play

to capitalize on a ‘franchise’ and extend its market.”¹⁸ At the same time, she claims that economic considerations are always part of adaptations.¹⁹ In the case of *Gundam*, and arguably also *A.C.E.*, the appearance of familiar mecha and characters is likely to be the major factor for the popularity of what would otherwise be highly repetitive videogames lacking narrative depth to an extent where they are, presumably, hard to follow for outsiders. Contributing to one or multiple major franchises, these games also play a role as advertisements for other products, just as the original mecha anime series was sponsored by toy makers like Bandai, who expected elevated sales of real-life models of the mecha and other series-related toys for children. A particularly prolific part of the *Gundam* franchise, the “super deformed” *SD Gundam GGeneration* games are a striking case of the economics behind adaptations.²⁰

In summary, games committed to—accurate or original—storytelling tend to offer alternative perspectives and subjective experiences of the *Gundam* world. However, the majority of games discussed so far tend toward decontextualization, databasification, standardization and skinning. These games arguably offer their fan-players what Hutcheon calls the intertextual pleasure of “understanding the interplay between works, of opening up a text’s possible meanings to intertextual echoing.”²¹ They also develop a considerable deconstructive force with respect to the original *Gundam* universe. However, by abstracting the narrative, characters and mecha from their context and from their specific features, they also reduce its political content to a choice between different skins only meaningful for insiders.²² The lack of novel contributions to the *Gundam* universe most of the games display marks them as highly self-reflexive.

Notably, Hutcheon claims that videogame adaptations not only have to meet the demands of a “truth-of-correspondence,” or a reference to the universe of the adapted text, but also that of a “truth-of-coherence,” meaning a plausibility of the action in the context of the game.²³ Inverted, the fact that the above-mentioned games fail to convince as adaptations offers an opportunity for taking a closer look at them as games in their own right. The next section analyses how *Gundam* games adapt elements of a major media franchise into specific videogame genres.

Survival Training

The mix of adapted narrative elements (background, characters, mecha) and gameplay in *Gundam* games provides an interesting case for Hutcheon’s claim

that successful adaptations have to be equally accessible to knowing and unknowing audiences.²⁴ On the one hand, the abstracted, reshuffled or even lacking narratives found in most of these games are hardly intelligible for unknowing audiences. On the other hand, the gameplay of many titles is intuitive enough to be grasped immediately. At times confronting the player with tough challenges, the rules and controls are nonetheless simple enough to be mastered to a certain extent, and the instructions are easy enough to understand instantly.

In the following section, I take a look at the two most prominent videogame genres *Gundam* is adapted to, namely shooters and strategy role-playing games. In most cases dominated by third-person combat action on ground and in space, the shooters deploy the mobile suits with their enduring armour, ability to fly and set of super-sized, deadly weapons as human enhancements. The titles of the *V.S.* series reduce the complexity of controls, truthful to their arcade framing. More sophisticated examples like *Climax U.C.* or the *A.C.E.* series features complex maneuvers and make use of the full range of the controller.²⁵ **Example 3.2** shows how these shooters display a tendency towards fast-paced reaction and emphasize hand-eye coordination, which is particularly striking in the 2.5D shoot 'em up *Gundam Seed*.²⁶

The action in these games tends to converges toward decontextualized reaction to the accelerated flow of information on the screen. Required of the player are analytical skills to decipher the screen quickly, and a corresponding set of control skills necessary to react to its signals. Hand-eye coordination is arguably part of many videogames, to various extents, and pedagogical research has long highlighted its value as a skill in the contemporary world. Besides the sensorimotor skills, a recent study of cognitive dimension of first-person shooter play indicates that such games promote cognitive flexibility and cognitive-control skills.²⁷ However, at the same time, visual acceleration promotes a kind of “responsive irresponsibility” and a double vision on the part of the player. One has to identify and evade the most immediate threat, be it projectiles, obstacles or the enemy, while constantly searching for new targets elsewhere on the screen and trusting the automatic trigger to remain on the target until destroyed. The attention moves on to the next target as soon as one has reason to believe that the momentary target will be destroyed by the last fired projectile. However, there is no time to reflect on or even focus on either the individual enemy, or the moment of destruction. In a way, I believe this is an experience similar to Walter Benjamin’s well-known description of

film viewing as tactile, habitual “reception in distraction.”²⁸ Although already ascribed a physical quality by Benjamin, this should be qualified further by adding the term “intense,” to account for the active, physical involvement of the player.

In their intense reception in distraction, these shooters offer a taste of Paul Virilio’s dystopic vision of an accelerated, dromological future. In this future “War of Time,” speed is superiority: “to be quick means to stay alive” when knowing-power is replaced by moving-power.²⁹ At times of accelerated speed and ubiquitous accessibility to destruction, the struggle to maintain a certain margin of political reaction time—time for reasoned decisions—in order not to be replaced by automation of defense and decision, is lost. For Virilio, this means that the world as a field of free (political) action comes to an end and “the more speed increases, the faster freedom decreases.” Ultimately, speed converges towards an “instantaneousness of decision.”³⁰

In light of Virilio’s analysis of politics in times of acceleration, shooter games and their emphasis on hand-eye coordination or analysis-reaction take on an ambivalent meaning. These skills could be said to prepare their players for behaving—or at least surviving—in a culture dominated by fast-paced information flows and visual representation, similar to how, in Benjamin’s view, film prepared early twentieth-century audiences for future struggles. However, insofar as the games emphasize instantaneous decision, reaction and anticipation, instead of reasoning, imagination and action, they do not offer any alternative to the contemporary tendency towards acceleration; rather, they reflect it in play. As far as I can see, this reflection is not critical but admiring of speed.³¹

At the same time, this “double vision” might be a more general and common structure in videogames. From the perspective of semiotics, Yoshida Hiroshi distinguishes between a semantical and a syntactical dimension of the videogame screen.³² While one concerns the meaning of the icons and symbols presented, the other puts them into meaningful relation with each other within the game world. For example, while a ball on a baseball game might even leave the screen if it is too high for the dimensions of the game field represented, its shadow remains visible and indicates its position to the player, who, consequently, is challenged to track the shadow and the ball in order to determine the right spatial position and act accordingly. Without mastering the syntactic dimension, the player is unable to master the game.³³ Concluding his examination, Yoshida points out that this common “double vision” is mastered

by most videogame players with ease, whereas it is not only uncommon, but rejected by some critics in the world of art.³⁴ He raises the important question of how this “double vision” relates to the history of sensuality and in what sense it suggests updating Benjamin’s discussion, particularly against the background of Muroi’s discussion quoted in the first chapter of this book.

The turn-based strategy rpg, on the other hand, interrupts the flow of time. The titles of the *SD Gundam G Generation* series feature chess-like gameplay in which the player takes turns with the computer in strategic role-playing fights and can think about the next move as long as he or she wants. In command of several units in bird’s-eye scenarios, one has to make appropriate tactical and strategic choices to defeat the enemy. Each unit has a specified range of movement and attacks, which are to be used to the player’s advantage. Gradually, one can upgrade the equipment, regroup soldiers and gear and create individual teams for the battles to come. Given Virilio’s claim that with increasing acceleration, space (territory) as the central contested category in war is replaced by time, these turn-based, de-temporalized games with their strong emphasis on space and distances—and their genre as a whole—might be regarded as a counter-movement. Yet, at the same time, they deploy the numerous mecha of the franchise to create high information density, further amplified by customization options. This turns the games into vast spaces of functional configuration and re-combination of the decontextualized database elements mentioned above.

Again, this is an ambivalent feature. On the one hand, the games promote skills of analyzing and understanding complex information systems and databases in times of that such systems have ever-increasing importance and influence. As such, they confront the player with a high information density and offer an intense but playful experience of mastery. Volker Grassmuck discusses *otaku*, a Japanese term referring to passionate or “extreme” fans of manga, anime, games and related fields of interest, as a new strategy for dealing with the information age.³⁵ At the end of the twentieth century, he observes, “[h]ardly anybody is not affected by the flood of information and plethora of media. The increasing flow-velocity of our life processes forces us to simultaneously partake in ever-more projects in ever-more places together with ever-more people.” In contrast to attempts to respond to this new information density with flexibility and multi-tasking,

[t]he otaku are trying out a solution that goes in the opposite direction. Their urge to appropriate the world is motivated by the

ambition to swap the borderlessness of the social cosmos for the microcosmos of collecting, of games, or of the machine. This radical limitation enables them to form an identity and bundle together a life story as a narrative. If the multiple represents opening up, then the otaku represents closing off.

Based on my own research into the otaku culture, I doubt that these claims can be generalized.³⁶ Nevertheless, the videogames in question deploy their mecha to generate information density, and offer ways to master it. In this sense, these videogames resemble Grassmuck's portrait of the otaku world, because they offer a coherent, closed space and strategies for and the experience of "mastering the social and psychological uncertainties of our age."³⁷

In this, they depend on a mechanism similar to the closure Jameson regards as crucial for successful utopian imaginaries. However, as in the case of the shooters, this closed space features characteristics similar to those found in non-game empirical reality, instead of offering alternatives to it. In order to qualify this statement, I would like to distinguish between creative and repetitive information, and the corresponding strategies of engaging with data. McKenzie Wark draws such distinction in *A Hacker Manifesto [version 4.0]*, albeit in the peculiar terminology of production vs. hacking and communication vs. information.³⁸ He claims that "[w]here communication merely requires the repetition of this commodified difference, information is the production of the difference of difference" (Statement no. 40). A hack "produces a production of a new kind, which has as its result a singular and unique product, and a singular and unique producer" (no. 8). Production "takes place on the basis of a prior hack which gives to production its formal, social, repeatable and reproducible form. Every production is a hack formalised and repeated on the basis of its representation. To produce is to repeat; to hack, to differentiate" (no. 9).

Converting these statements into my terminology, one could say that his description of communication fits my notion of a repetitive engagement with data, because it deploys a formalized, pre-defined difference, whereas his notion of information matches creative engagements, because it entails a novel way of engaging with data. Against this background, I would argue that the potential for creative information in the above-mentioned games is limited to their deconstructive function in the context of the adapted franchise, because none of these games features a novel strategy for producing information. Instead, they perpetuate the contemporary conditions and promote repetitive strategies of managing information rather than creating it anew. In contrast to shooters,

turn-based strategy games appear to offer their players what is lost in acceleration: time to think and make decisions about the future. Yet, a closer look reveals that these games only shift the plane, from accelerated reaction to strategies of managing information density and complexity. In sum, both cases are characterized by acceleration and density. The skills needed to survive their scenarios are similar to those required of us in non-game empirical reality. To return to Virilio's skepticism, quoted in the first chapter, these games, arguably, turn their players into "travelers traveled by the program." As suggested by Carroll and Adorno, they deploy "commonplaces" and offer accessible scenarios, rather than confronting us with disruptive conflicts capable of stimulating independent, radical imagination. Since speed and data are central elements of the videogame space, it should not surprise us that they play an important role in many games. However, the following sections show that they can be deployed in more radical, provocative ways than we encountered here.

Future War

Given the strong tendency toward agonistic or competitive challenges in videogames in general, and their fraternity with war simulations of all kinds, it may come as no surprise that several successful independent works and series share the theme of war with the above-mentioned adaptations.³⁹ Developed as original videogame series, *Front Mission*, *Ace Combat* and *Armored Core* place the action within genuinely novel, sophisticated and temporally and spatially extensive science fictional universes (see Figure 4).⁴⁰

The turn-based strategy rpgs of the *Front Mission* series, for example, are set in the twenty-first and twenty-second centuries.⁴¹ In a future based on the situation in 1995, when the series' first title *Front Mission* was published, several supranational republics are formed in the early 2000s, such as the European Community (EC), the Republic of Zafra (formed around Russia), the United States of the New Continent (USN), the Oceania Cooperative Union (OCU), as well as the unstable Organization of African Consolidation (OAC). Due to several developments, the United Nations (UN) are rendered insignificant in the twenty-first century and are replaced by the Peace Mediation Organization (PMO) founded by Zafra, only for the UN to regain strength in the early twenty-second century with the support of the USN. Despite these developments, the world remains highly unstable, with several coups d'état and anti-state terror on the rise.

By basing its future on real world facts, the series creates a plausible future

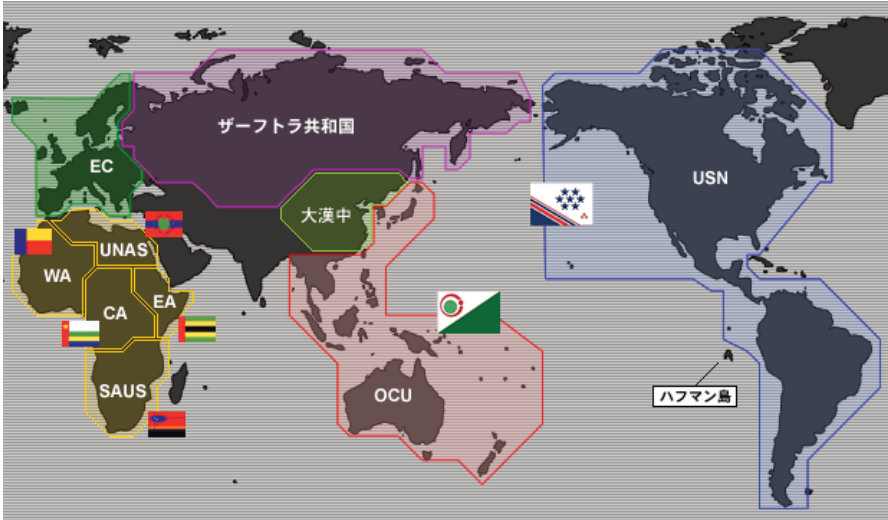


Figure 4. *Front Mission* world map.

world. This approach is also applied to technology, as Angelo D. Pineda, Kyle A. Thompson and Wilson K. Tam point out:

Game mechanics aside, *Front Mission's* true strength comes from its design and story elements. The biggest design influence is the series' grounded realism; the setting is based off of near-future trends of how our world will evolve. For example, the technology of the series has real-life applications. *Front Mission's* cast of characters come from all over the world, from Venezuela to Korea to even Iceland.⁴²

As an important element in the gameplay, the games introduce mecha called “wanzers,”⁴³ which a player can customize with various weapons of short-, middle- and long range and upgrade to optimize them in order to take on the awaiting enemy forces. In the missions or stages, which sometimes take more than an hour to complete, player and computer take turns in directing the attacks and movements of their wanzers.

The temporally and spatially extensive future world with its advanced technologies and infinite conflicts not only provides the basis for these missions or stages, but also serves as a background for discussing various political and philosophical problems. “In keeping with the series' near-future roots, each game focuses on particular military, political, scientific, and philosophical

themes that form the core of their stories. For example, a major recurring theme in the games is the struggle between globalization and nationalism.⁴⁴ While not the most esteemed title of the series, *Front Mission 3* is a good example of the series' "grounded realism" and its political commentary.

Set in the year 2112, the player begins the game in Japan. One quickly learns that future Japan has maintained its non-aggression policy on the surface, while embarking on humanitarian aid missions and conducting weapons systems development beneath—a reference to the critique against the ongoing policy changes in Japan since the early 1990s toward more active international military involvement. During the “Emma-storyline,” protagonist Takemura Kazuki aids the foreign scientist Emma in the pursuit of a stolen new weapon of mass destruction called “M.I.D.A.S.,” at the same time trying to rescue his sister Alisa, who is abducted for her scientific knowledge about this weapon.⁴⁵ The game is infused with themes like war victims, weapons technology and violence, and offers diverse moments of reflection on these issues, some of which I have included in **Example 3.3**.⁴⁶ The protagonist is not a soldier but an engineer and test pilot. The story touches upon individual experiences of war and killing several times, while nonetheless maintaining that Kazuki and the player have no choice but to fight against the attackers. In the context of the overarching story, Emma, who is responsible for developing M.I.D.A.S., repeatedly agonizes over her action and responsibility to mankind, in particular after the weapon is used by an over-ambitious general.

Despite the game's absorbing pace and depth, these reflexive episodes remain somewhat superficial. Much more than the rudimentary and unemotional animation techniques used in the dialogs, this is a result of the fact that the gameplay itself does not reflect this critique of violence and war technologies. On the contrary, featuring customizable mecha and diverse weapons in a very similar way to the *Gundam* rpgs, it immerses the player in technology and rewards a certain degree of admiration and enthusiasm. More importantly, the battles remain superficial in their treatment of the terrors of war and the fight over life and death, as **Example 3.4** shows. Human beings are visible only upon escape from their wanzers and, most of the time, the action does not refer to the death or injuries of those involved in the fights. At the same time, the player has to kill every single opponent, even when they have left their machinery and pose no substantial threat any more. Yet, complete destruction of a team member's wanzers does not lead to fatal injuries, and neither causes a loss of the robot: if the mission can still be completed, machine and pilot are restored.

82 Thought-Provoking Play

In general, each fight during the runaway starts with full specs—ammunition, armor, etc.⁴⁷ This is not just an example of the common rule-based contradictions with plausibility in videogames; what is more important here is that these contradictions are counterproductive to the game’s attempt to deliver a critical message.

Front Mission 5: Scars of the War deals with the problem of physical, mental and emotional damage inflicted by war in more sophisticated ways. Following the protagonist, USN soldier Walter Feng, into an armed conflict with the opposing OCU, the story touches upon the victims of war, including the traumatized soldiers, and further problematizes experiments with brain manipulation and soldier enhancement: A soldier in the enemy forces, Walter’s childhood friend Glen Duval is subjected to such experiments and ends up killing their mutual friend Randy O’Neill, whom he no longer recognizes after the manipulation. However, as in *Front Mission 3*, these critical elements are presented almost entirely through the narrative, be it in scripted dialogs or cut-scenes.

A similar divide between narrative and gameplay can be found in the *Ace Combat* series, albeit in a very different form.⁴⁸ *Ace Combat* is a first-person flight combat simulation. From *Ace Combat 2* to *Ace Combat 6*, the series is set in the fictional world “Strangereal” shown in Figure 5.⁴⁹



Figure 5. Strangereal political map.

A major event in the history of Strangereal is the so-called Belkan war, which is also the main subject of *Ace Combat Zero: The Belkan War*. After failing to avert a severe economic crisis, the Belkan government is replaced by a far-right faction that returns the country to economic prosperity and invests heavily in a strong military. In 1995, the Belkans deploy their military force in an invasion of their neighboring countries. The success of these expansive campaigns prompts the two superpowers, Osea and Yuktobania, to enter the conflict against Belka. Forced back onto their main territory after several months of fighting against an overwhelming enemy, the Belkans decide to drop seven nuclear bombs on their own borderlands in order to build a wall that stops the invading forces. The war weakens the superpowers considerably, because their forces are outmatched by Belkan military technology. In the aftermath, they dismantle their nuclear weapons and elect peaceful governments—not before creating secret military elite forces.⁵⁰

Whereas *Ace Combat Zero* presents the player with a retrospective on the experiences and missions of a legendary pilot in the Belkan War, *Ace Combat 5* opens with Yuktobania once again declaring open war on Osea 15 years later. Both games feature immersive stories⁵¹ with a set of interesting characters.⁵² Despite their difficult controls, they offer a thrilling and highly entertaining experience of aerial dogfighting.

At first glance, *Ace Combat 5* resembles a realistic flight simulation, since it features dozens of different real-world aircraft, including plenty of American classics like the F-16 Fighting Falcon and the F/A-18 Hornet, as well as Russian planes like the Su-27 and MiG-29. State-of-the-art fighters like the F-22 and classic jets like the F-4 and A-10 Warthog are also represented. In real life, some of these jets handle drastically differently, but despite its realistic looks (complete with gorgeously detailed plane models and cockpits, and authentic heads-up displays), *Ace Combat 5* is clearly not intended to be a realistic flight simulation.⁵³

Nonetheless, in its attempt to bridge real aerial combat with entertaining gameplay, the series does deliberately approach (the illusion of) a realistic experience in its graphics and gameplay—to this end, the designers, for example, gain expertise from the Japanese self-defense forces. To the extent that *Ace Combat* aims to offer realistic experiences, the vector points toward non-game empirical reality—even if this is a reality beyond most people's experience.

84 Thought-Provoking Play

Although the individual player may break out of his or her present in these games, this experience in itself does not feature any radical alternatives departing from our reality in drastic ways.

In sum, both *Front Mission* and *Ace Combat* offer alternative scenarios, which, at times, confront the player with a critical mirror of the present or commentary on a potential future. However, *Front Mission* fails to maintain plausibility in its contradictory gameplay and is thus weakened in its critique. In its pursuit of entertainment, *Ace Combat* fails to depart from reality far enough to generate disruptive conflicts with our empirical experiences of the present. In both cases, the way in which narrative and gameplay are combined prevents any radical political potential from emerging, precisely because the scientific method of constructing their alternative world is not applied rigorously to all elements that comprise the game space. The next section discusses a more successful example in this regard.

The Economic Nightmare

Armored Core (hereafter *AC*) is a long-running series of third-person mecha action games.⁵⁴ Its world is ruled by global companies rather than nations or elected political entities. The world's history varies within the series, but, in most cases, the games stage a post-apocalyptic present in the aftermath of a global (nuclear) war.⁵⁵ This major event changed the world's power balance in favor of the technology companies involved in these wars, which now hold all political power. Already through its setting, the *AC* series features a direct critique of (neo-liberal) capitalism and ecological destruction in its dystopic future. As the Japanese Wikipedia entry on the "Great Destruction," or "Grand Slam," as the entry calls it, summarizes the background to the first titles as

the distortion of the maximally grown liberal economy. Rapid increase of slums and environmental pollution in the industrialized countries are paralleled by their fraud against the developing countries, disguised as developmental aid. An irrecoverable gap of economic inequality, population growth, as well as environmental damage and food shortage caused by the destruction of nature, resulted in distrust in the governments' abilities to run the countries.⁵⁶

Beyond a narrative depiction of the consequences this world and its inhabitants are facing, the series puts the player in the role of a mercenary, tasked with

biological and economic survival. During the course of the game, the player is offered numerous contracts by diverse employers, primarily from major companies. These missions require sophisticated machinery and advanced weapons technology. Piloting a mecha called “Armored Core,” the player has to fight enemy mecha and other deadly war machines, both manned and unmanned. The money earned from these contracts can be used to purchase new parts for one’s own machine.

With its myriad parts and many interrelated layers of customization, the AC series is arguably one of the most complex examples of mecha customization. Figure 6 hints at the complexity of the Armored Core setup.



“Armored Core Schematics Interface System” (AC SIS), in short, the shop in AC4

Tuning system in AC for Answer

Figure 6. Customization in AC.

With all its options, the AC upgrade system requires considerable comparison and research in order to be mastered to some extent. Above, I have criticized a similar system in the discussion of the *Front Mission* series or the *Gundam* strategy rpgs. In all cases, mecha are not only an important element of the game

86 Thought-Provoking Play

mechanic, but also function as a customizable object of fascination, targeting a technologically savvy audience enthusiastic about (war) machines. **Example 3.5** shows that *AC* shares this technology fetish, arguably propelling it to new heights by offering elaborate designs and various ways to admire the machine, whether as a 3D model or in the opening video sequences.

Yet, whereas other games do not connect this dominant role of technology and customization directly to their science fictional world, the upgrade system in *AC* is a crucial element for conveying the series' dark vision of an economically dominated future. The relation between both elements is achieved by increasing the definiteness of one's actions in several interrelated ways. Among them, the payment system can arguably be said to be the most important. In *AC*, the player is rewarded for the actual performance during the missions, which he or she can fail to accomplish without having to start all over again. Figure 7 indicates that successful and efficient completion raises the income considerably, whereas poor and inefficient use of weapons, damage to the Armored Core or failure to meet the objectives lowers the reward and may even result in a minus balance, since ammunition and repairs have to be paid in any case. Losing the ability to upgrade the mecha is a major problem, as missions do not get easier.

Mission Report	Mission Report	Mission Report
Reward	Reward	Reward
Basic 280300 C	Basic 204400 C	Basic 280300 C
Special 50000 C	Special 0 C	Special 50000 C
330300 C	204400 C	
Cost	Cost	このミッション結果で確定しますか?
Ammo 0 C	Ammo 0 C	OK RETRY GIVE UP
Repair 136000 C	Repair 100200 C	結果を確定します
-136000 C	-100200 C	136000 C
Total Balance 194300 C	Total Balance 104200 C	Total Balance 194300 C
RANK A	RANK B	RANK A
PRESS [X] BUTTON	PRESS [X] BUTTON	PRESS [X] BUTTON

Figure 7. Two results for the same mission in *Armored Core for Answer* (l, m), followed by the choice to redo or save permanently (r).

The rewards earned during a mission are linked to the player's performance in other series like *Front Mission* or *Ace Combat*. However, the absolute judgment in *AC* is further elevated by the games' treatment of the saving function. What distinguishes titles like *AC4* is that they only allow for saving the entire status upon leaving the game, thereby forcing the player to accept less successful missions or revert to the frustrating method of restarting the entire game and going through the loading process after each suboptimal performance. Such an experience is also part of earlier games such as *AC2*, albeit to a lesser degree.

Here, successful completion, while in itself a considerable achievement for less experienced players like myself (see below), may, depending on the actual performance, not return sufficient revenues for the necessary upgrades, since ammunition and repair costs are generally very high.⁵⁷

Another way of conveying their dystopic message is the high difficulty these games display. The *Armored Core* series is not aimed at casual gamers, but targets hardcore fans with sophisticated data analysis and tactical skills, as well as a good hand-eye coordination. These requirements complicate the struggle for survival as a mercenary substantially. Recent titles like *AC Nexus* or the PS3 games *AC4* and *AC for Answer* feature a complex set of commands, which makes use of almost the entire range of controller functions. For me, a player used to recent first-person and third-person shooters, the earlier *AC2* controls provided an even more demanding challenge, because it does not make use of the analog sticks or offer a key assignment system. With only two key mapping options left, the player is forced to master the mecha in a predetermined, from my perspective counterintuitive way. Offering a frustrating initial playing experience, this limitation and awkwardness of the controls, however, points to the role controls play in the experience of gameplay in general, and the control over technology and mecha in particular.⁵⁸

Together, these elements support and amplify the experience of a world dominated by companies and war technology. By deploying the nova of economic dominance and mecha technology in multiple elements of narrative, game system and gameplay, the *AC* series manages to offer an involving experience of survival in a world that has transformed into a freelance battlefield. It may not surprise the reader that some of the skills these games require are familiar from the earlier analysis of acceleration and information density in *Gundam*, in the context of which I have discussed them as uncreative survival strategies.⁵⁹ The *AC* series radicalizes this tendency almost beyond recognition, confronting the player with a dystopic totality ruled by natural selection, in which biological survival—to the extent to which this category exists in videogames with their saving and retry options—is directly linked to economic survival and the skills necessary to prevail in battle.

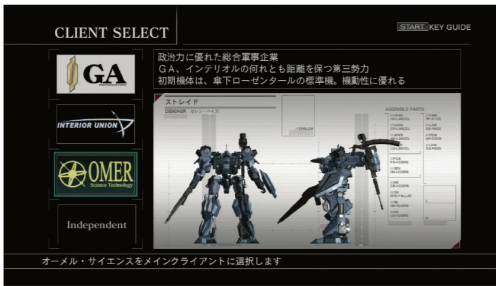
Whereas the lack of narrative context to the missions in many *Gundam* games was perceived as a failure, *AC*—which, by the way, does feature a vague overarching narrative—embeds this lack convincingly into its world view. After all, one does not choose to accept contracts due to their political motivation,

88 Thought-Provoking Play

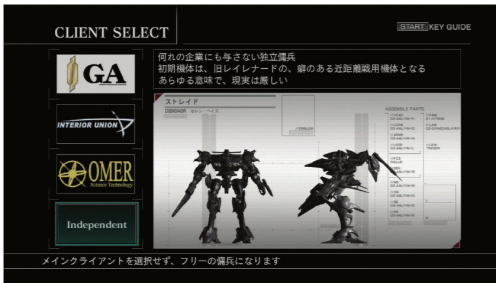
but because they are lucrative and ensure survival. Interestingly, *AC for Answer* offers a choice between several companies the player can join as a hired mercenary, including an independent faction, as shown in Figure 8.⁶⁰



"The world's largest corporation. It primarily operates as a defense contractor. Their craft proudly display military colors and feature excellent defense and heavy weaponry."



"A military corporation with political might on their side. They tend to keep their distance from both GA and the Interior. Their craft are standard, highly maneuverable Rosenthal machines."



"An independent mercenary unaffiliated with any corporation. The only available craft is an older Rayleonard model, built for close range combat. Good luck."

Figure 8. Ideological choices in *AC for Answer*.

At first glance, this might suggest some space for morally or ideologically driven decisions. However, betraying any such expectations, ideology is reduced to choices between different machines.⁶¹ The general tendency of the series suggests that this is not a flaw in the game design, but may well be read as a way of conveying the final consequence of this world: the irrelevance of ideology in the everyday struggle of the mercenary to survive the economic nightmare. Confronting the player with a scientifically rigorous combination of a broad range of expressive means, *AC* is able to offer the player the experience of

a version of Virilio's darkest forecast—a place in which analysis and skills are necessary for survival, ultimately replacing “playfulness” and political freedom.

Deconstruction, Implausibility and Dystopia

This chapter examined several major tendencies in the field of popular Japanese science fictional videogames. It identified some of the ways in which mecha are deployed in different series, ranging from means of addressing franchise fans or a technology-savvy audience attracted to war machinery to attempts at apocalyptic worlds, which are politically explicit not only visually, but also in the gameplay rules and experience. The fact that these tendencies cannot be separated clearly makes the mecha an ambivalent device in Japan's science fiction games.

The analysis suggests that the most dominant franchises on the market are not necessarily the most promising from a political point of view. As adaptations, the *Gundam* games feature a deconstructive tendency in the context of the adapted universe and offer the player a new perspective on and experience of their universe. However, in most cases, they remain self-referential and are dominated by skinning practices—a particularly strong tendency in hybrids like *Gundam Musō* or crossover series like *A.C.E.* The review of adaptations leads to the conclusion that a random selection of database elements does not suffice to generate disruptive conflicts. These results make me wonder if “databasification” can offer the “piquancy of surprise” and “change” at all, which Hutcheon regards as major potential of adaptations.⁶² As games in their own right, the analyzed *Gundam* titles have proven to be ambiguous cases, perpetuating the contemporary conditions on the one hand, and offering strategies for survival on the other. Overall, they remain repetitive and do not offer genuine alternatives or novel strategies of resistance.

Series like *Front Mission*, *Ace Combat* or *Armored Core* offer the player an alternative world one cannot call anything other than dystopic. In all cases, the dark tenor is that the effort made toward living together in peace cannot prevent a fiercely fought global war about resources and power. Yet, *Front Mission* and *Ace Combat* stopped short of deploying a science fictional novum in their gameplay rigorously enough to generate otherness and conflict with the known. Instead, they ended up restricting it—and with it their political message—to the conventional narrative layer. The implausibility resulting from the described inconsistencies in *Front Mission* does not make the series' universes

90 Thought-Provoking Play

less enjoyable, but works counterproductively to the critical elements displayed in the story or setting, thus weakening their political appeal.

An example of a more encompassing deployment of the novum was found in the sophisticated dystopia of the *Armored Core* series, which not only transfers the player into a post-apocalyptic world, but reflects and amplifies this setting in its gameplay and rule set, thus offering a total, compelling and frightening experience of life under extreme conditions. This finding supports Suvin's claim that in the most effective or "optimal" sf,

a sufficiently large number of precisely aimed and compatible details draw out a sufficiently full range of logical implications from the central S-F novum and thus suggest a coherent universe with overall relationships that are—at least in respect of the thematic and semantic field associated with the novum—significantly different from the relationships assumed by the text's addressees.⁶³

This initial exploration points toward a hypothesis that informs the following case studies: videogame spaces are politically most potent and conflict-laden when they mobilize a wide spectrum of their expressive elements or combine these elements in intriguing ways. The subsequent chapters will focus on titles that offer such complex interplay and negotiation of various elements and actors. What remains to be seen in the light of the critical, dystopic tendency found in the initial exploration, is whether videogame spaces extend beyond the sphere of critique and reflection of the present situation. Is their logic, as Virilio and, at times, Galloway suggest, actually so strongly interwoven with our present that they remain bound to it? Or, might they also succeed in confronting us with conflicts that point beyond the known and direct our imagination toward possible systemic alternatives? The next three chapters will make the case that this is indeed possible where games succeed in deploying a wide range of expressive means on specific themes rigorously.

Notes

1. On a technical level, Nintendo has withdrawn from the race for ever more powerful consoles—more apt to representing realistic environments and complex physical processes required by most of the high-budget productions mentioned above—instead aiming for casual gaming and new consumers with the DS and the Wii. The latter in particular led to a series of games emphasizing bodily movement, which are arguably much more "real" than any realistic

visual representation and, not by chance, contributed to a blurring of the categories of videogames and sports and fitness.

2. Unozawa [鵜之澤], *2012CESA Games White Paper*, 228–33. The data used for the *CESA Games White Paper* is based on the responses of four companies to a research survey conducted for all titles released since 1983, as well as earlier data. Titles are given in Japanese and English in the original.

3. A good example of this mix of fantasy and sf is the game *Makai Tōshi SaGa* [*The Final Fantasy Legend*] of which the English Wikipedia entry remarks that “the game features equipment from different genres, ranging from magic and swords of **fantasy** to **plasma rifles** and chainsaws of **science fiction**.”

4. vgchartz, “Video Game Charts, Games Sales, Top Sellers, Game Data – VGCharts.” According to their own description, vgchartz employs a broad range of methods to estimate sales numbers, such as polling with gamers and retailers, statistical trend fitting, price analysis and industry consultations (see “Methodology”).

5. Mecha is the English version of the Japanese term *mecha*, itself a short form adapted from the English terms “mechanism” and “mechanical.” According to the English and Japanese entries in Wikipedia, the term is widely used to refer to machines in Japan. In the context of Japanese popular culture, it commonly refers to the science fictional device of robots controlled by human pilots. Early prominent examples of mecha are the manga *Mazinger Z* published by Nagai Gō (永井 豪) between 1972 and 1973, or the tv anime series *Mobile Suit Gundam* from 1979, which developed into one of the most influential cross-media franchises in Japan. I use the term mecha throughout this analysis to refer to such robots.

6. Hutcheon, *A Theory of Adaptation*, 8.

7. *Ibid.*, 164, 174.

8. At the time of my first exploration (July 2013), the *Gundam* franchise included 44 titles for the Playstation alone, not to mention other platforms (Wikipedia 2013i). Due to time constraints, the analysis can only focus on some of these titles. I tried to cover the most important sub-series and sequels.

9. *Mobile Suit Gundam: Giren No Yabō – Jion Dokuritsu Sensōki* [Gihren’s Ambition – Chronicals of the Zeon Liberation War].

10. *Mobile Suit Gundam: Ichinen Sensō* [One Year War].

11. *Mobile Suit Gundam: Rengō vs. Jion DX* [Federation vs. Zeon DX]; *Mobile Suit Z Gundam: AEUG vs. Titānzu* [AEUG vs. Titans]; *Mobile Suit Gundam: Gundam vs. Z Gundam*; *Mobile Suit Gundam Seed: Rengō vs. Z.A.F.T.* [Federation vs. Z.A.F.T.].

12. *SD Gundam G Generation Neo*; *SD Gundam G Generation Seed*; *SD Gundam G Generation Spirits*; *SD Gundam G Generation Wars*.

13. *Another Century’s Episode*; *Another Century’s Episode R*.

14. Azuma [東], *Dōbutsuka suru posutomodan*, 71–83; for the English translation, see Azuma, *Otaku: Japan’s Database Animals*; for a discussion of Azuma’s ideas, see Schäfer and Roth, “Otaku, Subjectivity and Databases: Hiroki Azuma’s Otaku: Japan’s Database Animals.”

15. The third-person fighting games offer a choice of characters among the historical figures known from the “Three Kingdoms” period in China (220–280 AD), which the player has to reunite.

16. *Gundam Musō 2* [Dynasty Warriors: Gundam 2]; *Gundam Musō Special*.

17. A similar tendency is present in the *SD Gundam GGeneration*, in which notable changes are mostly of aesthetic nature or concern the referenced work(s). My analysis of

92 Thought-Provoking Play

Naruto games suggests that this is not unique to the *Gundam* games, but a might be considered a general current in (Japanese) manga, anime and games (production) culture (Roth, "Playing 'Naruto': Between Meta-Narrative Characters, Unit Operations and Objects."). It would be interesting to analyze the impact such practice has on the economic model the game production and the franchise as a whole is based on.

18. Hutcheon, *A Theory of Adaptation*, 30.

19. This should be taken as a claim about professional adaptations that have a commercial background. Amateur- and fan-works certainly follow other intentions and may, to some extent, be regarded as adaptations for the sake of adaptations. Unfortunately, Hutcheon does not discuss this area in any depth.

20. *SD* stands for "super deformed." According to the Wikipedia, this style of "shrunked," tiny representations of *Gundam* mobile suits is in use in parts of the franchise since the 1980s. It has developed from a playful parody to a highly successful sub-franchise which spawned several spin-off series and merchandise. The Wikipedia mentions that the "super deformed" style is presumed to be a strategy of circumventing licensing fees to the *Gundam* license holder Sunrise. Thus, the series also indicates the complexity of the economic dimension of franchises and adaptations in general, which cannot be discussed in detail here.

21. Hutcheon, *A Theory of Adaptation*, 117.

22. Traditionally set up as a future armed conflict between different fractions of humanity and post-humanity, *Gundam* features rich political themes in a science fictional setting, explored through an overarching narrative as well as by depicting the individual physical and psychological struggles of the characters caught up in the war.

23. Hutcheon, *A Theory of Adaptation*, 14.

24. *Ibid.*, 121.

25. *Mobile Suit Gundam: Climax U.C.; Another Century's Episode; Another Century's Episode R*.

26. *Mobile Suit Gundam Seed*.

27. Colzato et al., "Videogame Facilitates Cognitive Flexibility."

28. Benjamin, "The Work of Art in the Age of Its Technological Reproducibility: Second Version," 119–21. Benjamin claims that the shock effect of the cinema, originating from "successive changes of scene and focus" and thus from speed, makes film the "true training ground" for the new apperception necessary in times of increasing "aestheticizing of political life" by fascism. For a discussion of how Benjamin's conceptualization of the "modes of perception" and "reception in distraction" relate to contemporary media, see Schäfer and Roth, "Otaku, Subjectivity and Databases: Hiroki Azuma's Otaku: Japan's Database Animals."

29. Virilio, *Speed and Politics*, 70–71.

30. *Ibid.*, 152–58.

31. For a more comprehensive application of Virilio's dromology to videogames, see Wade, "A Dromology of the Videogame."

32. Yoshida [吉田], "Bideo Gēmu no Kigōronteki Bunseki."

33. *Ibid.*, 63–66.

34. *Ibid.*, 69–70.

35. Grassmuck, "Man, Nation & Machine."

36. Roth, "Otaku in Szene Gesetzt."

37. Grassmuck, "Man, Nation & Machine."

38. Wark, “A Hacker Manifesto [Version 4.0].” As this text is not paginated, I refer to the statement no. given by the author.

39. In his dissertation on the origins of videogames and their philosophical significance, Claus Pias (“Computer Spiel Welten,” 163–97.) showed that strategy games were always strongly intertwined with military strategy, planning and war simulations.

40. Tenmou.net, “World Map,” Accessed December 1, 2017. <http://www.tenmou.net/encyclopedia/world/index.html>.

41. For this research, I played *Front Mission 2*; *Front Mission 3*; *Front Mission 5-Scars of the War*. If not specified further, information about the game world origins in my own exploration of the game or the fan site “Tenmou.Net (Front Mission Fan Site).”

42. Pineda, Thompson and Tam, “Front Mission,” 1.

43. The term is compiled of the German words *Wandern* (to hike, to wander, to move around) and *Panzer* (tank).

44. Pineda, Thompson and Tam, “Front Mission,” 1.

45. Depending on a choice very early into the game, the player pursues one of two storylines in the game. I have only played the “Emma-Storyline” and the following remarks are based on this experience.

46. English subtitles for *Front Mission 3* taken from Unos Hambalos’ (2007) *Front Mission 3 – Game Script (EMMA)*.

47. This is why Dave Connoy (2003) gives the following advice in his walkthrough: “Don’t be afraid of death. The HP of all the parts of all of your wanzers is fully restored at the end of each battle, and dead pilots are even magically resurrected! Fight every battle to the bitter end, because you never know what lucky break might come your way. Of course, an arduous battle of attrition will reflect badly on your ranking, so you may want to redo the stage anyway.” I will come back to the rather common foregrounding of score over death suggested here in a later chapter.

48. For this analysis, I played *Ace Combat 5: The Unsung War*; *Ace Combat Zero: The Belkan War*. If not specified further, information about the game world origin in the player’s own exploration of the game or the wikia online encyclopedia section “Acepedia (Ace Combat Wiki).”

49. The map was reportedly created by Kōno Kazutoki (河野一聡, Namco Bandai) and uploaded to wikia in July 2014 by SlyCooperFan1 (Kōno [河野], “Strangereal Map”).

50. See Radford, “Ace Combat 05: The Unsung War FAQ/Walkthrough,” SY01. This all suggests strong similarities with our own history, albeit with certain important alterations. According to the entry on the “Belkan War” in the *Acepedia* wikia, “[t]he Belkan War is based heavily on World War II, with elements of the Gulf War.” This interpretation is supported by the German-sounding names of Belkan companies, etc. Yet, the appearance of nuclear weapons also suggests some influence of the Japanese history and the Asia-Pacific War. Unfortunately, a preliminary search could not determine the intentions behind the alterations made to this historical basis, particularly with regards to the nuclear bombs which are dropped by Belka itself.

51. “Ace Combat’s continued devotion to good storytelling is ultimately one of this game’s best strengths, since the presence of so much plot helps to give the missions a sense of genuine significance and cinematic drama. The high-quality voice acting, constant radio chatter, and stirring, dynamic music combine with the action very well, giving Ace Combat 5 an epic feel.” (Kasavin, “Ace Combat 5: The Unsung War Review.”)

94 Thought-Provoking Play

52. According to Radford, this was not always the case in earlier *Ace Combat* games (“*Ace Combat 05: The Unsung War* FAQ/Walkthrough,” CH01.).

53. Kasavin, “*Ace Combat 5: The Unsung War* Review.”

54. For this analysis, I played *Armored Core 2*; *Armored Core Nexus*; *Armored Core 4*; *Armored Core for Answer*.

55. This event is referred to as the “Great Destruction (*daihakai*)” in the PSX and PS2 titles (from *AC* released in 1997 to *AC: Last Raven* released in 2005), and as the “National Dismantlement War” in the PS3 titles (since the 2006 release of *AC4*). The Japanese Wikipedia entry for *daihakai* refers to three different versions of this event in the series. In *AC4* and *AC for Answer*, the Great Destruction is replaced by a “National Dismantlement War” waged by the leading companies in a situation where national governments are unable to deal with the problems of overpopulation and the rise of terrorism and anarchy. Whereas this later change can easily be explained by a different world setting, earlier games confused their players due to different versions of the Great Destruction. Released after *AC for Answer*, *AC V* does not continue the storyline of the earlier titles, but can be considered as a standalone project in terms of its narrative and world, and will not be focused on in the following section.

56. Wikipedia, “*Daihakai*,” my translation.

57. In other titles, like *AC for Answer*, the player can choose to redo a mission based on the results, accept his or her performance, or cancel the whole procedure, returning to the pre-mission state. On the one hand, this effectively weakens the absoluteness of one’s performance. On the other hand, it confronts the player with a difficult choice, since the earlier results are erased when opting for retrieval.

58. From a contemporary perspective grounded in an ever more realistic and intuitive experience of technological control, technical (and thereby often sensual) restrictions and limitations in titles like *AC2* or early PSX *Gundam* games such as *Mobile Suit Gundam*; and *Mobile Suit Gundam: Gyakushū No Shā* [Chars Counterattack] can offer a deeply disruptive, alienating experience of a “lack of control” over the machine.

59. *AC* offers the player the choice not to accept a mission or to abort it. *AC for Answer* is well known for requiring of the player nothing more than a successful completion of the final two missions—offering enough reward for missions aborted midway to upgrade the Armored Core sufficiently. Here, the game departs or abstracts from its economic logic, because it is conceivable that companies aiming towards profit and efficiency would not hire an unreliable mercenary repeatedly.

60. Translation taken from Ramza411sb, *Interactive Let’s Play Armored Core: For Answer – Part 1 – Introduction*.

61. This is most aptly expressed in the following section of a walkthrough by Acid Losvaize (“*Armored Core For Answer – Walkthrough*” ACFA03, errors in the original): “When you start the game, will be prompted about some options, and finally about your sponsoring company. Whatever you choose, it won’t affect storyline, just your initial gear and parts that will be in the shop at first. When I began the game, of course chosen independent type, but I think it’s better to take Interior Union since Tellus legs and core are premium quality, and you will be able to buy two Altair by selling one of the crappy samsara or medusa weapons. I strongly recommend you to do this. Drawback of choosing Interior instead independent... you are losing blade dragonslayer (I mean, you don’t have it and can not buy blades until later in the game), that is quite useful to kill AF’s. Besides, AALIYAH gear is more expensive than TELLUS, so economically you lose choosing this last one. Anyways, for me is best to have two Altair from the first mission.”

62. Hutcheon, *A Theory of Adaptation*, 4.

63. Suvin, "Narrative Logic, Ideological Domination, and the Range of SF: A Hypothesis with a Historical Test," 6.

Temporal Alternatives

In the last chapter, I showed how accelerated gameplay provokes an intense and distracting experience in the player. The speed of play in the examples discussed permits little to no time for reasoning and political action geared towards new undertakings, which shows that time plays a crucial role in political action. In this sense, games participate in the acceleration of contemporary life and—as Benjamin claimed for cinema in his day¹—may be said to train us to bear present everyday life. In this chapter, I ask whether videogames also challenge this notion of the increasing acceleration of life.

The idea of acceleration is built on the common understanding of time as linear, which serves as the basis for everyday life as much as for its analysis. This linear concept of time is ubiquitous. Frederic Jameson, for example, laments a “colonization of the future,” by means of which the time to come appears predictable, thus ruling out alternative possibilities.² A similar repressive function of prediction and calculation has been observed by thinkers like Hannah Arendt, who specifically criticizes the practice of “scientifically minded brain trusters” and their tendency to render open hypotheses and predictions into facts.³

These observations speak of the pervasiveness of a linear understanding of time and its influence on our present situation. Often in combination with notions of progress,⁴ this linear time serves as a widely unquestioned basis for society and economy. Barbara Adam, for example, argues that “[t]he members of such [contemporary industrialised; mer] societies use the concept of time not merely to synthesise aspects of mind, body, nature, and social life, but they also employ it on a world-wide basis as a standardised principle for measurement, co-ordination, regulation, and control.”⁵

Robert Hassan claims that the present can be defined as a second empire of speed, which, following the first empire dominated by the clock, is now dominated by global capitalist economy and connected by an information

network, demanding of its subjects flexibility, unquestioning obedience and blind action.⁶ In his analysis, Hassan draws on Paul Virilio's pessimistic observations on our increased acceleration. Virilio fears that with this acceleration of the contemporary war of time, "properly human political action will disappear."⁷

However, contrary to common sense, it is far from self-evident that all time is linear, although this understanding appears adequate in the biological realm. Barbara Adam, for example, claims that all time is social time, emphasizing its status as a social construct.⁸ Recognizing this constructed character of time, Virilio devotes considerable attention to identifying accidents of acceleration that interrupt the contemporary speed of linear time. In *The Aesthetics of Disappearance*, he discusses the disruptive effect brief "picnoleptic" absences of the mind in the everyday, "[t]he return being just as sudden as the departure, the arrested word and action are picked up again where they have been interrupted," can have on our linear perception of time.⁹

Inspired by Virilio's search for alternative conceptualizations of time, I turn to videogames. Aarseth famously argues that videogames are an example of the "ergodic cybertext," which he defines as a "machine for the production of variety of expression," requiring "non-trivial effort" of its users.¹⁰ The process of making sense of the game world is not only geared towards interpretation, but often as much towards configuration—a practice of acting in favor of a specific goal or situation rather than in a sensible manner in harmony with the narrative.¹¹

Aarseth distinguishes between a narratologist approach to game tasks as gaps in the narrative filled in by the users on the one hand, and a ludologist approach to "openings" or "keyholes" in games, which must be filled in order to make the game continue, on the other.¹² These observations highlight the importance of both categories and show that videogames may present us with a different set of means with which to engage with time. In action, the tension between narrative (interpretative) and ludic (configurative) engagement seems to emerge as a promising site of conflict. Moreover, videogames are characterized by a peculiar, contingent, multi-layered temporal structure negotiated by the designers, the player and the computer. Due to their "same-but-different" quality and their potential for complex, "input-sensitive" narratives, which are closely linked with our perception of time, videogame spaces offer various potential sites of temporal conflict.

I would like to consider this temporal structure in more detail before moving on. After all, contingency and repeatability are not limited to videogames or the digital realm, but can be regarded as general features of media. As Fabian Schäfer points out, media display a long history of annihilating the traditional space-time continuum by replacing linear narration with less determined structures.¹³ Yet, as Aarseth observes, the peculiar temporal expressivity of the videogame space partly stems from the fact that “the experienced sequence of signs does not emerge in a fixed, predetermined order decided by the instigator of the work, but is instead one actualization among many potential routes within what we may call the event space of semio-logical possibility.” The contingent results of player input indicate the importance of the player’s temporal experience, as

ergodic time [...] depends on the user and his actions to realize itself. There is no action without a participating observer. At the same time it determines the user’s sense of experienced time within the event space. In the clock-work world of the game, events occur when the controlling program enacts them, and when the user acts on the same level. The event time is the basic level of ergodic time.

Further observing that successful player input provokes in-game progression as another layer of temporality, Aarseth suggests that videogames feature three layers of time, namely the time of player actions, the time of game events clocked by the computer, and the time of game progression triggered by successful player action.¹⁴ Matsunaga Shinji discusses time in videogames from a philosophical perspective in a paper given at the annual conference of the Japan Digital Games Association, expanding on it in his PhD thesis, the publication of which is much-awaited. He argues for a three-layered model of time, consisting of real time, game system time and fictional time, which takes fictive time in videogames into account.¹⁵

With a similar intention to capture the complexity of videogame time, José Zagal and Michael Mateas propose the concept of temporal frames, i.e. sets of events each featuring their own temporality.¹⁶ Granting that other frames exist or may be added in individual cases, the authors identify four common temporal frames, namely real-world time (events happening around the player), game world time (events taking place within the represented game world), coordination time (events that coordinate the actions of multiple actors) and fictive time (application of socio-cultural labels to a subset of events). The layer of coordination time refers to the temporal rhythm of action and the oscillation

between multiple actors as coordinated by the computer. The authors' examples include synchronizing multiple players in a network, but also the temporal characteristics and rhythms of turn-based games. Furthermore, this frame covers the so-called lag caused by weak engines. It remains an important factor in gaming experience, in particular where the analysis focuses on the influence technology plays on the game experience. For the purpose of this chapter, however, I will largely ignore, or rather subsume it under the category of game event time that it partly structures, and from which it remains hard to distinguish in smoothly running single-player games.

In Figure 9, I have sketched how Aarseth's emphasis on ergodic contingency and Zagal and Mateas' model of temporal frames can be combined to model the temporal complexity of the videogame space.

In this model, any gameplay session, symbolized by the large arrows, involves at least three different temporal frames. Multiple sessions (either by different players, or the same player) may contribute to a specific successively unfolding videogame world, in which the player follows a story to the end, or may generate different worlds altogether, in which different stories or events take place.

Interestingly, Zagal and Mateas mention a potential friction between the multiple frames of temporality they invoke to describe videogame time: "The relationships between different, often coexisting, temporal frames within one game can result in a sense of temporality that is inconsistent, contradictory, or dissonant with our experience of real-world time. We call these relationships temporal anomalies."¹⁷ While not elaborated on by the authors, this notion of anomaly (and their choice for this term) is a helpful starting point for the analysis, because it indicates potential temporal conflicts that are disruptive to our "normal" or common temporal understanding. Thus, the relation between the different temporal frames itself may be scrutinized for its contribution to upholding or deconstructing the idea of linear time.

How is this different from the way in which time is "normally" expressed and experienced in media? Analyzing a series of time travel narratives, Marie-Laure Ryan shows how the flexibility of the imagination can be deployed to create temporal paradoxes, which contradict our "intuitive idea" that time flows in a fixed direction, that one cannot go back in time, that causes precede their effects and that the past cannot be changed.

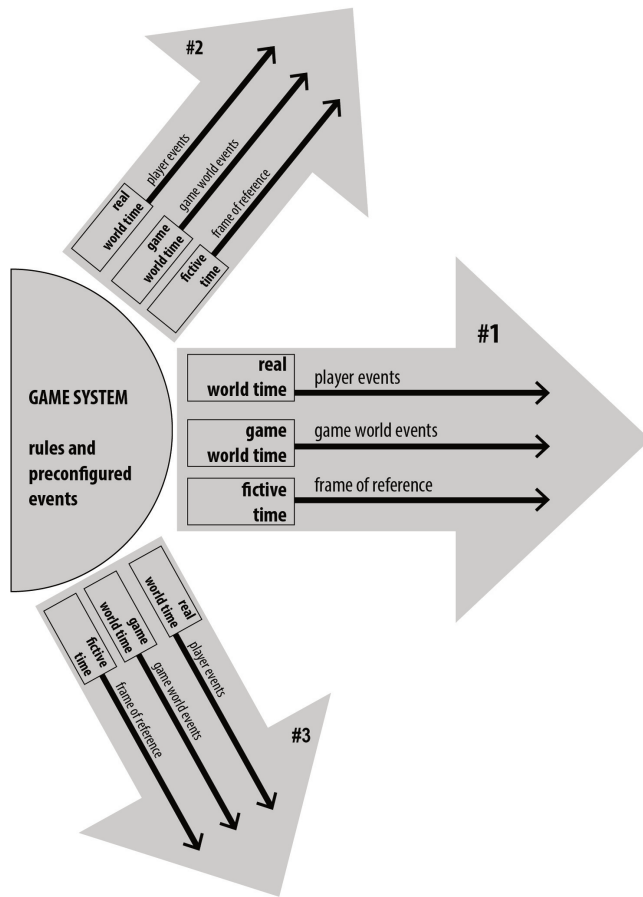


Figure 9. The temporal structure of videogames.

Whether temporal or not, paradoxes are the unimaginable at the heart of an imaginable world. We deal with them logically by putting them in quarantine, so that they will not infect the entire fictional world; we deal with them philosophically, by regarding them as thought experiments aimed at destabilizing common-sense conceptions of time; and we deal with them imaginatively, by putting ourselves in the skin of the characters whose life is being invaded by the irrational.¹⁸

Ryan identifies non-linear temporality as “unimaginable” and “irrational.” This view is also reflected in more recent works on Narratology. Thon, for example,

argues that “as it is part of understanding a narrative representation to locate the represented spaces of a given situation within the spatial structure of the storyworld as a whole, then, it is an equally important part of that process to locate the represented flow of time (or sequences of events) of a given situation within the temporal structure of the storyworld as a whole.”¹⁹

Paul Ricoeur, who devotes much effort to discussing the temporal structure of literary events, goes even further, arguing that our understanding of time is reciprocally connected to the narrative. He claims that “time becomes human time to the extent that it is organized after the manner of a narrative; narrative, in turn, is meaningful to the extent that it portrays the features of temporal experience.”²⁰ This does not mean that narratives are necessarily linear. On the contrary, for Ricoeur, “emplotment” is a dialectic process between succession and configuration. More generally, he tries to identify the non-linear potentials of what he regards as a mimetic three-step involved in the poetic act, by which “a prefigured time [...] becomes a refigured time through the mediation of a configured time.”²¹ In other words, Ricoeur aims to show how the movement from emplotment—the configurative practice that restructures the successive events authored by human action—to the act of reading and making sense of a configuration by linearizing it again, can entail glimpses of non-linear time.²²

Against this background, the status and character of videogame narratives (fictive time), and their relation to effects of player input in the game world (game world time), may be one potential plane on which linearity is maintained or disrupted in a negotiation between designers (authors of the narrative) and player (constructor of the narrative). What effect does the experience of this negotiation have on our perception of time? Recognizing their complex, multi-layered temporal structure, we need to ask if videogames can deploy their temporality in disruptive ways, thus pointing to a novel understanding of time. In other words, is it possible to perceive time in videogames as something other than it is, or do they provide hints for imagining alternative notions of time? While many games clearly tend toward acceleration and reaction—as various skeptics have commented on—I will show that some titles deploy this potential conflict to disrupt our linear conceptualization of time in a playful way. As will become apparent, this is where the narrative or fictional and aesthetic “skin” of a game becomes a crucial factor: it is no coincidence that most of the games discussed below deal with time travel and its capacity of confronting us with temporal paradoxes. The concept of time is, in other words, best approached in temporal terms.

The End of Time

Time and time travel are central themes in the rpg *Chrono Trigger* (hereafter *CT*).²³ In the game, the player has to lead a group of adventurers to save the earth from its future destruction, traveling back and forth between times as distant as 6500,000 B.C. and 2,300 A.D. Following the example of other Japanese rpgs, the game features several areas—the more common spatial separation is replaced by a temporal one—which must be visited in a more or less predetermined order to proceed. All areas offer various quests at various stages of the overarching narrative and have to be revisited several times. The game world events are strongly pre-structured in the beginning, leading the player through several introductory stages that establish the story and familiarize him or her with the gameplay. Later chapters are more open and, lacking guidance, require more intensive detective work.

While traveling, the player has to combine the strength of multiple characters to solve quests and fight mighty enemies, employing both brute force and magic. In this sense, the game can be said to be an example of the tendency towards sf-fantasy hybrids. At the same time, its temporal structure and time travel theme are clearly framed by a notion of scientific progress—which is reflected on in a side-quest—and thus grounded in “science fictional plausibility.” The first of a series of time gates is opened accidentally when a princess’ pendant reacts to a scientific demonstration of a teleporter at the Millennial Fair in the game’s present. Other gates follow and are revealed to respond to magical forces; but, at the same time, the game features a scientifically constructed time machine called “Epoch,” which frees the player from the restrictions the locally bound time gates imposed. This scientific achievement affords an openness and contingency that contributes to the genuine quality of the widely acclaimed feature of multiple endings in *CT* (see Figure 10).²⁴

These endings, or rather the entry points to them, emphasize the successive character of the game event time, which is linearized in online walkthroughs by the frequent use of “after” and “before.” Departure from the path of the conventional ending “Beyond Time” requires specific actions during certain spans of game event time. The alternative endings also depend on considerable player skills. For example, ending 3 is frequently referred to as the most difficult one to achieve, because the player has to defeat the last boss moments after entering the game, with only two characters and without the additional supplies one can build up later during the game. Due to this structure, the command over game world time through player choice—insofar as events can be delayed

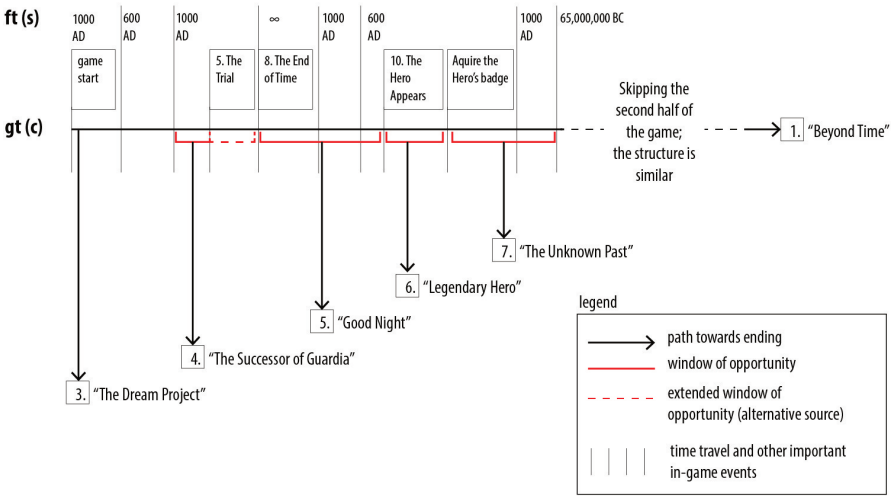


Figure 10. Multiple endings in *CT*.

or hastened—seems to be reintegrated into a mechanism of acceleration, which rewards higher skills with shorter completion times.

Yet, several objections complicate this conclusion. First, the “quick and skillful” solution to the game removes large portions of the experience, which seems counterproductive considering that the game is supposed to be entertaining. It should also be mentioned that some of the endings, like ending 3, are only accessible after the first successful conclusion. Thus, rather than pointing to short-cuts in a linear narrative, the structure of multiple endings in *CT* encourages repetitive gameplay and extensive skill development. Rather than accelerating or contracting, this structure prolongs the player’s experience of the game, in which each ending can be regarded as a puzzle piece needed for “completely completing” the game.

This strategy is described by Ōtsuka as “narrative consumption.” In a series of articles written between 1989 and 1991, Otsuka identifies a tendency in Japan’s cultural production of the time towards offering the consumer pieces (small stories) that grant access to a larger story or a narrative “world” (*sekai*). In his view, “narrative consumption” motivates extreme activities on the part of the hungry consumers who aspire to complete the puzzle, but at the same time may not be able to control the tendency that consumers who understand the “world” start producing their own parts of it.²⁵

As far as the confined space of the videogame software goes, the endings of *CT* do not offer themselves to additions on the part of the player. Nonetheless, Ōtsuka's claim that "narrative consumption" motivates extreme activities on the part of hungry consumers aspiring to complete the puzzle is applicable in the broader media ecology, given the countless amateur derivate works, some of which have prompted an official request for removal by Square Enix.²⁶ Applying the "same-but-different" quality of games on a narrative level, the promise of alternative endings prompts the player to replay the game and access "more" of its world. At the same time, the multiple endings not only expand the experience beyond the initial completion, but also render narrative time spatial, with player choice as the factor relating the game worlds, challenging the player to explore the *CT* universe by straying from the obvious paths.

The number of endings available limits this potential. Yet, this limitation should not be regarded as restriction per se. On the contrary, if the number of endings was unlimited, their pursuit would become random, arbitrary and meaningless.²⁷ The spatialization of narrative multiplicity is only effective as long as it stays in touch with defined narrative structures and thus generates a tension between limitation and openness. This suggests that the player not only influences the outcome of the game (its narrative path and ending), but is also able to reconfigure the events individually. At the same time, online walkthroughs show how multiplicity and temporal complexity in *CT* prompt cooperation between various individuals, who all contribute to the goal of understanding the game inside-out, completely completing it even in respect to details not directly relevant for the gameplay.²⁸

In its openness, contingency and multiplicity of endings, *CT* appears a model case for the ergodic cybertext and the tension between lasting pleasure and skill-based abruptness. However, it remains coherent even in its contingency. The different temporalities are historically continuous, and the ending variations leave the linear cause-effects relation intact. Whereas some of these appear rather unmotivated, most can be explained logically from the earlier gameplay, such as the appearance (or absence) of several characters the player can choose to rescue, spare or kill during the adventure. As ZeaLitY and others point out, in *Chrono Trigger*

[t]ime travel is not handled haphazardly, however; rather, it is apparent that the creators of the games worked avidly to build a basic technical framework. This allows consistency in the story and prevents confusing paradoxes. This standard was maintained in

Chrono Cross, which explained more of the world by introducing the concept of dimensions, countless realities that progress on their own and house their respective timelines. Stories revolving around temporal transforms often suffer from inconsistencies and causal quagmires, but upon close observation, the Chrono series displays a standard of excellence in maintaining plot harmony.²⁹

While offering exciting and lasting gameplay experience and a great story, *CT* does not challenge the common linear sense of time, but may even be said to reinforce it. A similar tendency towards narrative coherence and temporal linearity can be observed in other games, like *Final Fantasy X*.³⁰ Thus, the idea of a linear succession of events that form a causal chain prevails in videogame narratives like those mentioned above. In the light of a recent rise in attention for history and historical memory, including its materialization in memorials, Itagaki Ryūta, Jeong Ji Young and Iwasaki Minoru speak of a “mnemonic turn” in the present.³¹ Against this background, the insistence on coherence and linearity in these and other games should at least prompt us to pay attention to how this simplistic structure influences our common perception of time and history.

Narrative Shadows

In contrast to the consistent contingency in *CT*, *Shadow of Memories* (hereafter *SoM*) radically disrupts such overall compatibility with linear time.³² A third-person adventure, *SoM* centers on the protagonist Eike Kush, who is assassinated in the prologue. Eike wakes up in a strangely disordered space, where the mysterious creature Homunculus offers him assistance in his struggle for survival and his search for the culprit and the reason for his assassination. Accepting, he is presented with a time travel device called a “digipad.” In a total of ten chapters, each of which starts with a new successful attempt on Eike’s life, the player has to navigate the protagonist back and forth between four time zones, 1580, 1902, 1980 and 2001, and, using the revived Eike, alter the already known future by changing the past. Through Eike, the player can explore his environment and engage in conversations with the inhabitants. All actions take a specific amount of time, and if the player fails to rearrange the past successfully after a certain span, he fails to prevent Eike’s death and the game ends.

Like *CT*, the game features several endings depending on certain player choices. A closer look at the relation between the multiple endings and the overarching narrative in *SoM* shows, however, that this game experiments

far more radically with the player's sense of time than *CT* does. The player starts *SoM* without much information about the protagonist or his world. Throughout the chapters, he or she finds an increasing number of hints about the connections between the inhabitants of the different times, their relation to Eike and the reasons why he is targeted in the first place. However, the epilogue reveals that the culprit is, in fact, another character who has obtained the ability to travel through time, and who targets Eike for something he did during his travels to the past—a journey to the past that he embarked on only to avert the threat to his life. To the extent to which this “conclusion” involves a temporal paradox, it suggests the logical impossibility of its narrative, disappointing any expectation of clarity on the part of the player. The multiple endings featured in *SoM* shown in Figure 11 amplify this effect.³³

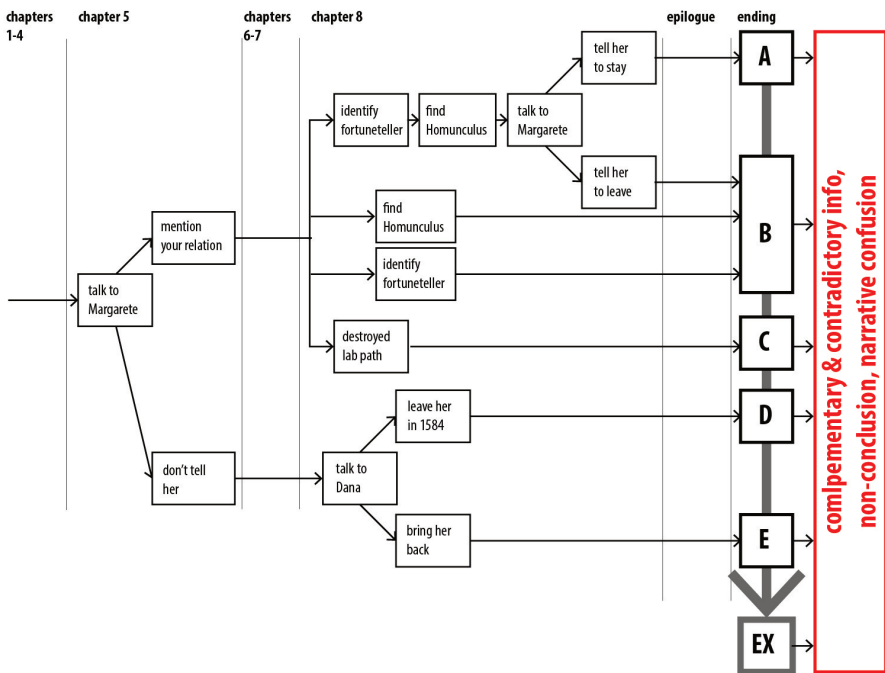


Figure 11. Multiple endings in *SoM*.

Unlike the coherent picture in *CT*, they confront the player with contradictory conclusions. These conclusions range from eternal life for Eike or the logical impossibility of his existence due to the death of the Homunculus in the past, to Eike's ironical death by accident in the present after the threat is already averted. Thus, the epilogue appears as a stage for the playful, paradoxical and

often deliberately inconsistent treatment of the overarching narrative. While somewhat parodist, these endings do not lose touch with the vague overarching plot, thus tempting the player to engage with their content. In other words, the overarching narrative and the paradoxical, subversive conclusions are related sufficiently enough—and linked by the fictive game history strongly enough—to challenge the player into pursuing them. Yet, ultimately revealing their incoherence, they create what can be called an experience of ontological anxiety. In Ricoeur's terms, one might say that the game offers a glimpse of a non-human time, to the extent that the poetic act confronts the player with a disruptive conflict, because he or she is unable to either emplot or narrate the paradoxical events, or easily dismiss the connections between the events and regard the overarching narrative as postmodern, i.e. fragmented and decontextualized.

Without an overarching narrative in place, the effect of these contradictions would not be experienced as disruptive. However, by means of temporal paradoxes and narrative inconsistencies, the game confronts the player with the impossibility of narrating its events in any coherent way. As with the example of *CT*, the effectiveness of this strategy is made possible and simultaneously restricted by the limited number of endings, directing the player to collect versions instead of aiming for a narrative totality. As Figure 11 indicates, such collecting is promoted by the designers, who reward the successful collector with an additional ending (EX) only accessible once all other endings have been experienced. Once again, then, we are directed toward Ōtsuka's model of "narrative consumption". However, here, the desire for collecting or mastering the game completely is deliberately played out against the impossibility to narrate the game. As long as the player does not abandon or ignore the narrative layer entirely, this conflict between ending collection and narrative closure can function as a conflict that prompts us to question our sense of linear temporality.

Death as Solution

The space of *SoM* offers an alternative to such narrative engagement. Each chapter features several events and cut-scenes unrelated to either the pursuit of the initially proclaimed game goal of survival, or a deeper understanding of the game world history. In Chapter 5, for example, Eike promises the little girl Sybilla a kitten in 1902 (see **Example 4.2**). The player can choose to travel back to 2001 to fetch the kitten or not, or might decide to skip the meeting with Sybilla entirely in favor of a faster pursuit of the chapter goal. Neither choice has any impact on the outcome of the chapter (Eike's survival) or provides more

information about the overarching narrative. However, completing the kitten side-quest contributes to raising the player's achievement in the chapter, as a screen after the ending of the game reveals (see Figure 12).



	Best Clear Time	Achievement
Prologue	0:17:56	20%
Chapter 1	0:04:51	37%
Chapter 2	0:29:38	55%
Chapter 3	0:16:53	54%
Chapter 4	0:20:19	36%
Chapter 5	0:37:29	50%
Chapter 6	0:10:56	22%

各章の最も短いクリア時間と、イベントの達成率です。
× ボタンで戻る。

Figure 12: Achievements during the author's first attempt at *SoM*.

As with the multiple endings, this feature attracts repetitive play, this time targeting the game system. Contrary to the initial impression of linearity and a scarcity of choice, each chapter offers many more scenes to discover, many more kittens to give, so to speak, each contributing to player achievement.³⁴ While again pointing to the structure of limited prolongation and complete completion mentioned earlier, the player is confronted with a far vaguer system, which demands more extensive, calculated and planned exploration and collection. The *Percentage FAQ* by JackSpade is not only based on repetitive, interrogative play, but also shows that the complexity of the system prompts multiple theories about its nature, as posited by JackSpade and Roberto Corsaro.³⁵

Such approximation of the inaccessible, non-disclosed elements of the videogame space through what could be called a playful process of falsification is a common methodology for playing—and in my case, analyzing—videogames. In *SoM*, this exploration of the system's boundaries can be profoundly disruptive, when it confronts the player with conflicts beyond common sense. Arguably the strongest expression of such conflicts can be found in what JackSpade refers to as “multiple death scenes” (hereafter “mds”). Figure 13 shows

a map of the mds in the second chapter of the game, which I have documented in **Example 4.1**.

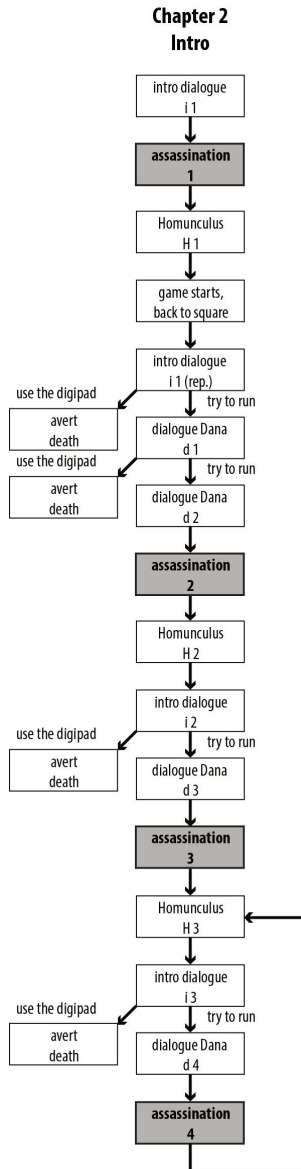


Figure 13. Multiple death scenes in SoM, Chapter 2.

Mds are scenes that add to the achievement and have to be collected by triggering the protagonist's death deliberately. Chapter 2 of the game begins with a cut scene of a dialog between Eike and the non-player character (e.g. characters controlled by the computer, hereafter npc) Dana on the town square, during which the protagonist is assassinated. After the repeated introductory dialog (i1) following the first death, the player can either choose to depart to the past immediately—the move suggested by the blinking digipad and the anticipated assassination—or try to walk away from Dana. The second, initially counter-intuitive move results in a different cut scene conversation with Dana (d1 & d2), followed by another death. After the second assassination, the Homunculus tries to teach Eike how to use the digipad (H2).

Following this, the player witnesses a different version of the introduction (i2). Walking away from Dana once more unlocks another dialog (d3) and a blunter hint from the Homunculus (H3) after the third death. This strategy works one more time (i3 and d4), until the events start repeating themselves after the fourth assassination.

In this way, mds explicitly create a conflict between systematic completion and the original narrative structure and game goal of survival, prompting an active departure from it. Importantly, their disruptive character is not simply a way of enacting another reality, in which death is not the end—the latter is quite common in videogames—rather, its disruptive power is derived from the fact that it is in open contradiction with the reasonable narrative game goal of survival and thus the player's earlier experience of the game. This tension negotiates our understanding of time, actively confronting the dominance of linear narratives and biological time.

In a strange way, the system-oriented play reverses Paul Virilio's dictum that "[e]verything in this new warfare [of the contemporary war of time; mer] becomes a question of time won by man over the fatal projectiles towards which his path throws him. Speed is Time saved in the most absolute sense of the word, since it becomes human Time directly torn from Death."³⁶ In the assault on the game system and its interest in percentage, the player uses the "immortality" of the protagonist in the videogame space as a probe, subjecting time and even death to the aim of total numerical domination. In the absence of any emphasis on haptic player skills, progression is achieved by repetition and death. To complicate matters further, the mds also contribute to the spatialization and depth of the narrative, as they explore potential directions the conversation might develop in, playfully building on the player's experience of earlier

versions. On a narrative plane, the game comically trades the end of the story (death) for more of its pieces.

This overall structure is, again, not unique to *SoM*. However, because the game deals with time explicitly, these moments are temporally disruptive in an immediate sense, whereas they are simply part of the rules in other cases. The designers indicate that they deliberately aim to trigger reflections and thinking about time, both in an abstract philosophical sense, with themes like destiny, memory, time travel, the Homunculus or eternal life, and in a practical sense related to the player's everyday experience: when visiting the library in Chapter 5 (see **Example 4.2**), the player may pick up a fictive book from the shelf, which asks in its title *Is being busy being happy?*³⁷ While engaged with narrative play, this appears as a reflexive, almost parodist moment, because the player is busy ensuring Eike's survival and would not stop in order to read the book, even if that was possible. Yet, the game system provides precisely this kind of disruptive escape from narrative linearity and speed at the expense of death. While contributing to a sense of "more" narrative content, it crucially does not contribute to closure or to fully establishing the causal relation between the game events and characters in their various times.

Paradoxical Action

Both *CT* and *SoM* explore the science fictional trope of time travel, albeit in very different ways. *CT* positions time travel (the "End of Time," the "time gates" and the time machine "Epoch") between magic and technology, deploying it to create narrative coherence and to relate diverse game spaces meaningfully. On the level of rules and game system, time travel serves to justify the limitation of the number of active characters at one time,³⁸ as the OLD MAN explains when the protagonist first reaches the "End of Time" in the game:

OLD MAN: Why, this is "The End of Time," of course! All lost travelers in time wind up here! [...] It is pretty bleak here... But not to worry. All time periods connect here... You can visit your friends whenever you wish! But you can never travel in groups greater than 3...³⁹

One might say that, by referring to time specifically, the game draws our attention to the question of how rule-based structures can be translated into a temporal framework. At the End of Time, all potentialities (non-active

characters) wait to be called up by the player. Against the background of the time travel narrative, this might challenge us to imagine a timeless space connected to all moments in history, in which all discarded characters and potentialities in general dwell until further notice.⁴⁰

This “timelessness” of space is, in a way, technically adapted to the Epoch, which allows the player to access any time available in the game at any time. Where Virilio’s dromology suggests a reduction of space to temporal immediacy, *CT* reduces history to instant accessibility.⁴¹ At the same time, the game events put the player in charge of speed and rhythm to the extent that they have to be triggered by his or her input. However, in *CT*, this command over the emplotment and the restructuring of time and history it implies, is mostly limited to *flânerie* and levelling-up before turning to the next task, thus leaving the temporal linearity intact.

In contrast, *SoM* deliberately deploys time travel to create paradoxical situations. Moreover, the player can actively cause and explore them. Frequently, the player enters so-called causal loops. Ryan asserts that “you cannot travel back in time,” pointing out the potential conflicts time travel causes for the common one-directional cause-effects relation and the impossibility of changing history.⁴² **Example 4.2** shows a contracted version of Chapter 5, the major events of which can be ordered (configured) as in Figure 14.

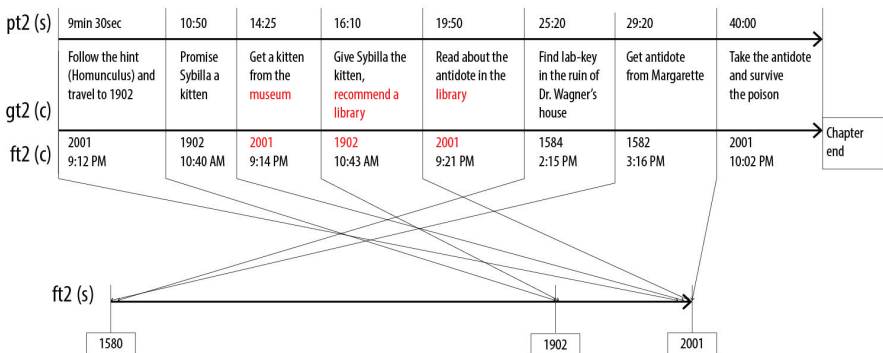


Figure 14. The temporal structure of the main events in *SoM*, Chapter 5.

The figure includes the successive player time (pt2), the configurative game event time (gt2) and two versions of the fictional time, one referring to the configurative (in-game) and one to the successive (overarching historical) ordering of time. As in other chapters, the player can alter the past in Chapter

5 in ways that effect the present. The red emphasis in the figure shows the paradoxical effects of some of these changes. Eike receives a kitten from Eckart Brum in the museum in 2001. As soon as the player uses him to change the past by recommending a library in the conversation with Alfred Brum, the event in the museum cannot be possible if we conceptualize historical or world time as a linear flow. That is, if the past and the future are connected in the way in which they are commonly perceived, the alteration in 1902 should also have an effect on the present, which follows it even if the player has experienced it at an earlier point in his or her time. This example of a causal loop is an effective use of the multi-layered temporality in videogames, insofar as it contrasts the player's successive experience of the gameplay (pt2)—his knowledge of earlier events and chapters—with the configurative and highly selective character of the events that define the rhythm of the game world time (gt2) but, referring to a fictive layer of historical dates, also point to successive time (ft2).

The references to a successive history throughout the game are deployed in a disruptive and ontologically threatening way, because the fictive history (ft2) contradicts the player's successive experience (pt2) of the *SoM* universe and its events (gt2). The only way to explain the events is by translating the configurative game world time into a successive story of progress with regards to the task of surviving. Such linearized game world time marks the difference between what Ryan distinguishes as a pragmatic sense of time based on our everyday experience and a purely temporal sense of time. She argues that backward causation only appears reversed in a pragmatic sense, whereas, in a strictly temporal sense, one might say that time runs in one direction but some causal relations run in the other.⁴³ With this distinction in mind, one could say that some events of the game world time in *SoM* are diagonally opposed in their causal direction to its fictive time. This not only provides an explanation for the temporal structure itself, but also indicates that, from the perspective of player experience and his or her pragmatic sense of time, this reversal can appear disruptive precisely because it goes against intuition, prompting him or her to make sense of the conflict or anomie between the temporal frames.

Philosopher David Lewis suggests such an alternative when discussing the paradoxical nature of time travel in the second volume of his *Philosophical Papers*. Lewis distinguishes external time or “time itself” from personal time, the latter functionally understood as “that which occupies a certain role in the pattern of events that comprise the time traveler’s life.” In order to solve the problem of diverging temporalities, he suggests that “whereas a common person

is connected and continuous with respect to external time, the time traveler is connected and continuous only with respect to his own personal time.” Based on this distinction, Lewis proposes to solve the paradox of “inexplicable causal loops”—instances where a time traveler erases the cause of his own existence—by replacing the concept of successive time with that of a “branching time,” the branches of which would have to be separated “not in time, and not in space, but in some other way.”⁴⁴

From this perspective, each event potentially marks the beginning of a new branch from the traveler’s point of view. i.e. who does not return to an altered future, but to an alternative one on a different branch. In the context of videogames, one could identify the player’s actions as the link between different temporal branches, which is frequently discussed in terms of labyrinths and tree structures. The structure of the multiple endings in *CT* and *SoM* illustrated above can be regarded as examples in this respect. Likewise, one can conceptualize the alterations made during time travel as bifurcation of temporal branches in the game world time (with Lewis, “time itself”), which remain linear in the successive experience of player time (“personal time”).⁴⁵ This observation highlights both the importance of action for relating the worlds of a videogame space, and the crucial contribution the successive frame of player time makes to our experience of videogame time. The confusion arises precisely because the player has “just” visited the same historical period and was then confronted with a different place than she is now. Arguably, a similar structure is in place in *Chrono Trigger*.⁴⁶ Yet, a closer look at Chapter 5 of this game reveals that the temporal structure of *SoM* is even more complicated, once we take the mysterious—somewhat magical—creature Homunculus and its dwellings into account. In Figure 15, I have related the game events and the successive player experience of the introduction to Chapter 5 with the fictional time of the protagonist.

The figure shows how *SoM* creates an intricate multi-layered temporality by reviving the protagonist after death. The game presents the player with the successive experience (pt1 pt2) of two alternative configurations of events, gt1 and gt2, which are both related to the fictive in-game time ft1. During gt1, the fictive duration of the dinner sequence or Eike’s death cannot be determined. Considering that Eike is outside on the street at the beginning of gt2, when the player takes command, it seems safe to assume that he has already had his deadly meal. However, given that it takes only 1:45 minutes for the poison to take effect during gt1—the time dialogs take is reflected fairly accurately on the

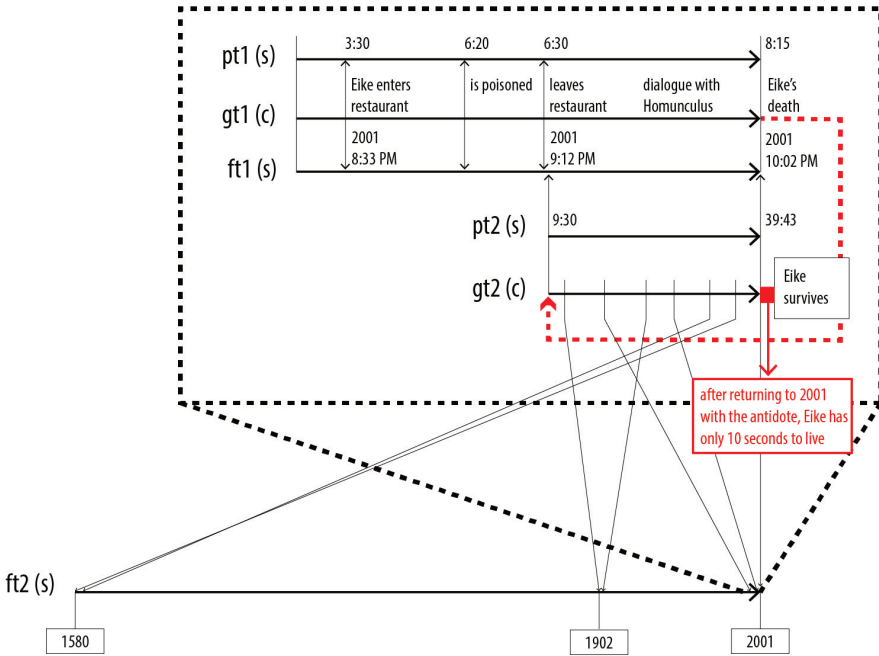


Figure 15. Temporal multiplicity in Chapter 5 of *SoM*.

progression of fictive time of the game—the amount of time the player has to solve the puzzle in *gt2* contradicts this hypothesis. If, on the contrary, Eike has not been poisoned yet, one might wonder when the attack is committed, given that the player controls Eike during *gt2*. Yet, when we travel back to 10 pm in 2001 after obtaining the antidote, the same Eike is already intoxicated and has only ten seconds to live—this span is fixed, regardless of how long the player takes to solve the riddle.

If the strange “doppelgänger” is not ascribed to the mysterious, magical powers of the Homunculus, this paradox can only be explained if we accept that Eike has split for some time and merged again (hence the two fictional timelines in the figure), combining both experiences/histories as soon as the quest for the antidote is completed. Thus, while *SoM* suggests some coherence on the surface, a closer look reveals that time travel is deployed here in a vague, not necessarily logical way. This is not entirely surprising, given that the game begins with the resurrection of a dead protagonist. However, it nonetheless provokes the player to think about its temporality and question its possibility, to the extent that even branching time cannot cover. The player, who experiences

both *gt1* and *gt2*, is left with a strange uncertainty caused by the fact that the structure of each chapter makes enough sense to be enacted successfully with ease (guided by the rules), but at the same time appears logically and ontologically impossible (on the narrative plane). The game presents us with a conflict between the clear sense of time applied when solving the puzzles and a radical, impossible temporal structure of the narrative. It may prompt us to wonder whether the everyday practice of reducing temporal complexity to a functionally framed, linear set of events also obscures our own temporal complexity.

To the extent to which the temporality generated in this conflict does not follow common sense or logical considerations, the effects of a player's actions are not fully predictable and can only be justified on the basis of the game system and its requirements. *SoM's* repetitive and tentative attempts in trial-and-error fashion allows us to play with and experience its temporal complexity beyond logical or imaginative engagements. In addition to Ryan's list of logical, philosophical and imaginative ways to deal with temporal paradoxes and fictional "irrationality," *SoM* offers the player a space for experimenting with such paradoxes in action.

Experiencing Non-Linear Time

As I have shown, temporal conflicts emerge on various levels in the negotiation between the designers who set the rules and authorize the narrative space of a game, and the player, who enacts and experiments with it. Any game can be reduced to a "ludic" engagement consisting of reaching the goal or conquering the game's entire geographical or narrative space by visiting all places and collecting all endings. However, as soon as we take notice of the content, games that explicitly deal with time like *Chrono Trigger* and *Shadow of Memories* offer a variety of perspectives on temporality, which can be experienced and playfully explored in action. Moreover, while luring the player into a mode of "narrative consumption," i.e. the attempt to understand the game's narrative world, *SoM* ultimately disrupts the player's sense of narrative coherence in several ways, thereby creating an ontological and temporal uncertainty. In Figure 16, I have tried to map the various conflicts discussed above in the original model of the temporal structure of videogames.

Such uncertainty is created by the multiple, paradoxical and contradictory endings in *SoM*, which create a tension with the expected narrative closure, thus disrupting our sense of a linear story and history. On another level, the narrative

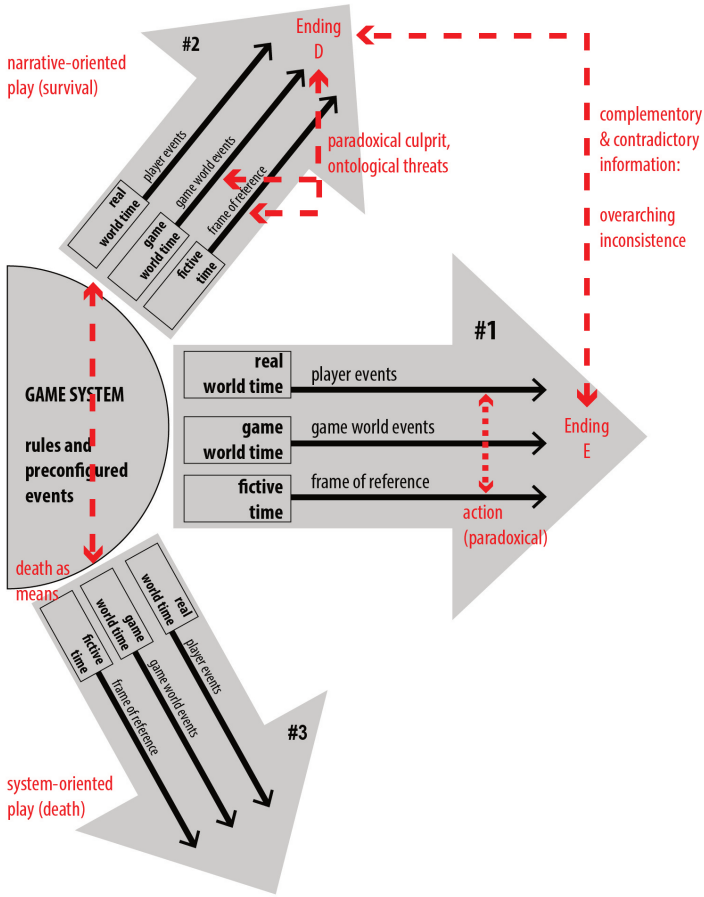


Figure 16. Temporal disruption in SoM.

goal of survival and its underlying assumption of linear, biological time is contrasted with a systemic goal of collecting scenes and raising achievements, at times by actively departing from the narrative and thus from linear time. A last, profoundly disruptive conflict was shown to exist in the tension between linearity and action itself. Here, the player is the source of conflict, because he can not only enact paradoxes of time travel, but also proceed despite the contradictory or inconsistent temporal character of the world.

The intensity of this disruption on the player is debatable, not only due to the abovementioned possibility of “ludic engagement,” but also, because the players may choose to ignore or avoid these conflicts.⁴⁷ However, in my experience,

it is precisely this balance, between curiosity and ignorance the game manages to strike well in its mixture of familiar structures and otherness. By representing the contradiction as an experienced result of a variety of contradictory elements and layers, *SoM* arguably succeeds in “expressing” a situation that is commonly regarded as difficult to represent.⁴⁸ Doing so, the game shows that videogame space has the potential to confront the player with a paradoxical temporality that can be enacted even if it cannot be emplotted with sufficient coherence. For Ricoeur, the plots we invent are “the privileged means by which we re-configure our confused, unformed, and at the limit mute temporal experience.” Understanding, in his view, is grasping the operation that unifies events into one whole and complete action.⁴⁹ However, if the conflicts highlighted above succeed in confronting us with temporal uncertainty and reject the plot, such understanding is not possible. This impossibility may leave the player puzzled and curious about alternative times, but not deprived of actionable choices. This is significant because it offers a new way of engaging with paradox situations and, by extension, with non-linear time. In *SoM*, we may not be able to imagine non-linear time immediately, but we are able to approximate it in action and experience. Even if the contradiction is not present in one situation (like a door that is open and closed in the same moment), it is present in one videogame space and palpable in the experience of the player.

In all cases, the disruptive conflicts risk being ignored. In this respect, the science fictional device of time travel, and that of the Homunculus, appear as a particularly direct, deliberate and explicit way of both achieving such a tension, and resolving it—after all, their existence can be blamed for all inconsistencies if necessary. Nonetheless, I believe *SoM* should be regarded as a successful example of disruptive temporal conflicts or “anomal” temporal moments that challenge the player to think about the nature of time and its mechanisms.⁵⁰ These conflicts include the possible failure to structure gameplay experiences in *SoM* in narrative terms, which, given Ricoeur’s insistence on the reciprocal relation between the narrative and human time, can be interpreted as a sign of radical, non-human temporality.

Videogames like *SoM* might not offer a concrete alternative conceptualization of time—given the difficulty of explaining time in general, this is not surprising. However, the disruptive conflicts identified arguably have a similar, if not stronger effect as Virilio’s “picnoleptic” absences of the mind, of which he claims that

[i]f you admit that picnolepsy is a phenomenon that effects the

120 Thought-Provoking Play

conscious duration of everyone, [...] anyone would now live a duration which would be his own and no one else's, by way of what you could call *the uncertain conformation of his intermediate times*, and the picnoleptic onset would be something that could make us think of human liberty, in the sense that it would be a latitude given to each man to invent his own relations to time.⁵¹

To the extent that *SoM* allows us to reconfigure, restructure and play with time beyond linearity and even beyond logics, it confronts us with temporal liberty in a distinct, radically experiential way. In literary fiction,

[n]arrative paradoxes are like the holes in a Swiss cheese: they only exist as holes because they are surrounded by a solid texture of rational events. They differ from what is commonly regarded as “plot holes” in that they are an integral part of the plot and a source of meaning, rather than an inadvertent contradiction or insufficiently justified motivation that the reader either oversees, forgives, or regards as a defect.⁵²

In games, the player can configure time on multiple levels, and repeatedly so. Whereas narratives involve a disruption of linear time only in the employment of actual events, the disruptive potential of *SoM* is grounded in the fact that the player can configure events already on the level of the events that serve as the basis for the employment.

On the level of design, this recurs on the same-but-different structure and the input-sensitivity of videogame space, which grant the player access to different temporal configurations within the same game space. This allows her to compare various endings or juxtapose the pursuit of survival with the deadly systemic achievements. On the level of the player, this disruptive potential relies on repetition and the contingency of player action, as much as on the player's memories of the successive experience of game events or multiple versions of the game world in the frame of real-world time.

Michael Nitsche observes that reversal and repetition in videogames have a distinct expressive quality because they are experienced as different due to the knowledge the player gained in each attempt.⁵³ Drawing on these observations in his discussion of memory in videogames, Mukherjee argues that “[w]hen the gamer revisits and replays a certain part of the videogame many times, the actions might look the same and the remembered instances might all

be seen as copies of each other. However, these remembered instances vary and paradoxically, although they might represent the same event, they are different.”⁵⁴ Here, difference is a function of the accumulated memories of the player, which change the perspective on a scene with each repetition. In *SoM*, the designers turn this effect upside down by consciously disrupting the player’s sense of continuity and rejecting her attempts to connect the events experienced during multiple successive playing sessions.

Insofar as videogame play not necessarily depends on interpretation, but more directly on action, Ricoeur’s model of the successive mimetic three-step might have to be revised in a sequential study. The player is not only in part responsible for configuring or “emplotting” the videogame space through configurative gameplay (mimesis 2, targeting game world events), this emplotment is also immediately experienced, interpreted (mimesis 3) and can in turn be adjusted. This suggests a partial coexistence of the second and third mimesis. Furthermore, in the absence of certainty, the “worldly” actions (mimesis 1) that serve as the basis for the poetic act (mimesis 2), are in part actions the player has to carry out in order to make sense of the world and its plot. In other words, in the closed space of a videogame, the player contributes to all three mimetic steps, albeit in a limited sense insofar as it is pre-structured by the designers (emplotment). From this vantage point, videogame temporality may be regarded as contraction of the mimetic three-step described by Ricoeur, and a merging of its protagonists.

We may find a similar negotiation between designers and player to be at work on a structural level in other games as well. However, I believe that *SoM* stands out precisely because it engages with time both on the level of rules, and on that of the narrative. The game depend on a powerful narrative and its suggestion of coherence for its tension. Thus, content clearly does matter in this case. On a more general note, *SoM* shows that the disruptive, experimental quality of repetition and playful exploration with regards to time is possible to the extent to which it is limited: Ricoeur’s insistence on the reciprocal relation between narrative and human time here appears as the condition for temporal disruption, with the human player as the agent of a successive experience. How else could the shifts and breaks be meaningful?

Notes

1. Benjamin, "The Work of Art in the Age of Its Technological Reproducibility: Second Version."

2. Jameson, *Archaeologies of the Future*, 228.

3. Arendt, *On Violence*, 6–7.

4. Gellner, *Thought and Change*, 40–49.

5. Adam, *Time & Social Theory*, 9.

6. Hassan, *Empires of Speed*, 16–17.

7. Virilio, *Speed and Politics*, 159.

8. Adam, *Time & Social Theory*, 16.

9. Virilio, *The Aesthetics of Disappearance*, 19.

10. Aarseth, *Cybertext*, 1–3.

11. Similar observations have been made by a variety of game scholars. In his attempt to rescue videogame studies from the alleged colonization by literary or film studies, Eskelinen claims that "the dominant user function in literature, theatre and film is interpretative, but in games it is the configurative one. To generalize: in art we might have to configure in order to be able to interpret whereas in games we have to interpret in order to be able to configure" (Eskelinen, "The Gaming Situation"). Tavinor, for example, observes that videogame fictions "have mixed uses [...] and the function as a game seems to be somewhat inconsistent with the function as a narrative" (Tavinor, *The Art of Videogames*, 115). In a similar sense, Galloway states that "while games have linear narratives that may appear in broad arcs from beginning to end, or may appear in cinematic segues and interludes, they also have nonlinear narratives that must unfold in algorithmic form during gameplay" (Tavinor, 115).

12. Aarseth, *Cybertext*, 110–11.

13. Schäfer, "Virtual Death of the Human Being: Time and the (Ir)Reversibility of Choice in Digital Media," 103.

14. Aarseth, "Aporia and Epiphany in Doom and The Speaking Clock," 33, 37–38.

15. Matsunaga [松永], "Bideogēmu ni okeru jikan"; Matsunaga [松永], "Bideogēmu ni okeru imisayō."

16. Zagal and Mateas, "Time in Video Games: A Survey and Analysis," 848–51.

17. *Ibid.*, 854.

18. Ryan, "Temporal Paradoxes in Narrative," 160.

19. Thon, *Transmedial Narratology and Contemporary Media Culture*, 47–8.

20. Ricoeur, "Narrative Time," 169; Ricoeur, *Time and Narrative, Vol. 1*, 3.

21. *Ibid.*, 178–79; Ricoeur, *Time and Narrative, Vol. 1*, 54.

22. Ricoeur, *Time and Narrative, Vol. 1*, 82–83.

23. *Chrono Trigger* was created and released by Squaresoft (today Square Enix) in 1995 for Nintendo's Super NES and in the version used here ported by Tose for the Sony Playstation in 1999. Outside of Japan, the game was first released for the Nintendo DS in 2008. If not stated otherwise, knowledge about the game originates from my own gameplay or the "Chrono Trigger" section of the wikia "Chronopedia - Chrono Trigger."

24. Compiled based on Haunter120, “Chrono Trigger – Walkthrough”; McFadden, “Chrono Trigger – Walkthrough/FAQ (PSX)”; nemiminijam, “Kurono Torigā Zen Endingu Risuto”; Pringle, “Chrono Trigger Endings”; wikia, “Chronopedia – List of Chrono Trigger Endings.”

25. Ōtsuka [大塚], *Teihon Monogatariishōhiron*, 19–20.

26. Square Enix, “Cease & Desist.”; ZeaLitY, “Cease & Desist Letter.”

27. As HIRYUU (“Chrono Trigger Endings.”) puts it on rpgclassics.com: “Ah, Endings. They give games life. What a great advent for the gaming community. Sure, Pac-Man can be fun, but is it really fun to just keep playing until the game simply crashes on you? We, as a society, yearn for closure, and the endings provided in the games give us satisfaction, and they allow us to reflect back on our accomplishment, and realize that we have become the masters of our domain. We have taken this untamed beast of a game, and completed it, and the ending for the game is our great reward. Often, games may disappoint with their endings. A simple showing of the credits and little else (or that stupid ‘That’s Benjamin, you nut!’ line in FF: Mystic Quest). Luckily for us, Chrono Trigger features a multitude of endings for our greedy selves.”

28. See for example the credit sections of “A” Tadeo’s “Chrono Trigger Walkthrough and FAQ,” or KoritheMan’s “Chrono Trigger FAQ/Walkthrough (SNES).” This kind of voluntary, intense cooperation is quite common in videogames and deserves more attention from the perspective of community studies—attention this book cannot grant it. It would be interesting to revisit Ōtsuka’s concept of “narrative consumption” in the context of cooperation for the “colonization” of videogame worlds. Such collaborative player engagement with the games possibly offers a different experience than that suggested by individual collection. At the same time, it is an intended part of the marketing. Furthermore, as Galloway points out, networks are far from innocent or oppositional today.

29. ZeaLitY and others, “Principles of Time and Dimensional Travel.”

30. Washburn, “Imagined History, Fading Memory: Mastering Narrative in Final Fantasy X.”

31. Itagaki [板垣], Jeong [鄭], and Iwasaki [岩崎], “Higashi Ajia no Kioku no Ba’ o Tankyū Shite,” 8–9.

32. Lead designer of *SoM* is Kawano Junko (河野 純子). The game was released by Konami for the PS2 in 2001, and later ported to the XBOX, the PC, as well as recently to the Playstation Portable. In the US, it is published as *Shadow of Destiny*.

33. Compiled from Virgil, “Shadow of Destiny Ending FAQ”; Wikipedia, “Shadow of Memories.”

34. Tavinor argues that the gameplay in *SoM* is too inert and limited in its choices and its interactivity. In his view, *SoM* provides “only very superficial authorial control on the part of the player” and, he adds, necessarily so, since “definiteness” is a crucial factor for narrative success (Tavinor, *The Art of Videogames*, 126–27.). I have made similar claims about the importance of closure and finiteness above, and agree with Tavinor that *SoM* offers less contingency than open-world games. However, unable to exhaust the game in my explorations on either the narrative or the systematic level, I have to admit that I do not agree with his claim about the lack of choices.

35. JackSpade, “Shadow of Destiny: Percentage FAQ.” See also Appendix A.

36. Virilio, *Speed and Politics*, 46.

37. I am grateful to the late Harold Hays (Leiden University) for pointing this out.

38. As with most single-player role-playing games, *CT* features multiple characters

124 Thought-Provoking Play

who are different from each other in appearance, skills, and function within the group. Given the limited number of characters allowed in the fights, the player has to decide on which characters make the best combination, rearranging them according to the upcoming tasks and adversaries.

39. *Chrono Trigger*; translation taken from WaterExodus, *Let's Play Chrono Trigger Episode 11 – To the End of Time! Spekkio, Master of War!!!*

40. For more detailed information, see the Chronocompendium page on “Time Error.”

41. To the extent to which this temporal multiplicity can be translated into a spatial multiplicity, a similar structure can be found in most rpg, in which the player traverses great distances in the beginning—only to be presented with accelerated or even instant transportation means later on in the game. Themability appears also on this level.

42. Ryan, “Temporal Paradoxes in Narrative,” 150–51.

43. *Ibid.*, 154.

44. Lewis, *Philosophical Papers*, 2:69–80.

45. The implications of this claim cannot be fully explored here. The myriad ways in which the player can actively influence a game world reality could suggest that, on a theoretical level, even the metaphor of branches cannot cover the situation comprehensively. This problem seems to be closely related to Lewis' differentiation between actualization—here, the choice of a path somewhat predefined by the designer—and actual change—something not intended in the game system. “You cannot change a present or future event from what it was originally to what it is after you change it. What you *can* do is to change the present or the future from the unactualized way they would have been without some action of yours to the way they actually are. But that is not an actual change: not a difference between two successive actualities” (Lewis, 2:76). This suggests that the character of the action and its relation to the game world might be framed as ranging from meaningfully-actualizing to radically-meaningless and unpredicted. It would be interesting to discuss these issues in more depth against the background of repetition.

46. ZeaLitY and others, “Principles of Time and Dimensional Travel.”

47. Thon's emphasis on the importance of “charity” for the mental construction of a storyworld by the player suggests as much. As mentioned in Chapter 2, he claims that “recipients will generally try to exhaust every possible alternative explanation before trying to imagine a logically impossible, contradictory local situation or a logically impossible, contradictory global storyworld,” or even ignore inconsistencies when creating the mental image of a storyworld (Thon, *Transmedial Narratology and Contemporary Media Culture*, 61–62).

48. Thon, *Transmedial Narratology and Contemporary Media Culture*, 59.

49. Ricoeur, *Time and Narrative*, Vol. 1, x–xi.

50. These contradictions may cause a vague feeling of disruption even if the player does not attempt to find reasonable explanations in every instance.

51. Virilio, *The Aesthetics of Disappearance*, 31–32.

52. Ryan, “Temporal Paradoxes in Narrative,” 160.

53. Nitsche, “Mapping Time in Video Games,” 149.

54. Mukherjee, “Re-Membering and Dismembering: Memory and the (Re)Creation of Identities in Videogames,” 8.

Alien Aesthetics

Videogames target our aesthetic experience in many ways. As mentioned earlier, Kirkpatrick claims that games are primarily about performance and experience, and not about content and its intellectual processing.¹ Against this background, the question I would like to address in this chapter is whether videogames offer conflicts on the level of aesthetic experience. This question is more relevant to the aim of this book than it may appear at first. Theories of the aesthetic experience frequently refer to its significance with regards to the possibility of change: the possibility of radical change, in turn, is linked to the possibility of experiencing something “new,” something not already known. Such an experience might allow us to develop a new perspective on the world or alter our thinking about it. One question for my project, then, is, whether the aesthetic experience of videogame spaces can be an experience of conflicts powerful enough to unsettle our perspective on the world, thus stimulating our imagination of alternatives. In raising this question, I am not asking whether videogames are “beautiful” or whether they can be regarded as art. This question has been addressed by several recent inquiries.² Rather, the analysis focuses primarily on the sensorial experience of gameplay and the player’s interaction with videogame worlds and their inhabitants. What conflicts arise from it and how might such conflicts impact our political ideas, thoughts and visions?

The aesthetic experience is characterized by a paradoxical relationship between immediate sensual perception and mediate aesthetic judgment about what is perceived. Thomas Munro and Roger Scruton summarize this paradox in an entry on “Aesthetics” in the *Encyclopædia Britannica Online* as follows:

[T]he expression aesthetic judgment seems to be a contradiction in terms, denying in the first term precisely that reference to rational considerations that it affirms in the second. [...] On the one hand, aesthetic experience is rooted in the immediate sensory enjoyment

of its object through an act of perception. On the other, it seems to reach beyond enjoyment toward a meaning that is addressed to our reasoning powers and that seeks judgment from them.³

Inverted, one might say that conflicts in videogame space, on the aesthetic plane, involve some degree of difficulty in making sense of the experience. Videogame play is always accompanied by some degree of understanding of what is going on in the game world. At the same time, the aesthetic experience of gameplay, at times, seems to exceed our cognitive comprehension of a situation. Is there any conflict potential in this difference? To be blunt, if videogames are capable of generating novel aesthetic experiences that exceed our cognitive judgment, they might as well bring about a radical change in our perspective. It remains questionable whether an absolute aesthetic other is possible and what it would be like. Aware of the paradoxical quality of this question, Jameson remains skeptical of the possibility of such genuine otherness, concluding that even the most radical attempts at imagining otherness in sf are nothing but mirrors of the self and projections of our own situation. At the same time, he emphasizes that the possibility of imagining a radical other, like a new color, “is allegorical of the possibility of imagining a whole new social world.”⁴

Jameson already hints at the political dimension of the aesthetic experience, which Rancière elaborates on in his writing. He points out that aesthetics is a direct condition and limitation for political action. Rancière regards politics as a conflict about the nature and demarcation of a common space, about defining common objects and identifying those who possess the ability to a common language, in a general sense of the word.⁵ He calls this division of space “distribution of the sensible,” meaning “the system of self-evident facts of sense perception that simultaneously discloses the existence of something in common and the delimitations that define the respective parts and positions within it.” In his view, our concept of aesthetics is such a distribution, “a delimitation of spaces and times, of the visible and the invisible, of speech and noise that simultaneously determines the place and the stakes of politics as a form of experience. Politics revolves around what is seen and what can be said about it, around who has the ability to see and the talent to speak, around the properties of spaces and the possibilities of time.”⁶

For Rancière, both politics and art aim to (re)define the boundaries of this common space. “Politics and art, like forms of knowledge, construct ‘fictions’, that is to say *material* rearrangements of signs and images, relationships between what is seen and what is said, between what is done and what can be done.”⁷

In plain terms, the distribution of the sensible influences the common space we perceive as field of political action, as well as the action we perceive as possible in this space. Political action and aesthetic experience, in turn, have an effect on this distribution and may shift it towards formerly politically irrelevant or even unknown realms. In a sense, the recent attention to the affective dimension of politics is a reaction to the dominance of the cognitively, intellectually driven model of discourse and an attempt at overcoming the limits of the intellect with regards to human capacity in general. Such attempts often question the superiority of “rationality” over other capacities human beings have.

With regards to the political dimension, the question for this chapter is, whether videogames may offer conflicts that potentially contribute to shifts in the boundaries of what is perceived as common, what can be said, what is doable. Such “redistribution” of the sensible, even if only experienced for a moment, might serve as a basis for imagining novel, radical alternatives to the status quo. It should be clear by now that imagining or even perceiving something new against the gravitation of the known is not a trivial task. In the context of the evolving information universe and computers, Muroi and Yoshioka claim that the absolute other can never be accepted peacefully. Instead, they speak of a “war” between multiple intersecting realities.⁸

What better place to start looking for such conflict than the ways in which videogame spaces confront us with the aesthetic experience of the alien, which, according to Chris Goto-Jones, remains one of the most radical and literal encounters with the other.⁹ How is this encounter with the radical and unknowable other possible aesthetically? Jameson maintains that even the most successful attempts ultimately can be folded back into the known in the analysis. The only successful strategy against the impossibility of knowing and representing the alien he refers to explicitly, is a consequently partial representation, as found in the film *Alien*, in which the audience never sees more than parts of the creature.¹⁰ Adam Roberts does not reject the possibility of radical otherness as vehemently as Jameson and at the same time puts a stronger emphasis on the emotional quality of the alien. Discussing the film *Blade Runner*, he claims that the “combination of human, childlike innocence and ingenuousness with a machine-like strength and ruthlessness [...] provides the replicants with their uncanny metaphoric potency,” Roberts identifies a more extreme example in the Borg of the *Star Trek* universe, which “represent everything the Federation is not, focusing our attention on the way their mode of being is literally beyond our ability to comprehend.” For him, the Borg

represent “the true nature of ‘otherness’; an alien [...] radically and totally unlike you or me or anything we can conceive. [...] It is impossible for us to enter imaginatively into the world of the Borg because certain key values we hold, values like individuality, life/death and so on, are too centrally part of us, whereas for the Borg they are neither good nor bad but simply irrelevant.”¹¹

Both authors thus express the idea that the alien as a radical other is only possible in the impossibility of representation, intelligibility or imagination. This negative existence of the alien points to a central tension in the idea of disruptive conflicts. Videogames are equipped with particularly interesting features in this regard. As I have already discussed, their representation as such is subject to several translations: from code to running software, and from complex, multidimensional and multi-layered worlds to a relatively minimalistic, often partial audio-visual representation. With regards to the latter, Manovich points out that the computer-based transformation maps source phenomena that are beyond the limits of human senses and reasoning onto a representation “whose scale is comparable to the scales of human perception and cognition.”¹² Does this potential for partial or non-representation have similar effects to the partial representation in *Alien* referred to by Jameson? Or, does that which is beyond our senses “leak” into the representation? It seems at least theoretically possible that the alien is comprised of complex data beyond our comprehension of life, only pointed to vaguely by its representation. More so, since I have argued that videogame worlds and their representations are also partly unimagined, i.e. not predicted by the designers in every detail in advance. They are instantiated and performed by the computer based on a more or less open code, in which the designers often merely specify a certain range or spectrum.

On a second plane, the enacted objects function as generic containers and blur familiar differences between objects and living things: a formal distinction between a door and an attacking enemy can be quite difficult only based on the structural elements of their code. At the same time, living things are a particular focus of videogame design. Designers have been widely concerned with the responsiveness of the videogame world and its inhabitants. Whether based on rigid routines and algorithms, or on an ever more complex and sophisticated artificial intelligence, designers often attempt to simulate life in games.¹³ Real-time strategy games and first-person shooters show the evolution of variable and procedural elements in videogames most explicitly, confronting the player with seemingly intelligent, human-like opponents and realistic environments.¹⁴

With regards to my interest in conflicts with regards to the alien, the question is, what kind of life is instantiated here?

On a third plane, I would like to keep an eye on the relation between the computer-generated world and its life and the player. Frequently, gameplay is described with reference to cybernetics and Donna Haraway's influential *Cyborg Manifesto*, in which she develops the idea of the hybrid "cyborg as a fiction mapping our social and bodily reality and as an imaginative resource suggesting some very fruitful couplings."¹⁵ Jon Dovey and Helen Kennedy, for example, go as far as to claim that "[i]n the lived enactment of gameplay, there is no player separate to the interface and game world; there is a fusion of the two into a cyborgian subjectivity—composed of wires, machines, code and flesh." In their view, the avatar is a cyborgian representation of the player character and the player actions, the sonic, haptic and visual experience that is communicated to the player.¹⁶

This claim has to be re-examined carefully. Firstly, because it presupposes the empirical validity of Haraway's cyborg—a claim Haraway does not make about her self-declared "ironic dream" or "ironic political myth." Secondly, because it could imply that the player is not aware of his or her separation from videogame space. While this might be true at times, such generalization remains problematic and questionable both theoretically and based on my own experience as a player. Games can certainly offer an intense experience that makes the player forget his or her surroundings.¹⁷ However, this focus on the events in the game does not necessarily imply that the player (subjectivity) has merged with the avatar in any psychological or emotional way, let alone physically. This book is not the right forum to discuss these issues in depth, because their empirical analysis would require a decisively different methodology. What seems crucial, though, is that, as players, we relate to the events and objects in the game world in one way or other, and this relation might be host to a series of aesthetic or sensual conflicts.

With these initial considerations in mind, I would like to turn to the games *Rez* (2001), *The Chikyūbōeigun* [*The Earth Defense Force*] (2003) and *Shinseiki Evangelion 2* [*Neon Genesis Evangelion 2*] (2003), which confront us with various kinds of disruptive and even alienating life.

Indifference and Pure Play

A particularly unsettling aesthetic conflict can be experienced when

confronting the alien in the low-budget production *The Earth Defense Force* (hereafter *EDF*).¹⁸ As Inoue points out, the game is a masterpiece of game design because it is easy to learn due to its simple rules, involves an impressive enemy and offers a rewarding experience.

Shortly after starting up *EDF*, the player character is attacked by a herd of giant ants which cover the screen completely. This in itself already makes the game a masterpiece, but in addition, the confused player can easily succeed in fighting off the enemies by pressing random buttons, and is commended to do this via radio. Before knowing what is going on, the player starts to feel like the protagonist in a monster movie. [...] In the first five minutes, one learns how to play and gets a taste of the core attractiveness of the game.¹⁹

As **Example 5.1** shows, *EDF* is a minimalist game that confronts the player with an uncanny enemy invader and requires scarcely more than to move and pull the trigger. The uncanny effect of the ants is firstly created by their size and number, by which they literally penetrate our sight, sometimes covering all the world from the player's eyes. Compared to the properly UFO-like space ships the game features, the ants are by far the most alien objects present, although they are modeled after a well-known life form in our environment. This is not only a result of the appearance, but to a greater extent stems from their seemingly uncoordinated, insect-like movement and their unintelligible mind set, which, despite their invasive intentions, seems to be programmed for random aggression, as **Example 5.2** shows.

The ants are an invading force that cannot be reasoned with. At the same time, these creatures appear strangely disoriented and disinterested and may attack the player from far away, run him over or simply pass him by. This internal contradiction in the artificial alien intelligence between the signaled and perceived intension of invading earth and the disinterested, seemingly random movement is the main source of much of the disruption experienced in the gameplay. It is emphasized by the lack of choice on the side of the player, for whom effective extinction is the only meaningful action in the game. In order to proceed to the next stage, the player has to eradicate the enemy to the last ant—while the invading insects sometimes seem quite content with aimlessly crawling through the empty streets of Tokyo.²⁰ In addition, due to their agility, size and numbers, they move more freely through the environment than the

player and occupy it more totally. The destruction to man-made architecture is mostly caused by the player and the collateral or intentional damage he or she inflicts. By confronting us with this kind of imbalance, *EDF* not only amplifies the uncanny experience of the alien, but also disrupts the player, who is—deprived of any alternatives to shooting—alienated from the openness and emergent quality of human life in an entertaining way.

The frightening experience of *EDF* does not stem from the invading enemies, but rather from the fact that this lack of options in the face of an aesthetically overwhelming enemy is actually not just entertaining, but liberating. For the player, the minimalist setting and destructive quality of one's actions is profoundly enjoyable. Whereas Jameson cautions us against the possibility that “the alien, fully assimilated, its Difference transmuted into Identity, will simply become a capitalist like the rest of us,” the experience of *EDF* does suggest that we might be capable of escaping our non-game experience for a brief moment.²¹ At the same time, the lack of destructiveness and hostility on the part of the invader highlights our actions, pointing us toward the conflict created by inverting the roles of both sides.

A similar minimalist tendency is deployed in a different, arguably more radical way in *Rez*.²² The on-rail shooter charges the player with hacking the cyberbrain space [*dennō kūkan*] of a futuristic computer system called “Project-K,” in order to re-activate its A.I. “eden.” According to the designer's description, eden went to sleep to escape from the overwhelming information in the overpopulated and uncontrollable size of the network society the management of which it was created for.²³ A critically acclaimed game on the border with responsive videogame art, the music-infused shooter “blurs the line between user input and audio/visual feedback, creating a unique sensory experience.”²⁴ *Rez* features a distinctive artistic style based on responsive polygon and wireframe representations and sound effects triggered by the player's actions, along with a trance soundtrack that grows more complex with each new “layer” the player accesses in an area. “All of the environments move and fluctuate with the beat, adding to the synaesthetic effect of the game.”²⁵ The game manual itself advertises this experience as follows:

Gentlemen, open your senses. Go to Synaesthesia. You can transform the world into your original Sounds, Lights and Vibrations just by locking and shooting the enemies. You will discover the [*sic*] brand new time full of rhythm as well as ecstasy. The instinct “Rez” is now

finally being released. Can you really tear yourself from this sense of trance?²⁶

Example 5.3 shows that *Rez* goes beyond deploying abstract, minimalist art in order to represent the computer network.²⁷ This alone would hardly be innovative in times where, as Manovich puts it, the fact that in computer media anything can be mapped to anything makes specific choices appear arbitrary.²⁸ Rather, despite its rigid patterns and on-rails character, *Rez* is emergent in its responsiveness to player input, which is mapped dynamically onto the sensual expression of the game world. This is a distinct feature widely acclaimed. “[W]hat sets this game apart from all others of its ilk is that with every lock on, every shot fired, and every missile deployed, a sound is made that is tonally aligned with the music and synched up with the beat. In addition to the enemies all having these attributes, this creates the effect of the user essentially improvising the song as they play.”²⁹ In other words, the synaesthetic quality of *Rez* is derived from its dynamic representation of contingent player input. The game world unfolds aesthetically in response to the combined effort of player and computer.

In addition, the game features a numerical element based on a hidden rule-set. Contrary to the initial impression, the game world is vast and offers long-time engagement, if the player is willing to play repetitively.³⁰ It includes several hidden stages and modes, which are only accessible after outstanding performances in other areas (see Appendix B and C). Such achievement becomes increasingly difficult and requires training and concentration. Thus, it is in stark contrast to the experience of effortless action or “flow” the game offers in an early stage. However, this oscillation between a rigorous regime of numerical data, calculation and precision, and a playfulness of sensual aesthetics is a powerful and arguably unmatched representation of the videogame space and its mechanic otherness.

In the gameplay, “analysis” is not only a part of the score displayed after each level, but literally the way the player approaches the sensual explosion on the screen: one permanently tries to distinguish threat levels and to identify power-up items on time. In Chapter 3, I referred to this kind of analytic but strangely unfocused gameplay as intense reception in distraction. However, by generating a tension between the analytic gameplay and the synaesthetic pleasures of its responsive environment, *Rez* offers a direct opposition between the two elements of aesthetic experience and generates a distinct representation of the unknowable inside of a computer network. This tension is amplified and

at the same time resolved—one is tempted to say synthesizes—in the so-called Trance Mission, which has to be unlocked with considerable effort.

As **Example 5.4** shows, the Trance Mission abandons the game itself, confronting the player with a never-ending cyberspace in which neither goal, nor death exists. Deprived of the avatar, the player plays without aim, at risk of being trapped in the experience, as Axem Rangers remarks in his review of the game:

Quite possibly the coolest, most original of these unlockables is the hidden area Trance Mission. It's an endless, repeating mode where the enemies fly in very simple patterns and don't attack. It sounds boring, and it is for a few minutes. But after a few repeats of all the enemy patters, you literally begin to fall into a trance. You zone out. You play without thinking. Your eyelids become heavy. Play Trance Mission for too long, and it's hard to stop...³¹

In a leap into the strange otherness of aimless play, both the player and the usually threatening enemies abandon any intentionality and engage in a synaesthetic dance in a space beyond. In experimenting with the boundary between games and art, *Rez* offers an enclave for the experience of play as “to-and-fro movement without aim” in Gadamer’s sense. For Adorno, the “uselessness” of art is in itself already a political critique in a world defined by functional purpose.³² In the context of this chapter, I propose to refine this general statement by arguing that the uselessness of this experience is only meaningful in the context of the tense experience of the earlier stages of the game, in which it is situated. This impression is amplified not only by the general tension between experience and analysis, but also by the vocabulary of nature and evolution deployed in other areas and particularly in area 5, in which not only the sound becomes more complex, but also the landscape grows, as Figure 17 shows.

Here, the game comes close to “Artificial Life art,” which is marked by “[a] general desire [...] to capture, harness or simulate the generative and ‘emergent’ qualities of ‘nature’—of evolution, co-evolution and adaptation.”³³ Against the background of these references to biological life and the hostile nature of the computer network in most areas, the Trance Mission disrupts our sense of purpose usually applied to most of our actions. Presenting its players with a disinterested, rigid, non-responsive alien life, it also alienates them from the game itself, at risk of boring them immediately with its playfulness. Instead of

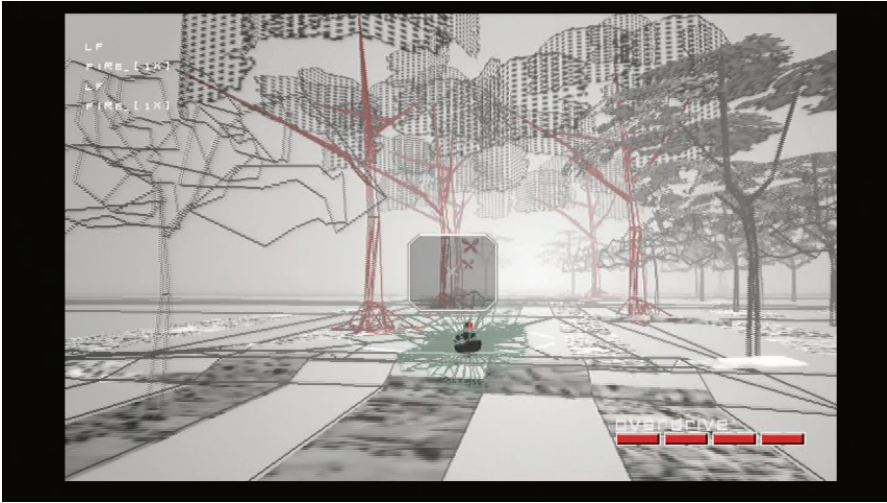


Figure 17. Emergent nature in Rez area 5.

being pressured to react quickly to the events on the screen, the player becomes a kind of detached, aimless—but, nonetheless, involved—contributor to a series of non-teleological events and their aesthetic experience.

Contrary to this risk, Axem Rangers' description of the experience points to the fact that this space can successfully invite the player to become part of it. As with *EDF*, it is not the absolute other the game highlights, but rather the momentary transformation of the player-self into something else. This transformative moment is only available due to the internal tension or conflict that *Rez* generates between two of its worlds and the two modes of engagement these worlds call for. In turn, this conflict also pushes the player towards imagining life in these two extreme modes of engagement, one focused on analytic engagement, both cognitively and physically intense, the other revolving around aimless, but arguably no less sensually intense play. At the same time, the Trance Mission may also alert us to the boredom of life devoid of purpose.

Absolute Terror and Uncanny Love

The two types of aesthetic conflict, one caused by the experience of different modes of engagement, and one caused by the confrontation with aesthetic others, are also at the center of the game *Shinseiki Evangelion 2* (hereafter *Eva2*).³⁴ Roughly adapting the hybridity of its source anime, the game offers

a total of 11 scenarios, most of which explore perspectives not focused on in the anime, or that expand on it, as well as several endings depending on the player's actions. Most scenarios consist of multiple chapters, each of which is divided into a "combat turn" and a "free turn." The combat turn features the fights between the huge, manned "artificial human Evangelion" (hereafter Eva) and the attacking "angels" that threaten to extinguish humanity.³⁵

Whereas the combat turn offers a rather conventional gameplay experience, the free turn allows the player to navigate the scenario's protagonist in third-person perspective through the space of the futuristic stronghold city Tokyo-3. *Eva2* features a variety of places familiar from the anime, such as NERV officer Katsuragi Misato's mansion, pilot Ayanami Rei's apartment, the school all pilots attend, a convenience store and several rooms within the NERV headquarters.³⁶ The player can explore and use these facilities in order to satisfy basic needs like food and an occasional bath, purchase various items in the convenience store, study for school or hack the computers of the NERV military headquarters in a search for confidential data. More than anything, the environment is a social space, populated by human-like npc. Interactions with and among these characters range from looking at someone and small talk to hugging and kissing.

Contrary to the initial expectation, the alien in *Eva2* is not encountered in the fights against the angels, but in the uncanny interactions with non-player characters, in which the player is confronted with a tension between the characters' human-like appearance and their abstracted numerical character. This tension is present in many games, but in *Eva2* it appears particularly uncanny and alienating. In order to explain the disruptive quality of these interactions, I would like to give a brief overview of their most important elements. A first of these elements is that the characters feature numerical variables, which represent their momentary emotional state, their feelings toward and their evaluation of other characters. The most important of these variables is the "Absolute Terror" (hereafter A.T.) value, which, in contrast to the anime and manga, is described as a kind of tension barometer by the game.³⁷

The A.T. is an important factor in the combat turn, where it influences the Eva's fighting strength, but also in the free turn, where it affects the interaction with other characters. Generally speaking, the A.T. changes with the character's well-being (hunger, thirst, sleepiness, toilet and shower), the course and outcome of the fights and, most importantly, the social interactions. For easier

understanding, **Example 5.5** presents some general interactions. Over time, it tends toward a neutral value, which decreases with passivity and increases if the A.T. is kept high over longer periods. In other words, in order to raise the A.T., the player has to fulfil his or her character's needs and participate in social life continuously. Such participation provides opportunities to raise the npcs' A.T. as well. Interestingly, the lead designer of the game, Shibamura Yūri, has pointed out that, while portraying this way of playing the game in the game guide and online, he did not expect the players to follow this guideline for more than a few minutes. Instead, he had hoped that players would start exploring and challenging the space of *Eva2* more extensively than they actually turned out to do.³⁸

Nonetheless, players apparently took the A.T. seriously. This and many other numerical variables attached to each character in the game world are directly linked to a second central feature of the game, namely the multiple-choice system called “Intelligent Material” (hereafter I.M.), which serves as the basis for the interactions with npcs (but also between them). *Neon Genesis Evangelions: The Complete Guide* lists 732 distinct I.M. commands, including anything from “look at X” and “kiss X” to “go to the toilet,” “hack the computer,” or “stop being a pilot.”³⁹ Interaction with or between npcs is generally conducted in an oscillating fashion, each character having a choice of up to four commands per turn. This choice is made by the game system based on several factors. Firstly, the distance between the characters influences the range of possible interactions. As I have visualized in Figure 18,⁴⁰ this distance is divided into far, middle and close range, delimited against anything out of range (like very far, not in sight or busy characters).

The shorter the distance, the more “physical” the interaction can become. Secondly, the numerous variables the characters are equipped with, such as the A.T. and npcs' opinion of the protagonist [*jimbutsuhyōka*], which consist of the three variables friendship [*yūjō*], love [*aijō*] and affection [*shin'ai*], have a major influence on the I.M. Another influential element is the respective characters' bodily condition. In the case of the protagonist, unfulfilled basic needs might limit the interaction possibilities and, in extreme cases, lead to a complete inability to do anything but eat, drink, go to the toilet or shower. Npcs tend toward more grumpy moods when they are interrupted in fulfilling their own basic needs. Fourthly, the “emotional state” of the player character has an influence on the interaction possibilities. In contrast to the evaluation of the protagonist by other characters, which can be accessed from the I.M. menu, his

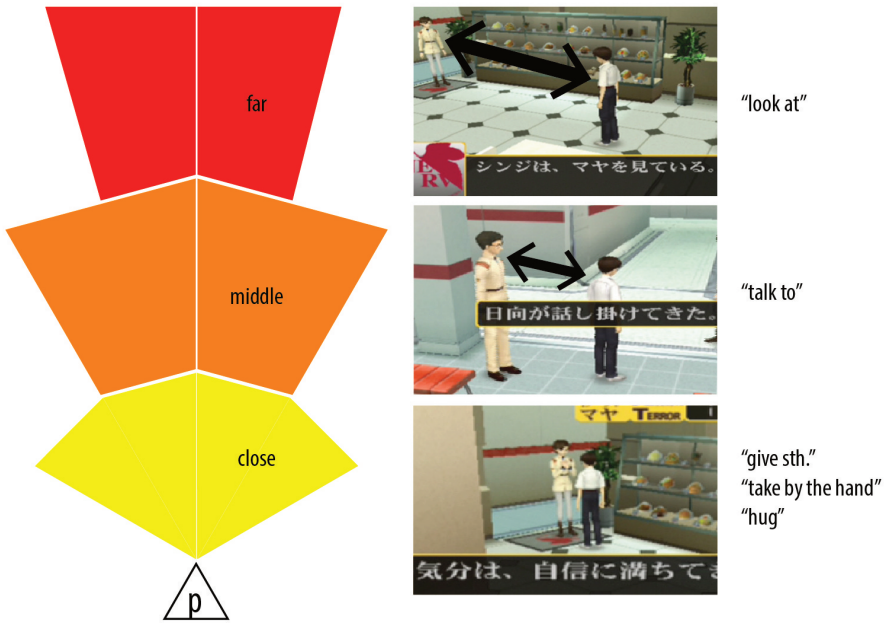


Figure 18. Distances in *Eva2*. Adapted from the *Complete Guide*.

or her own emotional state is not visible to the player and can only be guessed from earlier interactions.

Likewise, the npc responses to the player character's actions or communication depend on their set of conditions, variables and evaluations, including all of the above, but also a short- and long-term memory of earlier encounters. The quality of the interaction is dynamically reflected in the variables. Roughly speaking, one might say that dislike of the player character or an npc's bad emotional state lower the chance of "successful" interactions—success meaning either a raise in the A.T. or a strengthening of the personal relationship with an npc.⁴¹ Although the general evaluation of the player character varies among the npcs and depends on the scenario selected, all npcs can be potential targets to both aims.⁴² In either case, these various factors, which influence the success and progression of an interaction, hint at the difficulty of choosing action and reaction, which have to be carefully weighed against the known and suspected condition of the npc, the momentary situation and their potential reaction to certain approaches. The numerous, partially hidden variables and the computer-controlled I.M. turn the space of *Eva2* into a playing field for calculated, but never fully predictable social interactions.⁴³

In their numerical, calculated way, these interactions are an uncanny experience. In her analysis of Yumeno Kyūsaku’s novel *Dogura magura* from 1935, Nakamura argues that, in problematizing the question whether human beings can be reduced to “statistical beings,” Yumeno confronts the reader with a “mechanical uncanny,” or “a mode of fear that stems from the mechanization of the human body.” The existence of such beings “threatens what we perceive to be ‘natural,’ including personal memories and personal identities as a whole. The idea of a coherent self comes under attack, as bodies become both divisible and mechanical, and as characters are duplicated and become reduced to statistical beings.”⁴⁴ Nakamura’s terminology is likely inspired by Mori Masahiro’s essay on the uncanny valley, in which he examines the tipping point at which human-like robots reveal their “alienness,” and at which they suddenly become uncanny.⁴⁵ This sense of uncanniness in the face of the mechanical is strikingly present in the experience of playing *Eva2*. Where Adam Roberts identifies the uncanny of the replicants in *Blade Runner* as a result of the combination of machine-like strength and ruthlessness and childlike innocence, part of the uncanny valley in *Eva2* results from the conflict between the attempt of creating human-like characters engaging in emotional, affective interactions, and their existence as combinations of numerical variables. Moreover, after playing *Eva2* for a while, the player learns to predict some of the tendencies in these interactions and develops a “feel” for the situation and the most promising course of action. Guidebooks and websites provide hints or “recipes” that are likely to lead to an increase of the A.T. or other expected outcomes, like the one I have translated in Figure 19.⁴⁶

Shinji (S): Look at	→	Rei (R): Return look	→	S: Blush
S: Look at	→	R: Return look	→	S: Blush
S: Look at	→	R: Smile	→	S: Blush
S: Look at	→	R: Smile	→	S: Draw closer
...				

Figure 19. Dating tactics in *Eva2*.

This tension is not new in science fiction and can hardly be regarded as radical in the context of videogames, which necessarily reduce any kind of complexity to numerical, functional and winnable scenarios. However, the

uncanny experience in *Eva2* is amplified beyond literary or filmic practice, because the game makes it accessible to a playful exploration during which the player experiences his or her own gradual shift towards numerical and functional emotions. Furthermore, as opposed to most videogames, *Eva2* is particularly alienating because it defies our expectations about the numerical as a realm that can be mastered and controlled by the player. Its complexity creates alien characters neither fully compatible with human emotions, nor numerically transparent enough to be fully intelligible from a gamer perspective. Although some guiding principles for the interaction can be established, precise predictions of the outcome is impossible in most cases. This unpredictability is elevated by the third, arguably most radical element of the game, namely the npc A.I., which I examine in the next section.

Unreasonable Intelligence

According to the game's creator AlfaSystem, the A.I. "Kareru3," which controls the npcs in *Eva2*, is the rebuilt and enhanced successor to the AI system "Kareru2," which was used in their earlier game *Gunparade March*. AlfaSystem describes the game system as an attempt to facilitate a non-contradictory depiction of the game world and to leave most of the responsiveness to flexible algorithms rather than to determine it by a pre-scripted scenario. In addition to the features already familiar from Kareru2, the new system is designed to allow for "natural depiction (representation) of behaviour" [*shizen na kōdōbyōshanōryoku*] by focusing on "flow" [*nagare*] rather than on "momentary depiction (representation)" [*isshun no byōsha*]. Kareru3 allegedly allows the npcs to move through the game world independently and pursue their own respective interests and interactions with other characters.⁴⁷ The *Complete Guide* reveals that the npc A.I. is a complex system in which determining the course of action is influenced by a three-layered memory (short-, middle-, long-term) and a total of 16 different desires based on this memory or on bodily needs. These factors are, in turn, influenced by the npcs' other variable values (condition, mood, A.T., momentary feeling, evaluation of other characters), but also by time and place.⁴⁸ The lead designer responsible for *Eva2* and its A.I., Shibamura, betrays the complexity of these factors and their interrelation. While aiming for human-like behavior when modeling the A.I., he admits, many of the actual behavioral patterns the npcs display in the game world could not be predicted during the original modeling phase.⁴⁹ This reveals his willingness to leave certain aspects of the game world uncontrolled, or, as I have previously called it, unimagined. In the context of this chapter, the question is whether

the encounter with these unimagined npcs offers a disruptive or conflict-laden experience.

The disruptive effect of the A.I. can mainly be traced to the ways in which it deviates from our expectation of human-like or, in the terms of the developers, natural behavior. **Example 5.6** shows that the npcs are strangely unintelligible in their actions and interactions, often appearing repetitive, aimless and counterintuitive. Whether it is nightly visits to the (sleeping) player character's home without purpose, or the frequent instances of sitting down only to get up again repeatedly or entering a room and leaving it again immediately, the npcs seem unimpressed with day and night rhythms, with their own public appearance, their A.T. values or even with the enemy threat in general. Frequently, the player character's existence is plainly ignored, even if he or she is the only one present in a given space.

These traits of the npc A.I. contribute to a profoundly uncanny, alienating scenery, in which the protagonist is at times degraded to an observing background actor or even treated as an obstacle in the environment. Rather than offering human-like, "natural" behavior, Kareru3 confronts the player with something that at least approaches the unknowable. As complex, non-transparent numerical beings in human appearance, the npcs are subject to the player's experiments, calculations and playful engagements, similar to the way that Penny describes his robotic art *Petit Mal: An Autonomous Robotic Artwork*:

The primary goal of *Petit Mal* was to build a behaving machine that while entirely non-anthropomorphic and nonzoomorphic, elicits play behavior among people. Interaction is driven by curiosity and seemingly, a desire to pretend that the thing is more clever than it is. People willingly and quickly adjust their behavior and pacing to extract as much action from the device as possible, motivated entirely by pleasure and curiosity. (Interestingly, the only demographic who were unwilling to interact were adolescents). I saw the device, technically, as a demonstration of the viability of a reactive robotics strategy.⁵⁰

A similarly playful approach characterizes the interaction with the npcs in *Eva2*.⁵¹ Yet, at the same time, the uncanny of the non-transparent numerical processes, which escape calculated dominance and are sometimes the basis for behavior beyond reason, turn the npcs into a radical alien almost comparable to the Borg. In my opinion, the disinterested, seemingly aimless and unemphatic

movement of the npcs is reminiscent of the scenes on Borg spaceships and might even prompt a similar emotional response. The uncanny valley in the last section was a result of striving towards human-like appearance and interaction. The analysis of the A.I. suggests that this valley is deepened by the failed attempt at simulating human-like behavior and movement—it is no coincidence that Mori emphasized movement in his discussion, arguing that “[t]he presence of movement steepens the slopes of the uncanny valley.”⁵²

In addition, the already “other” space of the free turn appears to demand some, at least temporary intentionality of the player in order to last, regardless of its freedom and the more sandbox-like intentions of the designers mentioned above. This is the way that I experienced the game. Even in the most playful engagement, I had to maintain a certain level of A.T. in order to proceed in the story—the next, stronger enemy is always waiting to attack. Thus, the pressure of acting “effectively” in the social environment, despite the lack of definite knowledge of its mechanics, is considerable. Against this background, the experienced lack of any consistency or intention on the part of the npcs adds powerfully to the alienating effect of the game. Similar to that created by the indifference of the aliens in *EDF*, this effect stems both from the uncanniness of the opponents and from the gradually growing awareness of one’s own uncanniness. *Eva2* further highlights this effect in a similar way to *Rez*. In the scenario “Another World,” Tokyo-3 is a utopic enclave. Neither NERV, nor the angels exist, and the free turn lasts for as long as we choose, focusing on protagonist Shinji’s home and the school all children attend.⁵³ Here, the uncanny social interaction with the alien is the only occupation, and while the state of trance might not be reached, the player is finally invited to become part of its alien, unreasonable sociality. As such, it deploys a mechanism of pure play already identified in *Rez* even more radically, in order to assimilate the player to the uncanny, alien sociality of the *Eva2* npcs. In acting in the game world, the player creates a conflict with the prior, goal-oriented experience—once more, at the risk of absolute boredom.

Confronting the Unimagined

In this chapter, I have analyzed the conflicts arising in the aesthetic experience of a variety of videogame spaces themed around the alien other. As shown, such conflicts emerge mainly in two intersecting ways. On the one hand, *Rez* and *Eva2* playfully explore a contrast between different modes of engaging the alien world, oscillating between regular gameplay and its abandonment, or between judgment (analysis) and enjoyment (sensual experience). I would add that *EDF*

reverses this relation, presenting the player with a brutal task that is nonetheless enjoyed as a performance rather than for its content, causing a conflict between what the player sees and might judge based on common sense (destruction) and what he or she experiences (fun). That said, all cases show that these two sides of gameplay are, arguably, almost inseparable in the experience, neither existing exclusively. And yet, juxtaposing the two modes as two extremes, both games manage to establish a distance from the regular way of playing, which, in turn, helps the player question his or her teleological mind.

Abstractly, the analysis suggests that some of the most alienating experiences are afforded by the tension or conflict between intentional gaming and playfulness. In *Rez*, the tension between synaesthetic experience and analytic play reaches its climax in the Trance Mission, which lures the player into abandoning the task-structure of the game entirely. In “Another World,” the player of *Eva2* finds little to do. In these cases, the player could experience a kind of self-alienation specific to play. As already mentioned, Gadamer argues that human play always requires a task it can be directed towards.⁵⁴ In both games, then, the player cannot make sense of the aimless npcs—unless he or she stops playing humanly all together, abandons the game goal and becomes one of them. I doubt that this brings us closer to the inhabitants of videogame space. However, it achieves a kind of aesthetic autonomy that frees us from our common experiences and affords aesthetic novelty. What would a state of pure play look like, one might wonder after this experience, and start imagining such a radical alternative.

In this sense, all three games prove Rancière’s claim that autonomous aesthetic experience can be the beginning of a new humanity, of a new individual and collective form of life. Experiencing something new might translate into imagining a new alternative. This is not entirely surprising, given that Rancière develops his understanding of aesthetic autonomy by discussing Schiller’s concept of “free play,” which he regards as a suspension of common experience.⁵⁵ However, the extent to which videogames like *Eva2* and *Rez* approximate ideal play is as intriguing as the way in which they do so. Both games offer aesthetic novelty or free play in their abandonment of the conventional, goal-directed game. Yet, they never abandon the link to human play completely. Their free play experience is only meaningful in the context of the overarching task structure of the games, which turns even these spaces into potential training grounds for the analytically minded player. At this risk, however, they not only present us with a space of radical otherness but—almost

in a reversal of Jameson's fear expressed in the initial quote—equip us with the skills to experience it and let us enter. In this space, the hand-eye coordination crucial in *Rez* is solely deployed synaesthetically, and the social skills in *Eva2* are not directed towards anything but interaction.

On a different plane, *EDF* and *Eva2* confront the player with decisively uncanny, alien life. Its uncanniness is not a function of the appearance alone, but emerges from an interplay of visuals, action and, most importantly, vis-à-vis the player's own engagement with the game worlds. The ants in *EDF* are not only uncanny in their appearance and indifference, but also in tension with the player's lack of choice in the game. In *Eva2*, the tension between numerical, calculated play and emotional content on the one side, and the uncanny, alienating disinterestedness of the unintelligible npcs in contrast to the intentional behavior of the player on the other, is the source of the disruptive conflict.

An immediate question might be whether some of these disruptions are caused by a weakness in the software or are a result of intentional design, and whether this has an impact on the player's evaluation of the experience. After all, my alienation in the above-mentioned games could simply stem from faulty design—at least, the designer's claims about “natural behaviour” in *Eva2*, compared to the alienating results, may suggest such objection. Yet, I would like to oppose this view for two reasons. First, the designer's comments on the game suggest that this alienness of the A.I. was willingly accepted. In other words, the designers created the unimagined space of the npc A.I. intentionally, surrendering its actual arrangement and performance to the computer. On a certain level, this “will to chaos” may also be conceded to the designers of *EDF*, although I am unable to verify this. Second, such argument would imply that our judgment of any aesthetic experience depends entirely on our expectations. If the unexpected and alien is immediately understood as failure, then the idea of aesthetic conflicts makes no sense, because it would mean that we are incapable of experiencing novelty and are reduced to judging our experience based on pre-defined categories. The examples above, by contrast, show that aesthetic conflicts arise from a tension between the known and the radically other in the experience itself, in moments when our expectations are disappointed.

In sum, aesthetic conflicts and their experience as such require a certain amount of hospitality to otherness, as Adam Roberts calls it, on the part of the designers and the player. On the part of the designers, this submission to the unimagined appears to be a necessary condition for the alien. On the part of the player,

without such hospitality, without an interest in being disrupted aesthetically, the otherness of videogame spaces runs the risk of boring the player. Or, it might simply be regarded as “bad” game design, based on its entertainment value.

If their alienness is not dismissed from the start, the games analyzed above arguably add something to our aesthetic experience and potentially have an effect on what Rancière calls aesthetic distribution of the sensible. By confronting us with uncanny, unintelligible others, which require a different mode of perception, communication and judgment, the videogame spaces touched upon above point to novel concepts of community and “social” interaction, posing a question about how a different sociality or community could look and feel. Among them, *Eva2* is arguably the most concrete stimulus. Given recent developments toward biometric passports and databasified administration, *Eva2*'s relatively concrete sense of alternative community based on numerical quantification of all humanly characteristics and interactions appears as a radicalization and potential critique of the status quo, rather than a potential alternative to it. However, framing this social space as a human space, and juxtaposing it with the alienness of the npc A.I., it also creates a tension between the known and the other, pointing to a new terrain of aesthetic experience and thus a potential redistribution of the sensible.

Jameson concludes his inquiry of science fictional aliens with a question: “What [...] if the alien body were little more than a distorted expression of Utopian possibilities? If its otherness were unknowable because it signified a radical otherness latent in human history and human praxis, rather than the not-I of a physical nature?”⁵⁶ In both abstract and immediate conflicts, the analyzed games shift our attention toward such latent utopian possibilities by expanding our sense of what is perceived and experienced as common, what can be said and done. As such, they are aesthetic interventions in the political sphere.

Notes

1. Kirkpatrick, *Computer Games and the Social Imaginary*, 164.

2. For a general discussion of videogames as art, see Tavinor, *The Art of Videogames*. For other approaches on videogame aesthetics, see for example Deen, “Interactivity, Inhabitation and Pragmatist Aesthetics,” who applies John Dewey’s aesthetics to videogame play, or Burden and Gouglas, “The Algorithmic Experience: Portal as Art,” which examines the aesthetics of algorithmic play in the game *Portal*.

3. Munro and Scruton, “Aesthetics (Philosophy).”
4. Jameson, *Archaeologies of the Future*, 111, 120, 211.
5. Rancière, *Das Unbehagen in der Ästhetik*, 34.
6. Rancière, *The Politics of Aesthetics*, 12–13.
7. *Ibid.*, 39.
8. Muroi [室井] and Yoshioka [吉岡], *Jōhō to Seimei*, 110–11.
9. Goto-Jones, “Alien Autopsy,” 22.
10. Jameson, *Archaeologies of the Future*, 113–15, 140.
11. Roberts, *Science Fiction*, 118–23.
12. Manovich, “Data Visualisation as New Abstraction and Anti-Sublime.” Manovich’s reference to life may not be a coincidence. In his conclusion, he claims that “the real challenge of data art is not about how to map some abstract and impersonal data into something meaningful and beautiful—economists, graphic designers, and scientists are already doing this quite well. The more interesting and at the end maybe more important challenge is how to represent the personal subjective experience of a person living in a data society.”
13. For Japan, Tane Kiyoshi observes how otherness [*tashaei*] and its representation was already an important aspect of games at an early stage. He traces its first evolution to the transition between *Breakout* and *Space Invader*, showing how the latter turned the fix block obstacles of the former into an “actively” attacking [*nōdōteki ni kōgeki shite kuru*] enemy who thinks for itself (Tane [多根], *Kyōyō toshite no Gēmushi*, 23–24.) A similar evolution can probably be observed in the history of videogame design elsewhere as well. This desire for intelligent otherness later focused much attention on the growing field of artificial intelligence.
14. In a talk about “The Future of Game, AI, and Computer Graphics” at the annual meeting of the Digital Games Research Association Japan (DIGRA Japan) in Kyōto on February 25, 2012, Square Enix’s lead A.I. researcher Miyake Yōichiro (三宅陽一郎) discussed recent trends in game A.I., pointing out that in the pursuit of realism that characterizes a share of the contemporary first-person shooters, artificial intelligence is increasingly ‘humanized’ by adding accidental mistake routines. At the same time, he showed how the environment is increasingly enhanced by intelligent behavior of animals and plants.
15. Haraway, “A Cyborg Manifesto,” 149–51. For Haraway, the cybernetic organism is a symbol for the hybridity of human being and technology in fiction and lived experience “that changes what counts as women’s experience in the late twentieth century.” Its hybridity stems from its resolute commitment to “partiality, irony, intimacy, and perversity. It is oppositional, utopian, and completely without innocence. No longer structured by the polarity of public and private, the cyborg defines a technological polis based partly on a revolution of social relations in the *oikos*, the household.”
16. Dovey and Kennedy, *Game Cultures: Computer Games as New Media*, 109, 112.
17. This is generally discussed by terms like immersion and “flow.” According to the influential work of psychologist Mihaly Csikszentmihalyi, flow refers to an “optimal experience” in an “almost automatic, effortless, yet highly focused state of consciousness,” which is experienced by a wide range of people in diverse activities such as sports, art or work. Games and videogames appear highly compatible with flow, because they share many of its core conditions or elements listed by Csikszentmihalyi, for example: clear goals, immediate feedback, a balance between challenges and skills, a merging of action and awareness, the exclusion of distractions from consciousness, no worry of failure, the disappearance of self-consciousness, a distortion of the sense of time and that the activity becomes autotelic

146 Thought-Provoking Play

(Csikszentmihalyi, *Creativity*, 110–13). Since the first conceptualization, a broad variety of research in game studies and beyond has refined and adapted the concept.

18. *EDF* is a low-budget sf game developed by SANDLOT and published by D3 Publisher as volume 31 of its “Simple 2000 Series” for the PS2. According to its Nico Nico Pedia entry, the game had sold more than 100,000 copies by 2013.

19. Inoue [井上], *Gēmifikēshon*, 160, my translation.

20. *EDF* shows how the implicit or explicit nationalism in many videogames—which is not limited to Japanese productions—takes on a rather parodist notion. Such (possibly unintended) effect is even stronger in other titles of the Simple2000 Series, such as *THE Saigo no Nihonhei: Utsukushiki Kokudo Dakkan Sakusen* [*The Last Japanese Soldier: Taking Back the Beautiful Home Land*], in which the player has to reclaim the Japanese prefectures one by one against an overwhelming number of enemy soldiers, with each prefecture offering regional food specialties to collect along the way to victory.

21. Jameson, *Archaeologies of the Future*, 141.

22. *Rez* was developed by SEGA’s United Game Artists and released by SEGA for the Dreamcast and the PS2. In 2008, lead producer Mizuguchi Tetsuya released an HD version for the XBOX 360.

23. Game manual for *Rez*, 2–3.

24. Giant Bomb Wiki, “Rez (Game) – Giant Bomb Wiki.”

25. *Ibid.*; see also Wark, *Gamer Theory*.

26. Game manual for *Rez*, cover page.

27. The game’s designers acknowledge the influence of Wassily Kandinsky (see Sotenga et al. 2012), who is known for his experiments with synaesthetic art.

28. Manovich, “Data Visualisation as New Abstraction and Anti-Sublime.” The world in *Rez* does not at all appear arbitrary. Rather, the “synaesthetic” is a result of a conscious combination of highly compatible styles (trance music, abstract polygon visuals, wireframe environments).

29. Giant Bomb Wiki, “Rez (Game) – Giant Bomb Wiki.”

30. Wark claims that “[t]he only real problem with *Rez* is that it does not have enough levels. Victory is temporary, or rather temporal. You can defeat time in the game, but only for a time. And having won all there is to win, boredom looms...” (*Gamer Theory*, 138). After several hours of intense play, which brought me nowhere near mastery, I have to admit that I do not share this experience yet.

31. Axem Rangers, “Rez Review for Dreamcast: No Matter How Hard You Try You Will Still Lie Trapped within the System.”

32. Adorno, “Culture and Administration,” 116; see also Geuss, “Art and Criticism in Adorno’s Aesthetics,” 302.

33. Penny, “Twenty Years of Artificial Life Art,” 197.

34. *Eva2* is a PS2 adaptation of the successful anime *Shinseiki Evangelion* [*Neon Genesis Evangelion*] directed by Anno Hidaki (庵野 秀明), which aired between 1995 and 1996 in Japan. The game is produced by AlfaSystem, BANDAI and GAINAX, in collaboration with the anime’s director Anno Hideaki. According to Anno, the game allows each player “to create his or her own, individual *Evangelion 2*” (Funatsu [船津], “Bandai, PS2 ‘Shinseiki Evangelion2’ Kansei Kishakaiken Kaisai,” my translation). By granting a large variety of choices the social interactions in the free turn, the game’s “sandbox-like” system allegedly

allows the players to fulfill their desire and to set their own goal freely or alternately to abandon the notion of a specific goal overall (Shibamura [芝村], “Shinseiki Evangelion 2: About”; AlfaSystem, “Shinseiki Evangelion 2 Seihin Shōkai”). A fan site describes the game as being “much more a simulation than a game. You cannot only play Shinji, but also side characters (even Aoba! [A minor “computer technician” character in the franchise; mer]). 2000 hours of play guaranteed. The speed is awful, but at the same time, it features a high degree of freedom. You can for example fight Angels in Eva, run berserk, assassinate whomever you despise, stalk or be stalked, create a harem, get cheated on, go fishing with dad, etc.” (suba, “Eva2 Sūpā Kōryaku: Hajime ni,” my translation).

35. Depending on the scenario’s protagonist, the role the player takes during the combat turn varies. As one of the pilots, he or she is directly responsible for piloting the Eva. In most other roles, the player is restricted to tactical support or spectatorship.

36. NERV is a paramilitary organization entrusted with the research on and the deployment of the Eva against the attacking angels.

37. Game manual for *Shinseiki Evangelion 2*, 6. In other guidebooks it is also referred to as an indicator for the character’s general attitude and behavior, ranging roughly between passive and active (Nakajima [中島], Kariya [刈屋], and Miyazaki [宮崎], *Neon Genesis Evangelions: The Complete Guide*, 26–27) or “something like the confidence for leading a life in society” (Katō [加藤] and Tamura [田村], *Shinseiki Evangelion 2 Kōryaku Gaido*, 30, my translation.).

38. Takenami [竹並], *The Answer of Evangelions*, 16.

39. Nakajima [中島], Kariya [刈屋], and Miyazaki [宮崎], *Neon Genesis Evangelions: The Complete Guide*, 188–251, my translation.

40. *Ibid.*, 16.

41. The A.T. value influences the overall chances to win against the invading angels. Even non-pilots have direct or indirect influence on the battle. Katsuragi Misato, for example is responsible for strategic and tactical decisions. Akagi Ritsuko develops new weapon systems and other helpful technologies if her A.T. stays above a certain limit. However, fan-based discussions of the game reveal that raising the A.T. in preparation for battle is only one possible approach to the free turn. Engaging in romantic relationships with npcs is arguably an equally if not more popular aim among players (suba, “Eva2 Sūpā Kōryaku: Hajime ni”).

42. Notably, some factors diversify the characters with regards to their “numerical behavior.” For example, it is more difficult to influence the A.T. and other variables of older characters like Ikari Gendō and Fuyutsuki Kōzō. The same goes for the start values of the “desires” of the npcs, some of which vary (Nakajima [中島], Kariya [刈屋], and Miyazaki [宮崎], *Neon Genesis Evangelions: The Complete Guide*, 37, 178).

43. This is a stark contrast to the anime, of which Japanese feminist science fiction writer and critic Kotani Mari (*Seibo Evangelion – A New Millennialist Perspective on the Daughters of Eve*, 28–29) argues that the characters carefully play or enact a paternalistic family in what she calls a “family game.” In the free turn, the videogame employs central elements of dating simulation games. The free turn (more or less) abandons gender boundaries, leaving only some difference between same-gender and cross-gender opposites in the factor that influences the npcs’ behavior (Nakajima [中島], Kariya [刈屋], and Miyazaki [宮崎], *Neon Genesis Evangelions: The Complete Guide*, 43). When compared to the anime, the game also serves as a parody, replacing the seemingly inescapable psychological struggle and tensions between the characters with a set of numerical values at mercy of the player.

44. Nakamura, “Horror and Machines in Prewar Japan” 369, 377.

45. Mori, “The Uncanny Valley.”

148 Thought-Provoking Play

46. suba, “Eva2 Sūpā Kōryaku, Furi tăn,” my translation.

47. AlfaSystem, “Shinseiki Evangelion 2 Kaihatsu Nikki, dai 1wa.”

48. Nakajima [中島], Kariya [刈屋], and Miyazaki [宮崎], *Neon Genesis Evangelions: The Complete Guide*, 34–45.

49. Takenami [竹並], *The Answer of Evangelions*, 40–42.

50. Penny, “Art and Robotics: Sixty Years of Situated Machines,” 152.

51. This playfulness is also described in player guides. Beyond the “conventional” approaches to the freedom of the game world suggested in the *Complete Guide* (Nakajima [中島], Kariya [刈屋], and Miyazaki [宮崎], *Neon Genesis Evangelions: The Complete Guide*, 164–79), which include raising or lowering the A.T. as far as possible, enjoying school life, or aiming for a romantic relationship with a senior staff member of NERV, such gameplay includes “do not talk to anybody/only talk to PenPen” (a penguin Katsuragi Misato keeps as a pet) “create a harem,” “homosexual pairing,” “how many people can I assassinate,” “refuse to work when playing Misato,” “move in with Rei as Shinji,” etc. (suba, “Eva2 Sūpā Kōryaku: Hajime ni,” my translation).

52. Mori, “The Uncanny Valley,” 99.

53. The complete guide recommends using this scenario for experimenting with how to increase the A.T. most effectively (Nakajima [中島], Kariya [刈屋], and Miyazaki [宮崎], *Neon Genesis Evangelions: The Complete Guide*, 143.).

54. Gadamer, *Truth and Method*, 107.

55. Rancière, *Das Unbehagen in der Ästhetik*, 40–43.

56. Jameson, *Archaeologies of the Future*.

Violent Technologies

In the previous chapters, I have shown that videogames can challenge fundamental assumptions about common life, both regarding the structural hegemony of linear time and regarding the dominant, teleological way of engaging in everyday activities. In this final analytic chapter, I would like to take a closer look at the status of player action, arguably one of the most central features of the medium. Action is also a central political term for many theorists and thinkers, because it is the way in which we can influence society most directly and deliberately. As mentioned above, Geuss favors a broad and abstract understanding of political action as action capable of creating a new situation.¹ If we accept the broad understanding, playing videogames can be political in terms of a shared game space, if the actions of a player influence the ways in which the participating community of players engages or can engage with the game space. This layer, while possibly also applicable to single-player games, mostly concerns multiplayer game spaces. Another possible political significance of player action is its potential to influence the ways in which the players engage or can engage with their environment and the societies or world they live in—that is, if the experience made or lessons learned from playing are transferred to other non-gaming situations.

Arendt, in contrast, defines political action more narrowly—and, radically—as characterized by novelty, “boundlessness” and “inherent unpredictability” and based on human equality in plurality. For her, political action is about appearing or performing politics freely and publicly, thereby establishing something greater than our private, individual lives.² Arendt goes as far as to assert that freedom is the reason for people to live together in political organization in the first place, adding that political action is the only way in which this freedom can be experienced. As such, political action has to be without external purpose, and the purpose of the political, in her words, is “to establish and keep in existence a space where freedom as virtuosity can appear.”³ While almost converging with the concept of play, this aspect of her political philosophy invites substantial

critique of contemporary politics and its end-oriented dimension.⁴ Regardless, in Beiner's analysis, Arendt's insistence that this kind of political action or political space has diminished in modernity turns it into a tool of critique.⁵ In addition, her insistence that the idea of public action and performance is tangible puts Arendt's conceptualization in touch with Virilio's idea of creative play and his fundamental challenge to videogames, which I outlined at the beginning of the book. In a more detailed fashion, Claus Pias rejects the idea of the player as free subject in videogames. He argues that videogame contingency and emergence is merely an effect of the illusion videogames create by disguising their programming as a black box. He shows that in action games, the player is a device interconnected with the computer; playing requires an accommodation that affords time-critical input.⁶

This final analytic chapter seems like a good moment, then, for returning to this challenge. Asking whether players travel, or whether they are traveled, Virilio sharply distinguishes between active creativity and passive reaction, challenging the possibility of action in videogame space wholesale. Arendt, likewise, distinguishes the two sharply, arguing that behavior is the dominant mode of human relationship in modernity, conditioned by bureaucracy and the dominance of the standardizing, equalizing "society" and its conformism. To Arendt, the victory of the conforming social over the pluralist political is deeply troubling, because "[t]he end of the common world has come when it is seen only under one aspect and is permitted to present itself in only one perspective."⁷ Most explicitly, she discusses the threat that the ever more dominant bureaucracy and a pseudo-science that produces computerized, calculated predictions of the future, pose to the political landscape.⁸

In a fully developed bureaucracy there is nobody left with whom one can argue, to whom one can present grievances, on whom the pressures of power can be exerted. Bureaucracy is the form of government in which everybody is deprived of political freedom, of the power to act; for the rule of Nobody is not no-rule, and where all are equally powerless we have a tyranny without a tyrant.⁹

In a sense, then, both thinkers criticize a general trend toward rule-based behavior, which videogames only stand for symbolically. More recently, David Graeber updates these warnings with his examination of the increase in bureaucracy even in the face of—or rather in concert with—the trend towards "deregulation."¹⁰ Whether we agree with Virilio and Arendt's ideal of the political or not, the overtly pessimistic analysis of the increasingly tyrannical

bureaucracy today suggests at least that alternatives might be worth exploring. What better place to start looking in than a totally rule-based (totally bureaucratic) medium. The question for this chapter is whether videogames can offer spaces in which alternatives to the bureaucratic status quo can be hinted at or even experienced and explored? Can they confront us with conflicts that point toward freedom and political action in a novel sense—despite their existence as “private” endeavors and precisely because they are totally rule-based media?

This question gains additional force if we consider that videogames are, in many ways, strongly entangled with one of the basic pillars of bureaucracy, namely violence. In well-known games from *Doom* to *Call of Duty* or *Battlefield*, proceeding means violently defeating the enemy. In *Lost Planet 2*, for example, the player does not “discover” the planet, but “conquers” it. These are merely some examples of a larger tendency. As Schrank puts it, “[m]ainstream games are designed for players to overcome the ‘other,’ alterity, and difference.”¹¹ From a theoretical perspective, violence is a widely discussed problem. Both structural and physical violence are generally regarded as crucial for enforcing regulations and maintaining the rule-based order.¹² Both are also at work in destructive and harmful ways in society, as well as in videogames, for example with regard to gender, race and the discrimination of minorities.¹³

Theorists either reject violence completely, or consider it one of the ways for the powerless to regain power or agency. Reviewing the existing literature, Vittorio Bufacchi goes as far as to claim that “violence is, and has always been, the essence of politics.”¹⁴ With regards to its emancipatory potential, Frantz Fanon argues that disorganizing society in order to decolonize it is always a violent process. In his view, the naked violence of colonialism “only gives in when confronted with greater violence.”¹⁵ Like Fanon, many influential thinkers have regarded violence as political action because it seems to share with political action the effect of transgressing or interrupting “what otherwise would have proceeded automatically and therefore predictably.”¹⁶ For thinkers like Georges Sorel, Frantz Fanon or Jean-Paul Sartre, this turns violence into a potential factor or even a legitimate requirement for radical change.¹⁷ Such notions of revolutionary violence have been promoted repeatedly as a promising or even the only possible answer to structural, systematic or individual violence. As Neil Roberts points out with regards to Sartre,

[v]iolence is fundamentally an activity emerging from the category of agency. Agency here refers to one’s ability to act. Beyond simply

questions of acquiring control or potency, it involves a person's ability to make decisions. The capacity for agency, therefore, represents an important dimension of freedom and freedom's connection to anti-colonial violence. Those lacking subjectivity perform violence in order to gain agency.¹⁸

In contrast, Hannah Arendt rejects any kind of violence. She contrasts violence, understood as instrumentally enhanced natural strength, with properly political power, understood as the ability to act in concert.¹⁹ In *The Human Condition*, Arendt claims that “[p]ower is what keeps the public realm, the political space of appearance between acting and speaking men, in existence.” Violence, in her understanding, can destroy power but never become a substitute for it.²⁰ Bhabha summarizes some of the existing positions and points out the complexity of the discourse:

For Arendt, Fanon's violence leads to the death of politics; for Sartre, it draws the fiery, first breath of human freedom. I propose a different reading. Fanonian violence, in my view, is part of a struggle for psycho-affective survival and a search for human agency in the midst of the agony of oppression. It does not offer a clear choice between life and death or slavery and freedom, because it confronts the colonial condition of life-in-death.²¹

One important question for this chapter, then, is, whether violence in videogames offers any emancipatory potential with regards to free or political action? Do videogames succeed in reconfiguring the concepts of rules, action and violence, or their relation? Is violence involved in the production of disruptive conflicts that allow the player to re-conceptualize action from the ground up?

In order to find some foundation for the empirical analysis, I would briefly like to discuss what kind of violence is possible in games in the first place. Violence is both a concrete, physical or psychological, and an abstract, theoretical term. With regard to the latter, Bufacchi observes that the etymologically correct meaning of violence, namely “passionate and uncontrolled force” is often combined with that of “violation” or infringement, “because acts of excessive force frequently result in the violation of norms, rights or rules.”²² On yet another plane, one might distinguish between instrumental violence and intrinsic violence.²³ Whereas instrumental violence refers to violence as a means

to an end, acts of intrinsic violence contain inherent value and operate outside the means-ends continuum.

These four dimensions of violence—concrete and abstract, as well as instrumental and intrinsic—are useful in the following analysis insofar as they allow for a better understanding of the kind of violence experienced in game spaces, and of the way in which violence might be connected to action. With regards to the concretely physical or psychological dimension, one might point out that the virtual, voluntary character of videogames prevents them from becoming violent spaces. After all, they are “just a game.” Switching off the console solves all problems and violence is never immediate, never a physical threat to the player. It would be mockery to compare voluntary gameplay with the situation of the physically, psychologically or structurally oppressed, on the grounds of its strictly rule-bound character alone. Yet, even if not direct, I maintain that, to the extent to which violation of common norms, as well as physical violence is carried out by the player in a game world, it can be recognized as such. What is more, violent action is frequently a preferred or the only possible means of reaching the goal in videogames. Such violence is, primarily, instrumental.

Needless to say, violent videogames are not able to convey the experience of physical violence, war or oppression in an experientially “realistic” way to the player.²⁴ However, because they are recognized, violent action in games may be accompanied by an affective—or “psycho-affective”—quality. Tavinor goes as far as to claim that “[f]ictional worlds seem to allow us a greater access to some kinds of emotionally provocative situations, given that acting in a fictional world lacks the cost of acting in the real world.”²⁵ Since the immediate consequences do not extend into the outside world, players can take pleasure in violations of intended rules, or physical violence in games—or, at least, they do not need to apply the same evaluation to such action as they would outside of the game space.²⁶ Instead, the significance and status of violence has to be established and embedded anew.

If this is the case, I wonder if videogames might not also offer new perspectives on political action through their treatment of violent action and violation within their confined boundaries. Do they offer spaces in which Arendt’s claim, that total bureaucracy leads to complete powerlessness, can be experienced? If so, maybe these spaces also confront players with stimulating conflicts capable of reorienting our perspective on action and violence. Could the rule-based character of videogames offer new ways to challenge the rule-dominated

character of the present? The following analysis of *Metal Gear Solid* indicates that conflicts between action and rules indeed reconfigure and restructure our perspective on these issues in a novel, stimulating way.

Control

In the popular horror series *Biohazard* [*Resident Evil*], the player fights undead creatures infected with a highly contagious virus. Traversing barren lands and seemingly abandoned villages in *Biohazard 4* [*Resident Evil 4*] (2005), one is suddenly confronted with an assault from all directions. But despite the apparent inferiority of the player character, who, at least in terms of quantity, stands alone against an army, victory is possible thanks to superior abilities, firepower and healing skills. While offering the player the terrifying horror of unexpected, ruthless attacks from behind, the game nevertheless makes him or her the intruder. The game *The Earth Defense Forces* discussed in the previous chapter makes this tangible in its juxtaposition of the invaders, which elegantly traverse the terrain and structures, and the defending human player character, whose collateral damage destroys whole cities.

In such games, meaningful obstacles are created through the difference between the player character's abilities and the enemy. The player has to conquer the environment, often by destroying all enemy forces. Such a difference is also central to the *Metal Gear Solid* (hereafter *MGS*) series.²⁷ However, in this case it is deployed in a slightly different way that prompts critics to regard it as a critique of violence and a counterexample to conventional shooters.²⁸ As Derek Noon and Nick Dyer-Withford observe, *MGS* "emphasizes unobserved movement, subterfuge, camouflage, evasion, trickery, and out-smarting enemies, not just shooting everything that moves."²⁹ In the first section, I would like to examine in more detail this characteristic gameplay, which the lead designer Kojima Hideo has dubbed "tactical espionage action."

MGS presents the player with a consistent world and an ongoing narrative about great conspiracies during and after the Cold War, putting him or her in control of a genetically and technologically enhanced protagonist, who has to help avert a terrorist threat to global security in a one-man, covert operation.³⁰ A hybrid between shooter and adventure, the series emphasizes stealth and invisibility. The player has to direct the protagonist through hostile terrain, evading enemy soldiers, traps, as well as the vicious nature he is surrounded by. As **Example 6.1** indicates, *MGS* creates the gap between player character

and enemy abilities mainly on two planes, namely sensual perception and action capabilities.

In terms of sensual perception, the player character, simply put, sees and hears more than the enemy. Part of this advantage originates from the combination of the various viewpoints the player can assume, like third person, first person and limited bird's-eye view, and his ability to use the environment as cover.³¹ The other part of the superiority stems from enhancements of technological and science fictional nature, like a map on which the enemy positions can be monitored in real time (*MGS1* and *MGS2*), several types of goggles (*MGS3*) and other visual enhancements (*MGS4*), as well as active radar and a directional microphone (*MGS3*). Such enhancements also include the famous card boxes the player-character can carry and "put on" when in need of disguise in warehouses and storage rooms, as well as means of impersonation and camouflage in the form of a wide range of "suits" and "face paints" in *MGS3*. In *MGS4*, the camouflage is realized science-fictionally in a body suit called "octocamo," which blends with the environment after a few seconds of idleness. These sensual aspects are complemented with a difference in action abilities and behavior. In general, the enemies follow pre-defined routines and are astonishingly noisy, lazy and relaxed, given the circumstances. The player character is far more flexible and agile, and is able to traverse the environment silently and stealthily. In addition, a considerable part of his capabilities of forceful action are silent and can be executed from a distance and without being spotted. Moreover, the games make use of the distinct features of videogame space and the play situation. Figure 20 and Figure 21 offer an abstract schema of the differences the game generates between the player (character), and the computer-controlled enemies, on the various levels of visual sensory.

Generally, *MGS* confronts the player with a series of more or less contained areas controlled and patrolled by human and robot enemies, which have to be traversed in order to proceed. To understand the significance of stealthy movement for the gameplay, it is important to know that discovery is a painful, time-consuming and often deadly experience. **Example 6.2** shows that discovery is highly likely to result in player character death, or in time-consuming shoot-outs and extended run-and-hide, depending on the title and the situation. The player character is spotted when crossing an enemy's path or line of sight, or making suspicious noises at close range. To avoid detection, the game challenges the player to move carefully, to use the environment as cover, to perceive more than the enemies, to recognize their routines and to

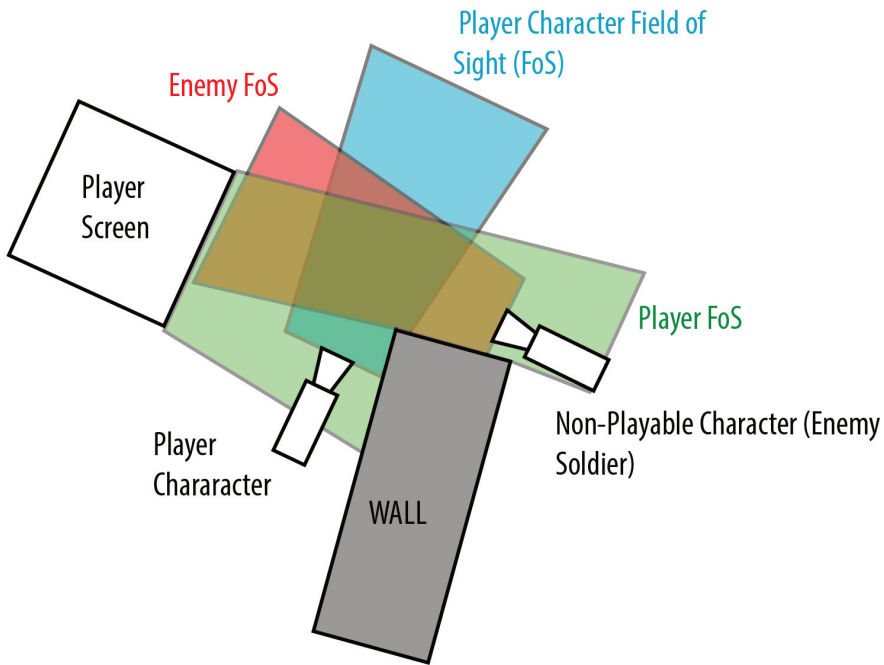


Figure 20. Player has the visual advantage due to the third-person angle on the game world. The enemy soldier is in his field of sight (FoS) although neither the player character, nor the enemy see each other.

know when to move and when to hide.³² Although the player has superior means and often the benefit of the doubt, the gameplay is nevertheless a thrilling experience, because, in most cases, one can never be sure of all potential threats. Putting the opposing forces on rails—more limited than those of the protagonist—the game tasks the player with spotting and reading enemy routines correctly and finding tactical solutions for traversing an environment full of enemy sentinels, traps and other obstacles. In this sense, *MGS* may be said to offer an experience of bureaucratic tyranny and its totality of rules. The player cannot but learn to understand the system, “behave” according to its norms and rules, and adjust to its dynamics.

This, in turn, makes *MGS* an example of what Galloway, based on a short *Postscript on the Societies of Control* by Gilles Deleuze, calls “allegories of control.”³³ Galloway believes that “what Deleuze defines as control is key to understanding how computerized information societies function.” For him “video games are, at their structural core, in direct synchronization with the

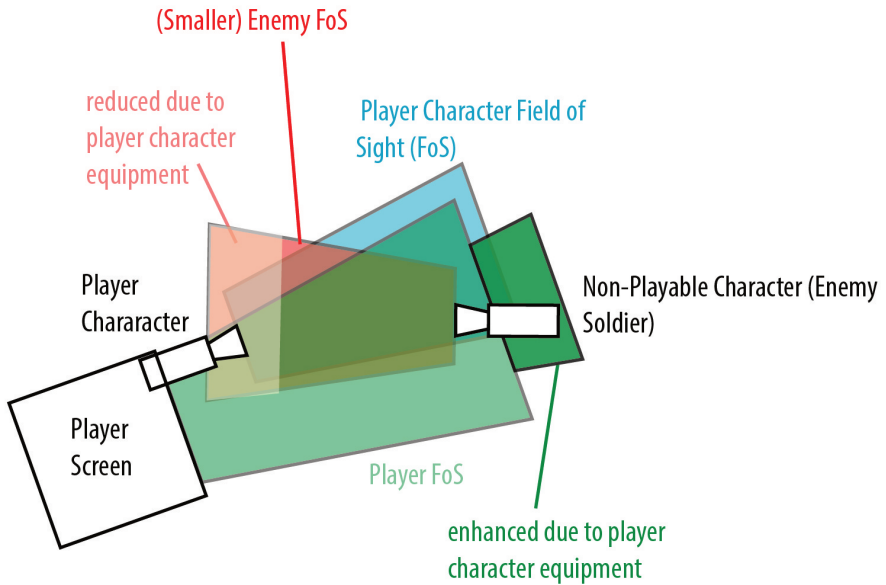


Figure 21. Player has the visual advantage due to technology the player character can equip (goggles, radar, etc.), while the enemy visual field is shortened by other technology (camouflage suits, etc.).

political realities of the informatic age.” Such “allegories of control” signify universal standardization because they substitute ideological critique by the logic of informatics control, identified as numerical representation, modularity, automation, variability and transcoding. While pointing to the similarity between the logics of videogames and social control, he also claims that, due to this proximity, they can make transparent the otherwise hidden “boring minutiae of discipline and confinement that constitute the various apparatuses of control in contemporary societies.” For Galloway, games like *MGS*—among other exceptional works he mentions—stand out because, here, “to play the game means to play the code of the game. To win means to know the system. And thus to *interpret* a game means to interpret its algorithm (to discover its parallel ‘algorithmm’).” Such games epitomize “the flatness of control allegory by unifying the act of playing the game with an immediate political experience.”³⁴

This rather abstract statement may be best understood in the context of the gameplay analyzed here. The *MGS* games confront the player with a rigid system of rules that could be interpreted as similar to the bureaucratic control

in contemporary societies. Equipping the player character with a more flexible, stealthy set of abilities, it suggests that rule-based systems can be challenged covertly. As long as they are not confronted, the enemies do not become hostile and might best be regarded as “requisites,” strictly following the algorithmic rules. With the help of careful observation, their rigid and predictable routines can be turned against them. In this case, both structural and physical violence are circumvented. Against the background of Arendt’s conceptualization of action, one may say that although the player is not free, his or her limited possibilities to resist the structural violence of the opposing rules stems from the fact that, within this videogame space, the system and its sentinels obey the even more rigid rules of Arendt’s tyrannical Nobody.³⁵

Recently, Japanese media scholar Itō Mamoru has reviewed this idea of the control society in light of the increasing blending of control society with digital technologies. He describes contemporary society one in which “an interface is put in between human beings and their environment, and which, by way of an information feedback transferred by high-end computers, assimilates natural environment, social environment and even human spirit and body into their circuit. This circuit, in turn, is equipped with a system that can control all things.”³⁶ Against this background, the experience of *MGS* can be described more accurately. The games do not just make the tyranny of rules explicit and part of the player’s experience of the game world. They do more than that by confronting the player with a conflict generated by the difference between their rule-based world and the player’s perception and expectations of such world based on everyday life experience or common sense tangible. The games are full of moments in which the player is clearly pointed toward the fact that what you see is not what it seems. The relation between visuals and detection is a good example of this. Since there is no explicit tipping point for enemy detection, conventional gameplay is characterized by an almost tactile progression through the environment based on careful observation. As **Example 6.1** shows, the distance and circumstances at which one is safe from enemy detection is not a “realistic” matter. Instead, knowing the tipping point is a question of experience and of applying a kind of “double view” similar to that at work in the *Gundam* shooting games discussed in Chapter 3. In order to win the game and to beat the system, the player has to know what he or she sees and, at the same time, know what it actually means within the rigid boundaries of the game space. However, the *MGS* games do not simply put an interface between player and the game world—as all videogames do in one way or other.

Rather, they make this interface itself a tangible part of the game world and the player experience, even putting it under his or her control to some extent.

This is done intentionally, as the recurring and often central motives of structural violence, standardization, information control, etc. in the series—in *MGS2* and *MGS4* in particular—suggest. In *MGS2*, the world is under the control of a mysterious group called the “Patriots” [*aikokushatachi*], who have long implemented systematic, computer-based control and information censorship over society. In the final showdown, the protagonist and player character Raiden confronts the genetically manipulated Solidas, who threatens society in the attempt to free himself of the grip of these ubiquitous powers and change his genetically pre-designed fate. In *MGS4*, this motive is repeated. The game portrays a future world dominated by and dependent on a global war economy, sustained by a ubiquitous computer system that controls and monitors all human soldiers and their access to weapons. Private contract armies under the surveillance of the system are waging small-scale wars in many areas of the world. Controlling a rapidly aging Solid Snake, the protagonist known from *MGS1*, the player tries to avert his genetic brother Liquid’s revolutionary plans to take over the system, thus indirectly supporting the status quo.

This ambivalence of the player character’s role is amplified by the conspiracy plot of the games, which keep the player in uncertainty about the meaning and status of his or her own actions in the world of *MGS* (although some kind of heroic undertone is never abandoned completely). More than once, the player is directly confronted with this uncertainty and asked to reflect on it. Arguably, the most direct address can be found in *MGS2*, as **Example 6.3** shows.³⁷ In the last parts of the game, the entire mission of the protagonist Raiden is revealed as an orchestrated “play” [*enshū*] aimed at generating an “extreme situation.” The scenario is explained to be the last test-run for a new training method for the creation of super soldiers. This message has a double meaning, because its content describes the design recipe for all *MGS* titles, ever. To enjoy the game, one has to play the protagonist’s role to the end [*yakuwari o hatasu*]³⁸—an unquestioning obedience, which is commended as a major contribution to the success of the test, and which is a necessary condition for playing the game in the first place.

In this way, the game confronts the players with their own “behavior” in a total, rule-based structure and confronts them with the fact that there is no alternative to playing, that there are no other options to proceed than the ones determined

in advance by the designers, even in the face of obvious betrayal. Yet, when reflecting his lack of own will in the epilogue, Raiden, whom the designers establish as a representation of his target audience of masculine videogame players,³⁸ decides to take things in his own hands and find a better way to live than by merely obeying rules, encouraged by none other than Snake, the veteran soldier of *MGS1*, who has experienced such powerlessness reduction to an obedient tool himself.

Overall, *MGS* offers an experience of totally rule-based environments that differ from our everyday life experience and makes their mechanisms not only visible, but subject to player experience and, in a more limited way, control. While suggesting ways of resisting and overcoming these rule-dominated situations, the games frequently confront the player with the fact that they cannot escape the structure. The player character is, ultimately, part of the overarching videogame space and bound to its rules. In both cases, the game achieves its effect by generating conflicts in the player's experience of the game space. One conflict emerges between the rule-based game world and the player's expectations of its behavior based on everyday knowledge. This conflict can seemingly be overcome easily, as it merely requires adjusting to the game routines and "learning" how to resist or side-line them. Gradually mastering the game space and its controls, the player is alerted to his or her own role in this space and to the fact that there is no escape from that role.

In this, the series offers an intriguing combination of time and space in the context of my earlier emphasis on acceleration and speed. Virilio claims that the negation of space due to the development of means for instantaneous action at a distance leads to the possibility of a "*direct encounter of every surface on the globe.*"³⁹ *MGS* instead offers a spatial visualization of the blind spots every complex system has due to its rigid rules, and proposes using the advantage of agility and technology to identify and exploit them, often in a time-consuming fashion. Although these strategies remain behavioral, to speak with Arendt, because they rely on the rules of engagement, the designers offer a disruptive experience in those moments where they exploit this limitation in a critique of obedience in contemporary society. By highlighting this fact and consciously confronting the player with his or her limitation in the game and in society, the designers turn the rigidity and conformism of the videogame space into a reflexive moment geared towards disrupting the player.

Affect

In most violent videogames, violence is, primarily, a means to win the game. The player is often confronted with an existential enemy in Carl Schmitt's sense,⁴⁰ i.e. one who negates the player's existence and has to be eradicated because he prevents progression in the game. However, games do more than that. As Koster pointedly argues, "[m]ost games encourage demonizing the opponent, teaching a sort of ruthlessness that is a proven survival trait."⁴¹ Among many others, this is the case in *Front Mission* or the previously mentioned *Earth Defense Forces*, where the player has to occupy the arena or stage totally in order to proceed. In the *Front Mission* series, enemy pilots have to be killed, even if they abandon their wanzers and do not pose a real threat any more. In conventional first-person shooters, enemies can be ignored temporarily, but remain active attackers, at all times in pursuit of the player. As argued above, *MGS* can be regarded as a partial critique of seemingly unavoidable violence, promoting non-violent solutions during large parts of the games. However, on another level, the range of means in *MGS* is also deployed to highlight non-instrumental, affective aspects of violence, thus catering to a growing importance of affect in society and research.⁴²

While promoting non-violent evasion, the thrill of the covert operations is amplified by the availability of a broad range of ways to deal with a situation. Both with regards to long-term strategy and situation-based tactics, the player can choose between evading the enemy, applying non-lethal force or disposing of the enemy by lethal means. Depending on the game, the balance between these methods shifts. During large parts of *MGS1*, lethal force is more or less the only possibility for solving situations where stealth is not an option, as in the end boss fights. This changes from *MGS2* onwards, where even in an enemy encounter, non-lethal force like knocking enemies out or anesthetizing them is available to the player. As **Example 6.2** shows, such action may cause suspicion upon discovery of the unconscious bodies, but remains without severe consequences. In contrast, lethal force, if spotted, results in reinforcements and alert status, making it difficult to move for a painfully long period of time. Moreover, as Irie points out, dead bodies remain in the field without disappearing, thus forcing the player to go to the trouble of hiding them from enemy sight.⁴³ During crucial parts of *MGS2*, in which the enemies are on guard and report to base frequently, lethal force (or direct discovery) leads to immediate suspicion and, if not covered up successfully, to an almost invincible reinforcement of enemies, making it even more difficult for the player to

navigate through the environment. The game also rewards a non-lethal play-through with the ironic code name “pigeon.”⁴⁴

MGS3 and *MGS4* most actively promote non-lethal gameplay as a difficult achievement, rewarding successful non-lethal play-through within the limits of several other restrictions not only with a special rank, but also with additional items at the end of each game.⁴⁵ At the same time, both games make escaping the enemy in alert phases easier, due to the vastness of the environment and the relative sufficiency of ammunition and weapons. Given the time-consuming and frustrating experience of discovery, it is fair to say that the preference is still for stealthy, non-lethal solutions.⁴⁶ However, the overall readjustments to the balance between all three possibilities puts a stronger emphasis on forceful and lethal action, offering a novel and a real choice between almost equal alternatives, with advantages changing according to each particular situation.

This tendency toward an equality of means seems to reinstate violence as a central element in the gameplay. As such, it might be said to converge with conventional shooters. The forum post quoted in footnote 46 points this out, remarking that “[p]eople complained that *MGS4* could be just blasted through.” However, by offering an increasingly real choice in terms of means, *MGS* also adds meaning to violent action beyond its reduction to an instrumental level. By making violence avoidable, the series foregrounds its psychological, intrinsic aspects and the destructive physical effects violence has. In other words, the choice of means potentially creates an awareness of the content of these means. It confronts the player with the fact that any action taken is, at least in part, not only behavioral but—within the limits of the videogame space—also either deliberate and intrinsic, or a result of a lack of control (skills) and power on the part of the player.

In overwhelming, confusing situations, outwith the player’s control, reverting to lethal violence and its lasting, predictable effects is a tempting option. However, the existence of other ways foregrounds the violent acts committed as the player’s choice. Pat Miller supports this impression in her analysis of *MGS*. Observing the gradual shift in balance and the opening of the game toward more “meaningful” or “real choices” from *MGS1* to *MGS3*, she claims that Kojima is able to communicate his critique of violence particularly well because

MGS3 managed to use the elements of player choice to set the medium of a videogame apart from, say, books and movies. In a sense, Kojima gave you a portion of the game entirely, and

somewhat perversely, player-created—that is, a product of nothing more than the player’s earlier choices—and derived a meaningful message from it. [...] Books and movies, as passive media, relate a message to the reader by presenting a story where the reader sees the consequences of the protagonist’s decisions and interprets from there. Videogames, as *MGS3* would have us understand, can be aimed directly at **the player**.⁴⁷

Such reflexivity is further amplified by the fact that often, violent solutions to overwhelming situations lead to discovery and, as a result, extended periods of inactivity on the part of the player—here, the designers almost appear to mock the player for resorting to violence.⁴⁸ In other cases, most notably the boss fights, non-lethal solutions are far more difficult to achieve than lethal disposal.

In *MGS4*, this tension reaches a maximal level. In the boss fights against the four members of the “Beauty and Beast unit,” the player confronts psychologically distorted, technologically enhanced, existential enemies. Victory over a technologically enhanced “Beast” is followed by an encounter with the respective “Beauty,” who, although defeated, still attacks Snake bare-handed. Although these scenes are also examples of the designer’s erotic fantasies present in all titles—in this case, holding up the camera at specific moments makes the Beauty pose for the player—the Beauty’s embrace remains deadly, putting the player into the position of running away from a weakened enemy who deserves pity more than hostility. Here, the use of force is instrumentally logical, but simultaneously deeply disturbing.⁴⁹

But while violence as a last resort for want of other options can still be explained instrumentally, there is also a dimension of videogame violence as entertainment in the games. At times, one just pulls the trigger instead of crawling past. Especially the later titles do not restrict violent action through game mechanics and always carry an admiration for weapons and war with them—the broad arsenal of deadly firearms available and the general setup of the protagonist as a one-man army attest to this. Moreover, in videogames, violence does not cause the same effects as it would outside of the game world. In other words, such violence has a different quality than structural or physical violence in the everyday and, even if executed for the sake of carnage and destruction, remains playful and—for some players—entertaining, as controversial as this observation might be. This does, however, not erase its cognitive and psychological significance for and interpretation by the player. It is this dual structure that the designers, once again, deploy in their ambivalent

engagement with playful violence, both on the level of player choice and in various commentaries on violence.

The four Beauty and Beast bosses of *MGS4* are victims of psychological damage inflicted in war and violent conflicts. In **Example 6.4**⁵⁰ I have compiled several instances in which the game comments on the player's violence. During the fight with The Sorrow in *MGS3*, the player has to lead the protagonist through a river, in which the dead bodies he or she has produced so far in the game float past, screaming in agony. Here and elsewhere, commentary on violence and violent action not only target the instrumental, necessary aspect, but also a more affective, intrinsic, playful dimension. Thereby, it emphasizes the stark contrast between the terrifying physical and psychological effects of the violence depicted and described in the game, and the player's playful acts of violence. In *MGS2*, protagonist Raiden asks Snake if he ever enjoyed the killing. Snake's forceful denial only amplifies the disruption on the part of the player, who is aware of the dual nature of his or her own action, simultaneously playful and violent. While offering a broad arsenal of deadly weapons and combat actions, the designers infuse the games with comments on violence that are intended to disrupt the player. The protagonist of *MGS2*, Raiden, is mocked by Snake for his virtual experience of war and criticized for his seeming fascination for violence and killing. Later, the player finds out that Raiden was a child soldier and a merciless killing machine in the past. Often, this commentary addresses the player directly, as at the end of *MGS1*, where Liquid accuses him of having enjoyed the killing throughout the game. For the player, it is hard to deny this, since violence in *MGS* is, on the whole, frivolous entertainment.

Violence is part of many videogames and players are usually aware of the implications of their in-game actions, even if they are not effective beyond the game space. However, most games do not discuss violence actively or locate this discussion entirely on the instrumental level, as I have shown in the case of *Front Mission 3*, where violence is justified by the situation and the need to proceed in the game world. In *MGS*, the designer's creativity in addressing the player in this ambivalent way offers a different perspective. The games repeatedly confront their players with a conflict between their own, earlier, entertainment-focused in-game actions and their sympathies with the protagonists on the one hand, and the horrors of violence and its results on the other. When combined with the variety of means available in *MGS*, the critical comments on violence in these games gain a disruptive force, confronting the player with the ambivalence of his and her actions.

Importantly, this conflict is effective because it juxtaposes the majority of unquestioningly violent games with the possibility of non-violent progress in *MGS*. It draws its force from the fact that the games offer the player instrumental and intrinsic incentives to deploy violent means and target the actual player's choices in each specific game world with their critique. Of course, this risks the critical commentary being ignored. However, it might be the only way to turn playful violence into an element of a disruptive conflict. Where Arendt largely ignores this intrinsic dimension of violence in her focus on its "instrumental" aspect,⁵¹ *MGS* makes it a central focus of critique. Importantly, this critique depends on the possibility of playful violence and can, in this sense, only be explored in this way because the virtual and voluntary videogame space offers the active experience of violence without producing the implied consequences outside of the game. Whereas in the preceding section I showed how *MGS* makes mechanisms of control transparent and available to the player's experience, now it is player attitudes and engagements with the game space that are revealed. Yet, in both cases, the conflicts mostly trigger critical reflection of the status quo. In the following section, I examine the ways that *MGS* goes beyond reflection, potentially pointing the player toward radical re-conceptions of life in common.

Freedom

In several moments during the *MGS* games, the difference between enemy and player or player character abilities is turned upside down both sensually and with respect to action. Amongst the many examples of this are many of the boss fights, starting with the infamous Psycho Mantis from *MGS1*. For example, the fights in *MGS3* are characterized by an apparent reversal of ability—while the player can rely on the invisibility, the long-range sensorium of the player character, and his sophisticated close combat techniques, opponents like The Fear, The End or The Boss are hard to beat precisely because they appear superior in these categories. Sensually, the player is deprived of his or her usual advantage over the enemy, confronted with (seemingly) invisible enemies who surpass his or her senses. The tension between seeing and being seen is most effectively reversed in the last fight against The Boss, where the usual "crawling" causes complete blindness, as the fight commences in a field of flowers.

In other instances of this reversal, endless repetition prompts the player to question the possibility to proceed in the game. For example, in *MGS1*, the protagonist is captured and repeatedly tortured by Ocelot, not certain how and

when to escape this threat, which is repeated until the player cannot keep up with the increasing speed of button-mashing required to survive the torture any more. In *MGS2*, boss fights with opponents like the RAYs, or a painfully long period of time during which the (naked) player is seemingly trapped in a room with all doors locked, cause anxiety and extreme insecurity, because these situations lack the kind of (conceivable) end we are used to in videogames. This does not mean that the videogame state of exception in *MGS* is divorced from the regular rules entirely. Admittedly, most of the above-mentioned situations maintain a link with the knowledge and skills obtained in regular gameplay. In addition, the radio offers more or less helpful hints on how to solve the situation. However, while requiring considerable skills, even the skill-based relation to the regular experience is reversed. For example, the chances of success in the encounters with Solidas (*MGS2*) or The Boss (*MGS3*) are much higher if the player ignores the reflex of keeping his or her distance from the opponent, and counters attacks rather than carrying them out.⁵² Yet, in my experience, in some instances, the games do manage to enter an uncontrollable sphere beyond common sense, as **Example 6.5** shows. The fight against The Sorrow can only be won by accessing the items menu after the protagonist's death and reviving him with the "revival pill." Against Psycho-Mantis in *MGS1*, who directly reacts to controller input, only switching controller ports has an effect, and the victory over his reincarnation in *MGS4* likewise depends on methods that are far from self-explicatory. In both cases, the solution is counter-intuitive with regards to player expectations, both based on other games and on earlier experience from *MGS*.

As the example shows, the fight against Psycho-Mantis also contains some of the most significant demonstrations of sensual deprivation in the series. Mantis is not only invisible and steals the player's eyes (activating first-person mode allows the player to experience the perspective of Psycho Mantis, which becomes the only way to spot the enemy in the second half of the fight), but also has the ability to generate what at first glance looks like the black "video" screen familiar to videogame players in the 1990s.⁵³ *MGS2* offers several additional instances of visual chaos, in which the designers demonstrate their dominance over the game world and its rules. During an action-intense sequence toward the end of the game, the screen is suddenly scaled-down in a fashion familiar from moments of "game over," accompanied by the respective sound. For an instant, this event may successfully trick the player into believing that the protagonist has died from enemy fire. However, a closer look reveals that the usual "Mission Failed" statement reads "Fission Mailed," and that Raiden is still

alive, now only visible in miniature but, nonetheless, controlled by the player. This and other instances during the series are usually referred to as self-reflexive parodies or instances of Brechtian “estrangement” breaking through the fourth wall.⁵⁴ However, one can also regard these moments as demonstrations of the designer’s superiority over the videogame space of *MGS*, which reminds the player of the fact that the rules are man-made and can change at any time.

What these examples have in common is that, at least when experienced for the first time, they confront the player with extreme situations in which common sense, knowledge and prior experience fail. Both the overpowering enemies in the boss fights, during which the hunter becomes the prey, and the moments in which the rules seemingly change, replace the usual feeling of mastery with anxiety, psychological thrill and pressure. Based on the work of Agamben, I propose to understand these situations as “states of exception” invoked by the designers. For Agamben, modernity is marked by two interconnected currents. In *Homo Sacer* he identifies the excluding inclusion of naked life—meaning the power of the sovereign to exclude a member from society, which at the same time implies that this member is made available to the lethal force of society—as the original political relation and basis of the sovereign’s power in modernity. He claims that human life today is not simply part of Foucauldian biopolitics or subject to machine-based calculation, but converges with the political. In addition to this trend, the state of exception becomes an increasingly common political practice in modernity, which blurs the boundaries between exclusion and inclusion, outside and inside, *zōē* [bare life] and *bios* [qualified life].⁵⁵ Thus, from one side, more and more aspects of private human life are subjected to political regulations and decisions, and, from the other side, the state of exception has increasingly become common political practice.⁵⁶ This state of exception is “a space devoid of law, a zone of anomie in which all legal determinations—and above all the very distinction between public and private—are deactivated.”⁵⁷ Usually, the state of exception is invoked in extreme situations, which are judged irresolvable by applying “conventional” law.

Crucially, the state of exception is marked by ambiguity and an undecidability in which *factum* (life) and *ius* (norm) fade into each other. This blurring has decisive effects on the character of action within its boundaries. The state of exception “defines a ‘state of the law’ in which, on the one hand, the norm is in force [*vige*] but is not applied (it has no ‘force’ [*forza*]) and, on the other hand, acts that do not have the value [*valore*] of law acquire its ‘force’.”⁵⁸ Simply put, in the state of exception, that which is usually applied (the norm) is not

applied (while not being rejected as wrong either), while that which would not be accepted, judged by the norm, is applied. This problem of the status and evaluation of action in the state of exception is explained in more detail in the context of the *iusstitium*, which, for Agamben, is the archetype of the state of exception.

The crucial problem connected to the suspension of the law is that of the acts committed during the *iusstitium*, the nature of which seems to escape all legal definition. Because neither transgressive, executive, nor legislative, they seem to be situated in an absolute non-place with respect to the law. [...] The idea of a force-of-law is a response to this undefinability and this non-place. [...] Force of law that is separate from the law, floating *imperium*, being in force [*vigenza*] without application, and, more generally, the idea of a sort of “degree zero” of the law—all these are fictions through which law attempts to encompass its own absence and to appropriate the state of exception, or at least to assure itself a relation with it.⁵⁹

Agamben’s discourse is far more complex than I can outline here—for example, Agamben carefully examines the ways in which the state of exception maintains a connection to the norm. Yet, at this point, his conceptualization is helpful insofar as it describes a radical situation similar to the experience of some moments in *MGS* when any rules that pre-structure action in the regular, normal situation are abolished, and when the norm cannot be applied. They all depart from common rules and earlier experience in some sense and create moments when neither acquired skills, nor logical deduction guarantee success. The player has to find ways out of these exceptional situations, which sometimes proves very difficult and physically intense. For example, depending on the player’s skills, the sharp-shooting showdown against *The End* in *MGS3* might bind the highly alert player to the screen for more than one hour. My own attempts often oscillated between extreme frustration and liberated arbitrariness, frequently ending in laughter: where nothing is certain, anything—even the most illogical acts—may have equal chances of success.

Thus, these situations show the arbitrariness of the videogame space and reveal the sovereign’s absolute control over it. During the brief period of novelty, when these situations are contrasted with the memory and experience of “normal” gameplay, they furthermore convey the impression that anything is possible within videogame space. At the same time, such moments are also

moments when action loses its directionality and becomes a force in the absence of any evaluative criteria or laws. Precisely because the solution can be anything, any action can either be a means to win, or simply an expression of the player's helplessness or desires. What is more, it is unclear whether the action maintains its previously known meaning. Violent acts might turn out to be not violent at all. Such states of exception in *MGS* function as a kind of non-place (Agamben) or a utopic enclave (Jameson) within the videogame space, in which the player has to—and, for the first time, is free to—observe, think and experiment with the environment repeatedly and beyond conventional, instrumental knowledge of the game (system). For a brief instance, the videogame space of *MGS* becomes a violent technology, which the player can enact in whatever way he or she wants—provided, of course, he or she does not give up and seek help in walkthroughs and guidebooks. Frequently, these situations tricked me into attempting all kinds of absurd actions, which one would normally know to be out of the question. At the cost of countless “continues,” I felt invited to abandon any sense of systematic rules and do the seemingly impossible, illogical and irresponsible.

Just as Agamben highlights the connection the state of exception maintains with the norm, it is important to understand that these exceptional situations gain their status precisely because of the contrast—or conflict—with regular gameplay. However, it is precisely this contrast that allows the designers to generate a space in which the player is uncertain for the first time. A space in which repetition and death seem to become the only valid currency, and experimental, playful action, including what was, until then called violence but now not attributed any prior judgment, the only means likely to yield any effect. For a brief moment, the player may experience a kind of freedom of choice usually not available in videogames—an experience of freedom that, created by the lack of solutions, may immediately shift toward frustration or boredom in the face of player aspirations to proceed in the game, but an experience nonetheless. While drawing on Arendt, Agamben seems to have a very different perspective on modernity and the present. I wonder what this experiential conflict between total bureaucracy (or rule-based, instrumental play) and the state of exception (arbitrariness of rules, deadly playfulness) means in terms of the relation between the two thinkers and their thoughts. I leave this question to those better-equipped to answer it. At least it seems fair to say that, against the odds of the medium videogame, the conflict outlined above does point the player toward questioning action fundamentally while providing a sense of freedom and thus direction for potential imagination of alternatives.

Unchartered Territory

In videogames, the designers are without doubt in control of the rules and thus of videogame space as such. Yet, the three sites of conflict analyzed above offer different examples of how videogames can engage with the question of political action. In sum, they provide surprisingly intense and fundamentally critical experiences of the status quo and its affordances of action, and, in my view, even direct our imagination toward potential alternatives geared to improving these affordances. In other words, videogames can be intentionally open spaces, framed but ultimately not fixed by the designers. While *MGS* provides fixation and total rule-based closure during large parts of the gameplay, it is precisely those aspects that are deliberately left open to player choice. This turns the games into an interaction with the designers and, at the same time, offers their spaces to an, admittedly narrow, version of playful virtuosity. Kojima recently stated that he has a clear message that he wants suffuse his games with, but that it is not his intention to “teach” this message to the players.⁶⁰ This subtle approach makes games like *MGS* open to stimulating conflicts, in which the designers leave the choice and responsibility for choosing how to move to the player.

Finally, the *MGS* games seem to succeed in deploying the medium’s distinct expressive potentials in order to create unique game spaces and experiences. Arendt writes that

[t]he most radical change in the human condition we can imagine would be an emigration of men from the earth to some other planet. Such an event, no longer totally impossible, would imply that man would have to live under man-made conditions, radically different from those the earth offers him.⁶¹

But maybe we do not have to travel that far. Is it not the status quo that approaches such man-made conditions in its increasingly pervasive bureaucracy and societal control? If so, *MGS* deploys the medium’s potential to offer equally radical, man-made spaces and to confront the player with conflicts that hint at and fundamentally question this status quo. Against the odds, they seem to offer spaces in which the status quo collapses momentarily to give way for something “new.”

From Arendt’s (and Virilio’s) perspective, such experiences may not amount to political action. After all, playing games does not—if we ignore the recent trend toward public display of playing and augmented reality games—make a public appearance. Moreover, the action itself remains confined and, ultimately

reduced to the freedom granted by the designers. The first problem is less pressing in my context, since it is not spaces for political action that I am looking for, but rather conflicts that may stimulate our imagination of such spaces and alternative societies in which they exist. With regards to the second, I am tempted to refer to Arendt for a solution. She ascribes to political action characteristics similar to those frequently discussed in the context of play, namely novelty, boundlessness and inherent unpredictability.⁶² While emphasizing virtuosity as a key requirement for performing political actions, she differentiates art from political action, claiming that the former is always reified, dead thought turned into tangible, and a finite product rather than ongoing and open-ended.⁶³ In other words, a crucial difference for Arendt seems to be the openness of the process, in terms of the ways of engaging with it and to its continuity over time.

I do not know whether it is likely that these experiences lead to radical change. However, my own experience comes close to how Felix Stalder describes the disruptive effect of outstanding cultural movements like Dada or Punk Rock. As Stalder claims, with reference to the work of Greil Marcus, “these movements achieved, at least briefly, what is usually unattainable: they suspended all rules. Suddenly everything was up for grabs; nobody held any authority over the future anymore. [...] Everything was to be reinvented, here and now. The emptiness and absurdity of the spectacle was revealed. Reality imploded and the void was teeming with the promise of the new.”⁶⁴ In my experience, the exceptional situations in *MGS* can have such a disruptive effect on the player, challenging him or her to reinvent the world—at least for a brief moment—new under the signpost of a vague promise of freedom. If freedom is understood as “the ability to program or reprogram oneself or create oneself anew from scratch,”⁶⁵ then such freedom appears within the grasp of our imagination in the experience of exceptional situations in *MGS*. As, once again, Arendt claims:

new always happens against the overwhelming odds of statistical laws and their probability, which for all practical, everyday purposes amounts to certainty; the new therefore always appears in the guise of a miracle. The fact that man is capable of action means that the unexpected can be expected from him, that he is able to perform what is infinitely improbable.⁶⁶

Perhaps it is this feeling of the possibility of action that the games manage to convey for an instant in their most extreme moments. Whereas in the

case of aesthetic conflicts, some of the tensions were created by the role of the unimagined computer performance in videogame space, this time it stems from the fact that the player experiences a space of absolute closure, which is deliberately detached in its rules and behaviors from the regular game world tyranny.

How these spaces—that of bureaucratic tyranny and that of the sovereign in the state of exception—are related, is a question I feel incompetent to answer. Keeping in mind that Agamben frequently speaks of two currents (see above), it seems possible to regard the bureaucratization of (public and private) life in our society of control as a genuine problem for subsequent work. The experience of the frustrating effects that contemporary bureaucratic and administrative tyranny have may be more frequent and more directly perceivable in the everyday, than the hidden arbitrary and despotic rule of the sovereign over human life. If anything, the *MGS* games succeed in revealing the immediacy with which the sovereign (designer) can reach the player character and the player. Even if the player feels in control during large parts of the games, the rules of the game may change arbitrarily. As before, this conflict between control and being controlled is created at the risk of frustrating the player. However, the experience of the various exceptional situations discussed above and the reflexivity built into them indicate that we can expect games like *MGS* to offer far more than a guided tour. The player may be traveled, but in such a way as to show him or her what lies beyond the established path.

Notes

1. Geuss, *Politics and the Imagination*, ix.
2. Arendt, *The Human Condition*, 175–76, 190–92. For a more detailed discussion and critique, see Beiner, *Political Philosophy. What It Is and Why It Matters.*, 1–24.
3. Arendt, “What Is Freedom,” 145, 153.
4. Beiner, *Political Philosophy. What It Is and Why It Matters.*, 1–24.
5. *Ibid.*, 6–8.
6. Pias, “Computer Spiel Welten,” 123.
7. Arendt, *The Human Condition*, 58.
8. Arendt, *On Violence*, 6–7, 29–30.
9. *Ibid.*, 81.
10. Graeber, *The Utopia of Rules*.

11. Schrank, *Avant-Garde Videogames*, 79.
12. Graeber, *The Utopia of Rules*, 32–33, 57ff.
13. With regards to videogames, see for example Embrick, Wright, and Lukács, *Social Exclusion, Power and Video Game Play*.
14. Bufacchi, “Two Concepts of Violence,” 193. Most prominently, Thomas Hobbes derives the necessity of a social contract from its dominance in the state of nature. Carl Schmitt’s famous definition of the political as a distinction between friend and enemy is based on a commitment to eradicate the enemy by means of physical violence (Schmitt, *Der Begriff des Politischen*, 7).
15. Fanon, *The Wretched of the Earth*, 2–3, 23.
16. Arendt, *On Violence*, 31.
17. Sorel, “From Reflections on Violence”; Fanon, *The Wretched of the Earth*; Sartre, “Preface.” See also John L. Stanley’s (1976) introduction to *From Georges Sorel*.
18. Roberts, “Fanon, Sartre, Violence, and Freedom,” 143–44.
19. Arendt, *On Violence*, 44–46. Bhabha (2004, xxi) points out that Arendt’s (1970) rejection of violence was a direct response to Fanon’s *The Wretched of the Earth* and Sartre’s pro-violent preface to it.
20. Arendt, *The Human Condition*, 200–202.
21. Bhabha, “Foreword: Framing Fanon,” xxxvi.
22. Bufacchi, “Two Concepts of Violence,” 194.
23. Roberts, “Fanon, Sartre, Violence, and Freedom,” 144–47.
24. Campbell makes this point convincingly by examining the difference between the messiness and chaos of the battlefield and the degree of abstraction and clarity necessary in games in order to be playable (Campbell, “Just Less than Total War Simulating World War II as Ludic Nostalgia.”).
25. Tavinor, *The Art of Videogames*, 131–46.
26. In the context of videogames, violence is frequently discussed with regards to negative psychological effects on players in general and children in particular. Given the complexity of media effects discussions and the strong bias in much of the research done in this field, this discussion requires more expertise than I have and more space than I can grant it here.
27. *MGS* is a globally successful series of videogames developed under the direction of Kojima Hideo and released by Konami from 1998 onwards. Although the series is based on two earlier games called *Metal Gear* and *Metal Gear 2: Solid Snake*, this chapter focuses on some of the more recent installments of the *MGS* series, namely *Metal Gear Solid*. (hereafter *MGS1*), *Metal Gear Solid 2: Metal Gear Solid 2: Sons of Liberty* (hereafter *MGS2*) and *Metal Gear Solid 3: Snake Eater*. (hereafter *MGS3*), both played mostly in the *Metal Gear Solid HD Edition*, as well as *Metal Gear Solid 4: Guns of the Patriots*. (hereafter *MGS4*). I refer to the HD edition of *MGS2* and *MGS3*, although I have also played the regular version of *MGS3*—the differences between the two versions are ignored below, in favor of clarity.
28. Miller, “Metal Gear Pacifist.”
29. Noon and Dyer-Witford, “Sneaking Mission: Late Imperial America and Metal Gear Solid,” 78.
30. Naked Snake in *MGS3*, his son Solid Snake in *MGS1*, *MGS2*, and *MGS4*. *MGS2*

174 Thought-Provoking Play

introduces another operative called Raiden, whom the player controls through large parts of the game.

31. Whereas the visual field in third-person view is fixed in *MGS1* and *MGS2*, the player has control over it in *MGS3*, and *MGS4*. The higher degree of freedom achieved here, is carefully balanced by the designer as to not make the games too easy. Whereas the enemy forces could be displayed on the map in *MGS1* and *MGS2*, this feature is not available in *MGS3*, where it is replaced by a number of temporarily available sensors, and reappears only in form of a vague threat detector in *MGS4*. The tension created in *MGS2* while the player cannot access the map and thus does not see what is behind the next corner, gives way to a widening of the playing field and the introduction of more obstacles to the visual field. Whereas the earlier games hide the enemies from the screen, the latter hide them from the player's eyes.

32. Although sensitivity is not limited to visuals, but, increasingly in the later titles, includes audio information, the latter seems to follow parallel patterns and thus is not a focus of this analysis. This omission should not detract from the fact that the audio elements of the game are crucial and contribute to its experience beyond mere additions. At several moments during the games the importance the designer has attached to sound becomes apparent, for example when a naked Raiden sneezes due to the cold in a warehouse and thus gives away his position in *MGS2*, through the rumbling stomach that betrays Naked Snake in *MGS3* once his food supplies run low or the awkward but silent crawling style in *MGS4*.

33. In the short essay on which Galloway's inquiry is based, Deleuze carves out the difference between spatially bound, disciplinary societies and free-floating, flexible societies of control. He claims that "[i]n the disciplinary societies one was always starting again (from school to the barracks, from the barracks to the factory), while in the societies of control one is never finished with anything—the corporation, the educational system, the armed services being metastable states coexisting in one and the same modulation, like a universal system of deformation." "Control is short-term and of rapid rates of turnover, but also continuous and without limit, while discipline was of long duration, infinite and discontinuous" (Deleuze, "Postscript on the Societies of Control," 5–6) As far as I understand Deleuze, in societies of control, one is free to move through space but under constant, computer-enhanced control, which registers, limits and remembers every move.

34. Galloway, "Allegories of Control," 88–91, 99–103.

35. From a similar perspective, Burden and Gouglas argue that the game *Portal* can be regarded as "an algorithmic exploration of human struggle against algorithmic processes" that increasingly shape our everyday. They claim that "the procedural nature of games provides a unique opportunity to explore the increasingly procedural nature of such increasingly prevalent technology" (Burden and Gouglas, "The Algorithmic Experience: Portal as Art").

36. Itō [伊藤], "Dejitaru Media Jidai ni Okeru Genronkūkan," my translation.

37. English subtitles for *MGS2* taken from El Greco's (2005) *Metal Gear Solid 2: Sons of Liberty Game Script*.

38. Noon and Dyer-Witford, "Sneaking Mission: Late Imperial America and Metal Gear Solid," 87.

39. Virilio, *Speed and Politics*, 149–52, italics in the original.

40. Schmitt, *Der Begriff des Politischen*, 8.

41. Koster, *A Theory of Fun for Game Design*, 68.

42. In recent decades, research related to the affective dimension of human life has been growing significantly. Ito offers an overview of the early establishment of the field and its trajectories, showing that this research is, in part, a reaction to the scientific emphasis on the

intellect and conscious action (Itō [伊藤], “Dejitaru Media Jidai ni Okeru Genronkūkan”). Particularly well-known works include the analysis of Brian Massumi, who examined how emotional reactions to a potential (future) threat influence individual decisions (Massumi, “The Autonomy of Affect”; Idem, *Politics of Affect*).

43. Ogiue [荻上] and Irie [入江], “Sen’yū Taidan,” 16.

44. Hamamura [浜村], *Metal Gear Solid HD Edition Operation Guide*, 249.

45. Online discussions about non-lethal play in *Metal Gear Solid 2* suggest that such strategy is at least theoretically possible, although not rewarded (Malumbrus, NeoSarinatan and Mr_Big_Boss, “Discussion about Non-Lethal Playthrough in Metal Gear Solid 2”). In contrast to the rather limited discussions of non-lethal gameplay in *MGS1* and *MGS2*, there are numerous forum threads and guides to non-lethal gameplay for *MGS3* and *MGS4* (see for example goldeneye86, “Metal Gear Solid 3: Snake Eater: No Alert/No Kill Guide”; Hellicar, “Metal Gear Solid 4: Sons of the Patriots – Big Boss Rank Guide”).

46. This general tendency is also pointed out in the following post on the IGN forum from May 29, 2012 (errors in the original): “I always play MGS games on a hardest available difficulty. I came into to series with MGS3, which I first played at first on easy and I must say I hated the game (I’d punch my younger-self if it would be possible. I didn’t understand anything about stealth and just blasted my way through the game (of course I skipped all cutscenes [sic] and codex sequences). Only problem was that MGS3 wasn’t designed to be a shooter, so I just found it clunky. I put the game on a hold for a while, but somehow got around to it once and decided to give it another chance. I selected Hard for a difficulty and the curve raised so high, that it literally forced me to learn the sneaking mechanics and complex controls. I also decided to pay attention to the story, since by then I had grown and was ready for more complex story. It took a while to get into the controls, but after that I found a whole different game. I just loved it so much, MGS3 stands there as my favourite game even today. But now back to the original message, I choose to play on hardest because it is what really forces you to play these games the way they were meant to be played. People complained that MGS4 could be just blasted through. Yeah, on normal maybe, try that shit on extreme.” (riesenkartoffel, “Comment in the Discussion of ‘METAL GEAR SOLID 3. NO KILLS. NO ALERTS. NO DEATHS RUN COMPLETEEEEEEEEEED’ on the *Metal Gear Solid 3* Board of IGN, Posted on May 29, 2012.) As this post points out, there is a huge difference between normal and hard difficulties in all *MGS* games—the latter emphasize tactical skills and stealth maneuvers to a far greater extent. While I am aware of the possible difference in experience this entails, this dimension has to be granted more attention than I can give it in this experimental project. Thus, the analysis refers to my gameplay on normal difficulty.

47. Miller, “Metal Gear Pacifist.”

48. Making violence inefficient and “waiting” a central motive of a videogame in our accelerated times may, in itself, be interpreted as a strong political statement.

49. Despite their functional dimension, moral choices in games frequently invite commentary by scholars, critics and gamers. Tavinor, for example, discusses the experience of moral choices in *Bioshock* from 2007, in which the player may or may not kill defenseless characters called Little Sisters (Tavinor, *The Art of Videogames*, 130). In 2009, *Call of Duty: Modern Warfare 2* has generated worldwide discussions amongst gamers and in mass media, because one of the stages enables the player to kill innocent civilians as a covert operative in an airport taken control of by a terrorist group.

50. English subtitles for *MGS1* and *MGS3* are taken from El Greco, “Metal Gear Solid Game Script”; and MHamlin, “Metal Gear Solid 3: Snake Eater Game Script.”

51. Roberts, “Fanon, Sartre, Violence, and Freedom,” 145.

176 Thought-Provoking Play

52. These situations highlight the active quality of the seemingly passive gameplay (stealth, avoiding contact, camouflage): prompting the right attack from the opponent by positioning the protagonist in the right distance turns the spatial position itself into a kind of weapon against the system. They also reveal the tactile character of the game, which requires the player to link the sensual information with movement and “feel” his or her way through the system and its sentinels.

53. This screen appeared when a gaming console or other peripheral was switched off or had lost the signal from the console, which was usually attached to the video-in port of the television screen. In *MGS1*, the message reads “Hideo” instead of “video.” While this appears significantly different in English, the difference in Japanese is harder to spot given it consists only of the omission of two small dots (*dakuten*) over the first character, rendering ビデオ (bideo, the Japanese Anglicism for “video”) ヒデオ (Hideo).

54. Noon and Dyer-Witford, “Sneaking Mission: Late Imperial America and Metal Gear Solid,” 87; Ogiue [荻上] and Irie [入江], “Sen’yū Taidan,” 17.

55. Agamben, *Homo Sacer*, 19.

56. For Agamben, the twentieth century offers numerous examples that show how the individual liberties won in democratic societies, which signify the preference of the private over the public, become the locus of sovereign decision in totalitarian states, but also in the state of exception, most openly found in the modern camps of Auschwitz and Guantanamo (Agamben, 129). Despite his influence, these and other claims make Agamben a controversial thinker, both with regards to his theory, and with regards to his polemic writing, which polarizes at times without intrinsic necessity (Geulen, *Giorgio Agamben Zur Einführung*, 118.).

57. Agamben, *State of Exception*, 50.

58. *Ibid.*, 29, 38.

59. Agamben, 51. According to Agamben, the term *iustitium* literally means “standstill” or “suspension of the law.” (Agamben, 41.)

60. *Gēmuteki Riarizumu 2.0* t=1:28:15.

61. Arendt, *The Human Condition*, 10.

62. Arendt, “What Is Freedom,” 190–92.

63. Arendt, 152; Arendt, *The Human Condition*, 168–69.

64. Stalder, “Culture without Commodities: From Dada to Open Source and Beyond,” 23.

65. Muroi [室井] and Yoshioka [吉岡], *Jōhō to Seimei*, 60.

66. Arendt, *The Human Condition*, 178.

Breaching Familiar Horizons

In this book, I asked whether videogames can contribute to our imagination of alternatives to the status quo, which, in turn, might provide direction for political action toward a better world. I have used the idea of ideational videogame space as a perspective on videogame expression and my own play, enhanced with other resources, as a way of accessing and experiencing this space. I hope to have shown that videogame spaces can indeed make distinct contributions to the imagination of alternatives, and offer intriguing perspectives on the foundations of contemporary life in common. In these final pages, I would like to revisit some of the implications these findings have on my claims about media specificity, political philosophy and, lastly, on the quest for alternatives.

The analysis has shown that videogames are a distinct and rich medium of expression and experience. Structurally, ideational videogame space draws its potential for conflicts—and thus for stimulating our imagination—from the specific ways in which designers, player and computer negotiate its contingency, dynamically and repeatedly. Here, videogame space appears distinct from other media, not least because its physical existence is much more fragile and, in turn, much more central than is the case with a variety of other media. Once printed, a book can, generally, be preserved in the same physical form, whereas a videogame space, which exists for the player in accessible form only in the computer memory, is necessarily instantiated and may thus potentially be different each time a player plays—saving the game offers some reconciliation, but remains limited to a specific situation and moment. This reasoning, to some extent, neglects the technical possibilities of today, both with regard to videogames, and with regard to books, which, insofar as they are distributed digitally, may be altered after the fact as well. But I maintain that the difference remains if we take these developments into account. With regard to structural similarities, online media, in particular search engines and social media, come to mind as examples of a similarly dynamic instantiation

of expressions based on design, input and computation. However, both spaces maintain several striking differences with regard to their expressive means, architectures and modes of engagement, even if we consider that the “ludic” is taking over ever more areas of culture today, as Raessens and others have argued.¹

Another source of conflict is the diversity of expressive elements videogame spaces combine. Specifying ideational videogame space in this regard helped to highlight some of the ways in which videogames host otherness and afford its active exploration on many levels of sensual representation, narratives and rules. If the cases discussed here can be seen as a serious and fruitful political philosophical engagement, they have also shown that, bluntly said, this engagement differs decisively from that found in a written text of a great thinker. In ideational videogame space, authorship becomes vague, even if we assign it to a collective, because the computer and the player contribute to generating this space. The literacy required to access and interpret videogame space is decisively playful and partly physical. Videogames have to be explored on their own terms, often involving creative player action and skills—if you fail to reach a certain area, you will not be able to find a conflict there and might not even know of its existence. Moreover, representation is partial and, to a certain extent, unimagined. In some cases, not even the designers are able to predict what is waiting for you. In sum, the analysis suggests that ideational videogame spaces can indeed contribute to political philosophical discourses, but only if we take them seriously in their difference to more established modes of thinking and, perhaps, also of imagining. In this sense, their potential lies not in offering ready-made models of a better world, but in prompting our active, playful exploration of conflicts, which may disrupt us and inspire us to imagine alternatives to the status quo as we know it. Successful videogames in this respect are interventions that point beyond the status quo, without offering one final, authorized model. To follow Adorno, they invite open thinking and rethinking of established ideas and foundations of life as we know it. Importantly, this open thinking is simultaneously an exploratory “acting”—the two are hard to separate in the engagement with videogame space. While writing and thinking may be conceived as action, too, videogame spaces help us reconsider and experience this relation in a different way and provide a different access point to political philosophy. Boldly put, in videogame space the “love of wisdom” (philosophy) is arguably more directly related to (the experience of) physical action than in other mediated contexts. Moreover, it is a space in which

thoughts and actions of different actors collide. The attribute “ideational,” thus, may be misleading, because this space is as much about action.

The cases I analyzed approximate this potential to exploratory thinking and acting in intriguing ways, generating ideational spaces ripe with conflict. This hospitality to conflict is not arbitrary or abstract, but specifically related to the qualities of videogame space in at least two ways. First, the games in question “succeeded” precisely because each of them explored the qualities of videogame space in a specific way that, at the same time, posed a specific challenge to the limitations and boundaries of the medium videogame. Put differently, some games are closer to Muroi’s notion of “intervention” than others, because their designers embedded in them a certain self-reflexivity and curiosity about the historical and cultural context in which they are created.

Second, and maybe more important, is that the concrete issues these games speak to are not random. Instead, they account for some of the more specific expressive potentials of videogame space, which are derived from the centrality of narratives, rules and representations. All examples considered in the case studies of Chapters four, five and six, combine these three elements in specific ways in the negotiation of videogame space, each opening up a distinct space for player exploration and experience. In *Shadow of Memories*, the player is invited to explore the idea of narrative—and with it, the idea of linear time—in action. In *Rez*, the *Earth Defense Forces*, and *Neon Genesis Evangelion 2*, the player is variously confronted with the performance of the computer and its ability to enact the unimagined, contributing to decisively alienating experiences. In the *Metal Gear Solid* series, the player is able to experiment and interact with various forms of rules and rule-based behavior, and experience the absence of such rules for brief moments. In all cases, the repetitive or “same-but-different” nature of videogame space contributes strongly to the possibility of conflicts and their experience. This suggests that videogames are most intriguing hosts to a specific set of issues.

Some of these issues are treated in a specific way because of the context of the developers—the *Metal Gear Solid* series comes to mind, because its lead designer Kojima Hideo links his games with his family history and their experience of war. Other games appear less discernibly inspired by the concrete contexts of their designers, and more work will be necessary to clarify that relation. In any case, the analysis pointed to the importance of the designers in the negotiation of videogame spaces. It seems to me that some of the most forceful, most disruptive conflicts discussed above result from the ways in which the

designers let go of their authority and actively explored videogame space as a partly unimagined structure. In *Shadow of Memories*, the choice to explore the narrative branches vis-à-vis the numerical goal of the game is left to the player, at risk of drawing their attention away from the content and toward a cluster of endings. In terms of aesthetics, the tension between analytic and unproductive play in *Rez* and *Eva2* risks boring the player. More importantly, the introduction of an A.I. relieves the designers of the task of envisioning and creating part of the game world (but it also negates the ability to control the game world). The last chapter on *MGS* combines both dimensions. The subtle critique of violence in the games is most powerful because it targets the player's expected—and invited—actions. At the same time, this potential risks being ignored or brushed away in frustration.

In all cases, the designers deploy a wide-reaching hospitality to otherness using the expressive features videogames offer. In my view, these design decisions go beyond the level of self-reflexivity regarding videogame culture—sometimes they appear bold and risky considering the centrality of entertainment in the videogame industry. Yet, it may be precisely this kind of risky, subtle, non-obtrusive engagement with the present and its foundations that, as far as I experienced it, has more lasting effects, because it does not confront the players with answers, but leaves it up to them to start asking questions.

Of all the games I played for this research, those selected for the case studies were the most explicit with regard to the political potential for conflict I am interested in. Some of these games, like *SoM*, *Eva2*, *Rez* or *EDF*, were created during a time I suspect of being highly productive in terms of diverse, exploratory games. Others, like *CT* and the *MGS* series go back further in history. I am unable to offer a full account of the various themes and tropes that developed in videogame culture in Japan and elsewhere over the years. It is worth pursuing these trajectories further, because, in some cases, this helps positioning a title in a larger history. For example, the disruptive conflicts in *SoM* are based on the idea of multiple endings, which was allegedly introduced in *CT*. Revisiting the original *Metal Gear* from 1987 after this research was completed was surprising for me as well, because many mechanisms that make for the distinct playing experience of the *MGS* series are already embedded in the early titles.

Nonetheless, if I had to guess, I would say that the richness of the disruptive conflicts and their possibility is enhanced by the later technologies of 3D

graphics, and the gradual expansion of expressive elements—better graphics, cut-scenes, etc.—which were gradually introduced during the 1990s, do contribute to the potential of videogames to confront the player with conflict on their own grounds. The alienation of *Eva2*, or the aesthetic experience of *Rez* are examples of this. Most directly, *EDF* suggests such evaluation, as it is based on a situation in which relatively performance-rich technologies for the Playstation 2 were widely available to developers. In any case, future studies will have to show how new technologies can contribute to different types of conflict.

In the final section, I would like to get up out of my cozy academic chair and consider the concrete stimuli the videogames I analyzed left me with. I mentioned above that they prompted me to ask questions that might be the starting point for alternative imaginations, and this is what I would like to do now. In *Shadow of Memories*, time is disrupted. Taking the implications of this experience seriously for a moment, I wonder how life in common might be structured if not in terms of linear time. At the end of some of the presentations on this research, I asked, what would it mean if each and every one of us had our own (social) time? This sounds like a neat idea, given that we never seem to have any time at all. But it is not meant as a reaction to or complaint about the business of life. What if this means something entirely different than being faster or slowing down? What if the very linearity of time is in question? What, in other words, if we really could all operate on a different, differently paced clock? Facilitating life in common under the assumption that linear time is not possible might entail finding ways—and taking more time—to communicate with and about each other much more in order to set common rules and goals. Technology might help coordination. On another plane, this starting point opens up a series of avenues and perspectives to think about, from individual relevancies (wasting time, saving time) to the race against time we are running against nature and its resources. But maybe this is already too abstract. On another level, that of narrative representation, non-linear time might mean that we stop assuming that any event, in particular when it involves more than one person, can be narrated “properly.” What would it mean if any representation had to be conceptualized as a representation of multiple perspectives that may well exceed our sensual limitations? If (hi)stories are not “flattened” or “compressed” into one linear narrative, how would this change the weight and importance of individual accounts? What concepts of history, memory, perception and science are possible without linearity? Would this enhance plurality or ultimately generate confusion?

Rez and *Eva2* seemed to offer an experience of timelessness in those moments when I was freed of the game's goals. This is a space of boredom, but maybe only as long as we think the time spent there should be invested more "productively"—based on whose standards, you might be tempted to ask? This question of standards is more generally at work in these games, which confronted me with alternative logics of thinking and acting, the numerical sociality and the unreasonable npcs in *Eva2* and *EDF* making the most lasting impressions. They had a mirror-like function that showed me my own actions and behavior by contrasting it with a different, unfamiliar, alien one. Yet again, what if we took the alien—now that we know it—seriously, not just as an opponent to overcome or seduce, but as a representation of an otherness that does not abide by our (teleo)logics? The question is not whether we might find a better version of life in common in the other, but how we might conceptualize the social anew, in a way that does not centralize difference but rather "togetherness," even if mutual "understanding" is impossible. While thinkers like Donna Haraway, Ueno Chizuko or Martha Nussbaum ask similar questions,² the games I played leave the field of theoretical inquires and allowed me to experience alienness and develop strategies for dealing with it, and with the impossibility of mutual understanding. So, what if we were to abandon the idea of sameness or collective identity on a fundamental level? Could we do this without creating new hierarchies? What would it entail? What would we lose? Or, we could start from a different direction and wonder how far we are away from the numerical beings in *Eva2* today—what would it mean to surpass the measurability and numerical status our identities have in the face of bureaucracy?

This question relates the interaction with the alien to the experience of rules and freedom in *MGS*. The question this series sparked in me was how responsibility might function more pointedly in the absence of standardized rules. Is there a way of rethinking the notion of rules, without ending up in a situation in which the fittest survives, and without simply replacing one set of rules with another? Could the freedom gained by abandoning the rules be meaningful as a freedom of political action, which would require us to maintain a sense of common life and common space. Or, could we at least think of the experience of acting within a space devoid of rules as an experience that inspires us to think of a set of rules we would like to apply? Could determining these rules individually and finding ways to communicate and negotiate them—instead of taking their universality for granted—be a central building block of a community? What if the authority came from the negotiation, not from the (already existing) rules?

To be sure, such processes do take place, but often in a limited way, within existing structures.³

If these questions or possible starting points for an alternative imagination seem to point to generic questions—the conditions created by capitalism, discrimination and differentiation, and the role of the state for society, which are the three central constituents of the contemporary system if we believe Karatani⁴—this is, in part, because they question the current system on a fundamental level. It may also result from the difficulty of translating my experiences into a theoretical and conceptual language—anything less would probably disarm my argument about media specificity and my insistence on the experiential potential of the medium. However, their applicability is much more concrete than the description might betray. The current situation in many places around the world appears to be defined by breaking with traditions and common sense, by perceived threats to established principles and understatements, and by the crumbling of former certainties. This is at least one of the factors contributing to the recent rise of nationalism in Germany, and probably elsewhere, as far as I understand it. If we do not want to return to past versions of society or establish new boundaries within it, one possible way forward might be finding new ways of negotiating diversity, new ways of enduring difference, and new ways of communicating and interacting. For me, the videogame spaces discussed, each in its own way, did clear a path and thus provide a starting point for my alternative imagination.

Notes

1. Raessens, “The Ludification of Culture”; Zimmermann, “Manifesto for a Ludic Century.”

2. Haraway, “A Cyborg Manifesto”; Ueno [上野], “Datsu Aidentiti”; Nussbaum, *Frontiers of Justice*.

3. Stalder, *Kultur der Digitalität*.

4. Karatani, *The Structure of World History. From Modes of Production to Modes of Exchange*; Karatani, *Auf der Suche nach der Weltrepublik*.

Appendix

A: Excerpts of JackSpade's SoM Percentage FAQ¹

From the DISCLAIMER:

This FAQ is list of scenes I and some friends have found out in the game to share it with the people who want a full 100% percentage, thus they need ALL the cut-scenes from each chapter. [...]I wish to give Extra Special thanks to Yunakitty for helping me check the validity of this FAQ and supporting me with it, you are great yunakitty! Please read her Character List FAQ as well!

Another special thanks to Curty who helped me find some hard to get scenes.Special credits to ichmari for finding the elusive scene in chapter 7 that everyone was looking for!

From the VERSION HISTORY:

From [14/08/01] to [19/08/01]

I finished the game at least 10 times..., recorded about 263 scenes or more..a lot of questions popped into play, about scenes and the fact that you can do them in different chapters..where do these scene belong? For example: You can give Sybila the kitten in 3 different chapters, start a tab in different chapters too..but they only count towards 1..hmm..Also, I'm 92% sure that all scenes in the list counts towards a 100% Total Achievement percentage but I won't be sure until I check them out with the new procedure.." [...]

[26/08/01]->7:45

My worst fear has come true!I just finished Chapter 8 with 100%...and I have uncovered that the scenes are not tied with a fixed % number! Oh man, how can I explain this to you..I will try..You see, before today, I thought that a particular scene was worth a fixed % number. Like seeing Eike dying for the 2nd time in Chapter 4 was worth 4%...but it is not so! You see, there are a certain number of scenes in each chapter, and everytime you do one, the percentage goes up, for example:

186 Thought-Provoking Play

```
012 .- Talk with boy: "Will you save my grandpa?"      Worth 4%
013 .- Eike: "Sorry kid."                               Worth 3%
014 .- Talk with boy: "Are you gonna help my grandpa?"  Worth 3%
015 .- The bar on fire(Inside).                          Worth 4%
If you delete the game and change a little of those scenes order like this:
```

```
012 .- Talk with boy: "Will you save my grandpa?"      Worth 4%
013 .- Eike: "Sorry kid."                               Worth 3%
014 .- Performer cut-scene: Getting the egg             Worth 3%
015 .- Meeting the dogs..again                          Worth 4%
016 .- Talk with boy: "Are you gonna help my grandpa?"  Worth 4%
017 .- The bar on fire(Inside).                          Worth 3%
```

As you can see, Scene 014 is worth 3%, no matter which scene it is. I hope someone has enough explaining skill so they can figure this out and send me a mail telling me how to explain this concept..oi... well anyway.I won't reformat my FAQ, but I will put up a note that the numbers show there are for my game and may vary from game to game.

*Roberto Corsaro has a different and very interesting theory about this, read onward to read his theory about scene percentages.[...]

[12/09/01]->1:02pm

Logged into Gamefaq's board and saw PS2 4 life post about the idea ichmari had about the elusive scene, and it worked! Chapter 7 is at 100%! I'll submit the update soon and afterwards.[...]

Here's Roberto's Theory on scene's percentages:

I think they are not integer values, but that there's a hidden decimal that might lead to apparent incongruence in scoring when the scenes are played in a different order ("if for instance, and this is just an example" ^_^ we have two scenes worth 3.5 point and the game approximates 0.5 to 0 *when displaying scores*, the first played would be 3 points worth and the second one would be 4 points worth).

Now, let's come to the Prologue.

When you have unlocked the Extra game, you have to play the normal game once more (by answering "am I dead" and "who's there?") to unlock a scene worth 3 point
(and this should lead you to reach 100% in Total Achievement too). Then this:

```
*****MDS*****
```

-Curty -[2] .- Time runs out with the stone: "You'll have to work harder"

*****+*****+*****+*****+

This only occurs when time runs out twice.

B: Excerpts from Gene's Rez Secrets FAQ²

3) Unlocking Secrets

There are many secrets to be unlocked over time. Most of them require that you complete a certain task. However, some of them are unlocked over time.

3.1) Completing the game

There are five areas in the basic game. Only four areas are selectable at the start. You must unlock the fifth area. After completing the first four areas, you will unlock Score Attack for each area. After completing the fifth area, you will unlock Beyond Mode (Lost Area), Beyond Mode (Direct Assault) and Score Attack Area 5.

3.2) Unlocking Secrets

Here is the list of the secrets and how to unlock them. Each one must be played in a certain mode. Play mode means the regular Play mode accessed from the main menu. Other secrets are unlocked from Score Attack and Direct Assault.

```

Play Mode
-----
Unlock Area 2                Clear Area 1 (Play mode)
Unlock Area 3                Clear Area 2
Unlock Area 4                Clear Area 3
Unlock Area 5                Clear Area 1-4 (100% Clear)

Score Attack Mode
-----
Unlock Area 1                Clear Area 1 (Play mode)
Unlock Area 2                Clear Area 2
Unlock Area 3                Clear Area 3
Unlock Area 4                Clear Area 4
Unlock Area 5                Clear Area 5

Beyond Mode
-----
Unlock Direct Assault - Normal    Clear Area 5 (Play mode)
Unlock Direct Assault - Ambient    Clear Direct Assault - Normal (or once)
Unlock Direct Assault - Punk      Clear Direct Assault - Ambient (or twice)
Unlock Direct Assault - Oldschool  Clear Direct Assault - Punk (or 3x)
Unlock Direct Assault - Psychedelic Clear Direct Assault - Oldschool (or 4x)
Unlock Direct Assault - Trance      Clear Direct Assault - Psychedelic (or 5x)
Lost Area                      Clear Area 5 (Play mode)
                                or Play time over 5 hours
Trancemission                   Rank 1st (Lost Area)
Boss Rush                       Area 1-5 Shot down > 95%

```

188 Thought-Provoking Play

Beyond Mode Options

Player Select

Zero Form	Unlocked with Second Form
Second Form	Any Area Shot down 100% (Play mode) / Play time over 5 hours
Third Form	Any 2 areas Shot down 100% (Play mode) / Play time over 6 hours
Fourth Form	Any 3 areas Shot down 100% (Play mode) / Play time over 7 hours
Fifth Form	Any 4 areas Shot down 100% (Play mode) / Play time over 8 hours
Final Form	Any 5 areas Shot down 100% (Play mode) / Play time over 9 hours
Morolian Form	Area 1-5 Shot down, Item capture 100% (Play mode) / Play time over 10 hours
Immortal	Clear all Direct Assault modes
Beam Type 1	Clear Score attack more than 5 times
Beam Type 2	Clear Score attack more than 10 times
Beam Type 3	Clear Score attack more than 15 times
Beam Type 4	Clear Score attack more than 20 times
Beam Type 5	Clear Score attack more than 25 times
Beam Type 6	Clear Score attack more than 30 times
Overdrive Infinity	Rank 1st (Boss Rush)
Camera View	
Near view	Rank 1st Area 2 (Score attack mode)
Far view	Rank 1st Area 3 (Score attack mode)
Dynamic view	Rank 1st Area 4 (Score attack mode)
First Person view	Rank 1st Area 5 (Score attack mode)

C: Excerpts from iamradiox's Complete Game Guide for Rez³

Secrets:

-There are different boss fight forms. Tera, Giga and Mega (Tera being the hardest and Mega being the easiest). If you shot down more than 98% of the enemies before a boss fight on any level on any mode, you will fight the Tera form. Also, on Score Mode, that form will give you much more points. For the Giga form, you must get a little less percentage than that and even less for Mega. Sadly, I don't know the exact percentage to get those two forms.=

-On the DreamCast version, there is a line under the name Rez displayed on the VMU (Virtual Memory Unit). If you look at it while listening to any song (in the menu or in the game), it should pulse at the song's beat.

-A screensaver fonction appears when you leave the game on the pause menu for five minutes or more.

-Here's the text displayed during Area 5:

"A great prosperity came, as life conquered even the highest mountains...
Mass extinctions came wave after wave...
but empty niches always quickly refilled...
to once again prosper, grow, and reproduce...
Someday the next great emigration will occur...
as we leave this existence looking for another..."

The journey will begin anew...
I hold within me all the memories that have passed...
Who am I..."

Notes

1. JackSpade, "Shadow of Destiny: Percentage FAQ."
2. Gene, "Rez - Secrets FAQ."
3. iamradiox, "Rez - Complete Game Guide."

Sources

- “A” Tadeo. 2001. “Chrono Trigger Walkthrough and FAQ,” <http://www.gamefaqs.com/ps/562913-chrono-trigger/faqs/8268>.
- Aarseth, Espen. 1997. *Cybertext*. Baltimore, MD/London: The Johns Hopkins University Press.
- . 1999. “Aporia and Epiphany in Doom and The Speaking Clock.” In: Marie-Laure Ryan (ed.), *Cyberspace Textuality*, 31–41. Bloomington/Indianapolis, IN: Indiana University Press.
- . 2001. “Computer Game Studies, Year One.” *Game Studies* 1 (1) (July), <http://gamestudies.org/0101/editorial.html>.
- . 2003. “Playing Research.” presented at the DAC 2003, Melbourne, <http://www.bendevane.com/VTA2012/herrstubbz/wp-content/uploads/2012/01/02.GameApproaches2.pdf>.
- Abe, Kōbō. 2002. “The Boom in Science Fiction,” *Science Fiction Studies* 29 (3): 342–49.
- Ace Combat 5: The Unsung War*. 2004. Namco. PS2, Japan.
- Ace Combat Zero: The Belkan War*. 2006. Namco. PS2, Japan.
- Acid Losvaize. 2009. “Armored Core For Answer – Walkthrough,” <http://www.gamefaqs.com/ps3/944263-armored-core-for-answer/faqs/55588>.
- Adam, Barbara. 1994. *Time & Social Theory*. Cambridge: Polity Press.
- Adorno, Theodor W. 1977. “Freizeit.” In: Rolf Tiedemann (ed.), *Gesammelte Schriften 10.2: Kulturkritik Und Gesellschaft II*, 645–55. Frankfurt, Main: Suhrkamp.
- . 2001. “Culture and Administration.” In: J.M. Bernstein (ed.), *The Culture Industry*, 107–31. London/New York: Routledge.
- . 2001. “Free Time.” In: J.M. Bernstein (ed.), *The Culture Industry*, 187–97. London/New York: Routledge.
- . 2001. “How to Look at Television.” In: J.M. Bernstein (ed.), *The Culture Industry*, 158–77. London/New York: Routledge.
- . 2001. “Resignation.” In: J.M. Bernstein (ed.), *The Culture Industry*, 198–203. London/New York: Routledge.

192 Thought-Provoking Play

- . 2001. “The Culture Industry Reconsidered.” In: J.M. Bernstein (ed.), *The Culture Industry*, 98–106. London/New York: Routledge.
- . 2001. “The Schema of Mass Culture.” In: J.M. Bernstein (ed.), *The Culture Industry*, 61–97. London/New York: Routledge.
- Agamben, Giorgio. 2002. *Homo Sacer*. Frankfurt (Main): Suhrkamp.
- . 2005. *State of Exception*. Chicago, IL: University of Chicago Press.
- Aijima [相島], Toshio [敏夫]. 1970. *Konpyūta no Kagiri Naki Chōsen* [コンピュータの限りなき挑戦]. Tokyo: Konpyūta ēji sha [コンピュータ・エージ社].
- AlfaSystem. 2003. “Shinseiki Evangerion 2 Kaihatsu Nikki, dai 1wa,” December 12, http://www.alfasystem.net/game/eva2/text_development/mel015x.cgi?mode=all_html&lno=1.
- . 2011. “Shinseiki Evangerion 2 Seihin Shōkai,” http://www.alfasystem.net/game/eva2/product_introduction.html.
- Another Century's Episode*. 2005. From Software. PS2, Japan.
- Another Century's Episode R*. 2010. From Software. PS3, Japan.
- Arendt, Hannah. 1970. *On Violence*. Orlando, FL/Austin, TX/New York/San Diego, CA/London: Harvest.
- . 1998. *The Human Condition*. 2nd ed. Chicago, IL: University of Chicago Press.
- . 2006. “What Is Freedom.” In: Idem (ed.), *Between Past and Future: Eight Exercises in Political Thought*, 142–69. New York: Penguin Books.
- Armored Core 2*. 2000. From Software. PS2, Japan.
- Armored Core 4*. 2006. From Software. PS3, Japan.
- Armored Core for Answer*. 2008. From Software. PS3, Japan.
- Armored Core Nexus*. 2004. From Software. PS2, Japan.
- Arsenault, Dominic. 2009. “Video Game Genre, Evolution and Innovation,” *Eludamos. Journal for Computer Game Culture* 3 (2): 149–76.
- Axem Rangers. 2002. “Rez Review for Dreamcast: No Matter How Hard You Try You Will Still Lie Trapped within the System,” September 8, <http://www.gamefaqs.com/dreamcast/534915-rez/reviews/review-40003>.

- Azuma [東], Hiroki [浩紀]. 2001. *Dōbutsuka suru posutomodan* [動物化するポストモダン]. Tokyo: Kōdansha [講談社].
- . 2007. *Kontentsu no Shisō – Manga, Anime, Raitonoberu* [コンテンツの思想 マンガ・アニメ・ライトノベル]. Tokyo: 青土社 [Seidosha].
- . 2009. *Otaku: Japan's Database Animals*. Translated by Jonathan E. Abel. Minneapolis, MN: University of Minnesota Press.
- Beiner, Ronald. 2014. *Political Philosophy. What It Is and Why It Matters*. New York: Cambridge University Press.
- Benjamin, Walter. 2002. “The Work of Art in the Age of Its Technological Reproducibility: Second Version.” In: Howard Eiland and Michael W. Jennings (eds), *Walter Benjamin: Selected Writings. Vol. 3: 1935–1938*, 101–33. Cambridge, MA/ London: The Belknap Press of Harvard University Press.
- Bhabha, Homi K. 2004. “Foreword: Framing Fanon.” In: Frantz Fanon (ed.), *The Wretched of the Earth*, vii–xli. New York: Grove Press.
- Bogost, Ian. 2006. *Unit Operations: An Approach to Videogame Criticism*. Cambridge, MA/ London: The MIT Press.
- . 2007. *Persuasive Games*. Cambridge, MA: The MIT Press.
- . 2014. “Why Gamification Is Bullshit.” In: Steffen P. Walz and Sebastian Deterding (eds), *The Gameful World: Approaches, Issues, Applications*, 65–80. Cambridge MA: The MIT Press.
- Brown, Harry J. 2015. *Videogames and Education*. London/New York: Routledge (Taylor & Francis Group).
- Buck-Morss, Susan. 2002. *Dreamworld and Catastrophe: The Passing of Mass Utopia in East and West*. Cambridge, MA/London: The MIT Press.
- Bufacchi, Vittorio. 2005. “Two Concepts of Violence,” *Political Studies Review* 3 (2): 193–204, <https://doi.org/10.1111/j.1478-9299.2005.00023.x>.
- Burden, Michael and Sean Gouglas. 2012. “The Algorithmic Experience: Portal as Art,” *Game Studies* 12 (2) (December), http://gamestudies.org/1202/articles/the_algorithmic_experience.
- Caillois, Roger. 1961. *Man, Play, and Games*. New York: Free Press of Glencoe.
- Campbell, James. 2008. “Just Less than Total War Simulating World War II as Ludic

194 Thought-Provoking Play

- Nostalgia." In: Zach Whalen and Laurie N. Taylor (eds), *Playing the Past: History and Nostalgia in Video Games*, 183–200. Nashville, TN: Vanderbilt University Press.
- Carroll, Noël. 1996. *Theorizing the Moving Image*. Cambridge: Cambridge University Press.
- . 1998. *A Philosophy of Mass Art*. Oxford/New York: Oxford University Press.
- Chrono Trigger*. 1999. Tose. PS, Japan.
- Colzato, Lorenza S., Van Leeuwen, Pieter J.A., Van Den Wildenberg, Wery and Bernhard Hommel. 2010. "DOOM'd to Switch: Superior Cognitive Flexibility in Players of First Person Shooter Games," *Frontiers in Psychology* 1 (April), <https://doi.org/10.3389/fpsyg.2010.00008>.
- Consalvo, Mia. 2007. *Cheating: Gaining Advantage in Videogames*. Cambridge, MA: MIT Press.
- . 2009. "There Is No Magic Circle," *Games and Culture* 4 (4): 408–17, <https://doi.org/10.1177/1555412009343575>.
- Crawford, Garry. 2009. "Forget the Magic Circle (or Towards a Sociology of Video Games)," <http://underthemask.wdfiles.com/local-files/key-note/Garry%20Crawford.doc>.
- Csikszentmihalyi, Mihaly. 1996. *Creativity*. New York: HarperCollins.
- Decker, Oliver, Kiess, Johannes and Elmar Brähler (eds). 2016. *Die Enthemmte Mitte – Autoritäre und Rechtsextreme Einstellung in Deutschland*. Leipziger Mitte-Studie. Gießen: Psychosozial-Verlag.
- Deen, Phillip D. 2011. "Interactivity, Inhabitation and Pragmatist Aesthetics," *Game Studies* 11 (2) (May), <http://gamestudies.org/1102/articles/deen>.
- Deleuze, Gilles. 1992. "Postscript on the Societies of Control," *October* 59: 3–7. <https://doi.org/10.2307/778828>.
- De Peuter, Greig and Nick Dyer-Witford. 2005. "A Playful Multitude? Mobilising and Counter-Mobilising Immaterial Game Labour," *The Fibreculture Journal*, 5, <http://five.fibreculturejournal.org/fcj-024-a-playful-multitude-mobilising-and-counter-mobilising-immaterial-game-labour/>.
- "Diggr – Databased Infrastructure for Global Game Culture Research." Accessed November 8, 2017. <http://diggr.link>.

- Dille, Flint and John Zuur Platten. 2007. *The Ultimate Guide to Video Game Writing and Design*. New York: Skip Press.
- Dovey, Jon and Helen W. Kennedy. 2006. *Game Cultures: Computer Games as New Media*. Maidenhead: Open University Press.
- Dyer-Witheford, Nick and Greig De Peuter. 2009. *Games of Empire: Global Capitalism and Video Games*. Minneapolis, MN: University of Minnesota Press.
- . 2009. "Empire@Play: Virtual Games and Global Capitalism," *CTheory*, ctheory.net.
- Echochrome. 2008. Sony. PSP & PS3.
- "Echochrome (Playstation.Com)." n.d. Playstation.com. Accessed November 4, 2017. <https://www.playstation.com/en-us/games/echochrome-psp/>.
- El Greco. 2004. "Metal Gear Solid Game Script," August 28, <http://www.ign.com/faqs/2004/metal-gear-solid-game-script-506035>.
- Embrick, David G., Talmadge Wright J. and András Lukács. 2012. *Social Exclusion, Power and Video Game Play: New Research in Digital Media and Technology*. Lanham, MD [etc.]: Lexington Books.
- Endo [遠藤], Masanobu [雅伸]. 2016. "The Making of 80's Japanese Games~Create World~." Keynote presented at the Replaying Japan 2016, Leipzig, August 16, <https://youtu.be/jD90KqI6Ng0>.
- Eskelinen, Markku. 2001. "The Gaming Situation," *Game Studies* 1 (1), <http://www.gamestudies.org/0101/eskelinen/>.
- Every Day the Same Dream*. La Molleindustria. Flash, Online. Accessed November 4, 2017. <http://molleindustria.org/everydaythesamedream/everydaythesamedream.html>.
- Fanon, Frantz. 2004. *The Wretched of the Earth*. New York: Grove Press.
- Fink, Eugen. 1960. *Spiel als Weltsymbol*. Stuttgart: Kohlhammer.
- Fink, Eugen, Saine, Ute and Thomas Saine. 1968. "The Oasis of Happiness: Toward an Ontology of Play," *Yale French Studies*, 41: 19–30.
- Flanagan, Mary. 2009. *Critical Play: Radical Game Design*. Cambridge, MA: The MIT Press.
- Flick, Uwe. 2007. *Qualitative Sozialforschung*. Reinbek bei Hamburg: Rowohlt.

196 Thought-Provoking Play

- Frasca, Gonzalo. 1999. "Ludology Meets Narratology. Similitude and Differences between (Video) Games and Narrative," original publ. in Finnish, for English version, see <http://www.ludology.org/articles/ludology.htm>.
- . 2003. "Ludologists Love Stories, Too: Notes from a Debate That Never Took Place." In: *DiGRA '03 – Proceedings of the 2003 DiGRA International Conference: Level Up*. Utrecht, <http://www.digra.org/wp-content/uploads/digital-library/05163.01125.pdf>.
- Freedman, Carl. 1987. "Science Fiction and Critical Theory," *Science-Fiction Studies* 14 (2): 180–200.
- Front Mission 2*. 1997. Squaresoft. PS, Japan.
- Front Mission 3*. 1999. Squaresoft. PS, Japan.
- Front Mission 5~Scars of the War*. 2005. Square Enix. PS2, Japan.
- Fujimoto [藤本], Tōru [徹]. 2007. *Shiriasu Gēmu: Kyōiku, Shakai ni Yakudatsu Dejitaru Gēmu* [シリアスゲーム 教育・社会に役立つデジタルゲーム]. Tokyo: Tōyōkō denki daigaku shuppankyoku [東京電機大学出版局].
- Funatsu [船津], Minoru [稔]. 2003. "Bandai, PS2 'Shinseiki Evangerion2' Kansei Kishakaiken Kaisai [バンダイ、PS2「新世紀エヴァンゲリオン2」完成記者会見開催]," *Game Watch*, October 30, <http://game.watch.impress.co.jp/docs/20031030/eva.htm>.
- Gadamer, Hans-Georg. 2004. *Truth and Method*. London/New York: Continuum.
- Galloway, Alexander R. 2006. "Allegories of Control." In: Idem (ed.), *Gaming: Essays on Algorithmic Culture*, , 85–106. Minneapolis, MN/London: University of Minnesota Press.
- . 2006. *Gaming: Essays on Algorithmic Culture*. Minneapolis, MN: University of Minnesota Press.
- . 2008. "Warcraft and Utopia." In: Arthur Kroker and Marilouise Kroker (eds), *Critical Digital Studies: A Reader*, 112–21. Toronto/Buffalo, NY/London: University of Toronto Press, 2008.
- Galloway, Alexander R., Thacker, Eugene and McKenzie Wark. 2013. *Excommunication*. Chicago, IL: The University of Chicago Press.
- GAME VIDEO/ART. "Interview: Paolo Pedercini Aka La Molleindustria." GAMESCENES. ART IN THE AGE OF VIDEOGAMES. Accessed July 13, 2016.

- <http://www.gamescenes.org/2016/06/interview-paolo-pedercini-aka-la-molleindustria.html>.
- “Games for Change.” Accessed June 28, 2016. www.gamesforchange.org/.
- Gellner, Ernest. 1964. *Thought and Change*. London: Weidenfeld and Nicolson.
- Gēmuteki Riarizumu 2.0 – Zenhen [ゲーム的リアリズム2.0 前編]. YouTube: YL Yokohama Toshibaunka Rabo [YL 横浜都市文化ラボ], 2017. <https://youtu.be/glpYgRAuSs>.
- Gene. 2002. “Rez – Secrets FAQ,” <http://www.ign.com/faqs/2003/rez-secrets-faq-437635>.
- Geulen, Eva. 2005. *Giorgio Agamben Zur Einführung*. Hamburg: Junius Verlag.
- Geuss, Raymond. 1998. “Art and Criticism in Adorno’s Aesthetics,” *European Journal of Philosophy* 6, (3): 297–317.
- . 2010. *Politics and the Imagination*. Princeton, NJ/ Oxford: Princeton University Press.
- Giant Bomb Wiki. 2013. “Rez (Game) – Giant Bomb Wiki,” <http://www.giantbomb.com/rez/3030-17578/>.
- goldeneye86. 2004. “Metal Gear Solid 3: Snake Eater: No Alert/No Kill Guide,” December 22, <http://www.gamefaqs.com/ps2/914828-metal-gear-solid-3-snake-eater/faqs/33861>.
- Goto-Jones, Christopher. 2010. “Alien Autopsy: The Science Fictional Frontier of Asian Studies.” In: Christopher Goto-Jones (ed.), *The Asiascape Collection v.1*, 22–27. Leiden, Netherlands: Asiascape.net, 2010. http://www.asiascape.org/resources/publications/asiascape_collection.pdf.
- . 2015. “Playing with Being in Digital Asia: Gamic Orientalism and the Virtual Dōjō,” *Asiascape: Digital Asia* 2, no (1–2): 20–56.
- Graeber, David. 2016. *The Utopia of Rules: On Technology, Stupidity, and the Secret Joys of Bureaucracy*. Brooklyn, NY/London: Melville House.
- Grassmuck, Volker. 2000. “Man, Nation & Machine. The Otaku Answer to Pressing Problems of the Media Society,” http://waste.informatik.hu-berlin.de/Grassmuck/Texts/otaku00_e.html.
- Gundam Musō 2* [Dynasty Warriors: Gundam 2]. 2008. Koei and Omega Force. PS3, Japan.

198 Thought-Provoking Play

- Gundam Musō Special*. 2008. Koei and Omega Force. PS2, Japan.
- Hamamura [浜村], Hirokazu [弘一] (ed.). 2012. *Metal Gear Solid HD Edition Operation Guide* [メタルギア ソリッド HDエディション 公式オペレーションガイド]. Tokyo: Enterbrain [エンターブレイン].
- Haraway, Donna J. 1991. "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century." In: Idem (ed.), *Simians, Cyborgs, and Women*, 149–81. New York: Routledge.
- Hassan, Robert. 2009. *Empires of Speed: Time and the Acceleration of Politics and Society*. Leiden: Brill.
- Haunter120. 2002. "Chrono Trigger – Walkthrough," March 15, <http://www.ign.com/faqs/2004/chrono-trigger-walkthrough-575924>.
- Hellicar, Stephen. 2008. "Metal Gear Solid 4: Sons of the Patriots – Big Boss Rank Guide," July 27, <http://www.gamefaqs.com/ps3/926596-metal-gear-solid-4-guns-of-the-patriots/faqs/53227>.
- Henricks, Thomas S. 2010. "Play and Cultural Transformation: Or, What Would Huizinga Think of Video Games?" In: J. Talmadge Wright, David G. Embrick, and András Lukács (eds), *Utopic Dreams and Apocalyptic Fantasies: Critical Approaches to Researching Video Game Play*, 15–41. Lanham, MD/Plymouth: Lexington Books.
- Hichibe [七邊], Nobushige [信重]. 2006. "Bunkasōzō no Jōken – Futatsu no Gēmu 'Ba' no Bunkaseisanronteki Kōsatsu kara [文化創造の条件 2つのゲーム「場」の文化生産論的考察から]," *Bulletin of the Graduate Division of Letters, Arts and Sciences of Waseda University. I, Philosophy, Oriental Philosophy, Psychology, Sociology, Education* 51: 65–73.
- . 2009. "Possibilities of Sustainable Small-Scale Game Development: Qualitative Data Analysis of Development of Doujin and Indie Games," *Journal of Digital Games Research* 3 (2): 171–83.
- Hine, Christine. 2000. *Virtual Ethnography*. London/Thousand Oaks, CA/New Delhi: Sage.
- hiro. 2009. "同人『クロノトリガー』の作成にスクエニが15万ドルの裁判！ 同人「ファックユー！」掲載 | ガジェット通信." *ガジェット通信*, May 23, <http://getnews.jp/archives/14675>.
- HIRYUU. 2006. "Chrono Trigger Endings," <http://shrines.rpgclassics.com/snes/ct/endings.shtml>.

- Huizinga, Johan. 1970. *Homo Ludens*. London: Temple Smith.
- . 2009. *Homo Ludens*. Hamburg: Rowohlt.
- Hutcheon, Linda. 2006. *A Theory of Adaptation*. New York/Oxon: Routledge (Taylor & Francis Group).
- iamradiox. 2008. “Rez – Complete Game Guide,” <http://www.gamefaqs.com/ps2/517868-rez/faqs/51611>.
- Inoue [井上], Akito [明人]. 2012. *ゲーミフィケーション [Gēmifikēshon]*. Tokyo: NHK Shuppan [NHK 出版].
- Itagaki [板垣], Ryūta [竜太], Jeong [鄭], Ji Young [智泳] and Minoru [稔] Iwasaki [岩崎]. 2011. “Higashi Ajia no Kioku no Ba’ o Tankyū Shite [「東アジアの記憶の場」を探求して].” In: Idem (eds), *Higashi Ajia no Kioku no Ba [東アジアの記憶の場]*, 7–35. Tokyo: Kawade Shobō [河出書房].
- Itō [伊藤], Gō [剛]. 2005. *Tezuka izu deddo – hirakareta manga hyōgenron e [テヅカ・イズ・デッド ひらかれたマンガ表現論へ]*. Tokyo: NTT Shuppan [NTT 出版].
- Itō [伊藤], Mamoru [守]. 2016. “Dejitaru Media Jidai ni Okeru Genronkūkan: Rironteki Tankyū no Taishō Toshite no Seigyō, Jōdō, Jikan [デジタルメディア時代における言論空間： 理論的探求の対象としての制御, 情動, 時間; English title: Transformation of Discourse Space in the Digital Age].” *マス・コミュニケーション研究 [Journal of Mass Communication Studies]*, 89: 21–43.
- JackSpade. 2002. “Shadow of Destiny: Percentage FAQ,” <http://www.gamefaqs.com/ps2/367317-shadow-of-destiny/faqs/13683>.
- Jameson, Frederic. 2007. *Archaeologies of the Future*. London/New York: Verso.
- . 2010. “Utopia as Method, or the Uses of the Future.” In: Michael D. Gordin, Helen Tilley and Gyan Prakash (eds), *Utopia/Dystopia: Conditions of Historical Possibility*, 21–44. Princeton, NJ/Oxon: Princeton University Press.
- Juul, Jesper. 2005. *Half-Real: Video Games between Real Rules and Fictional Worlds*. Cambridge, MA /London: The MIT Press.
- . 2008. “The Magic Circle and the Puzzle Piece.” In: Stephan Günzel, Michael Liebe and Dieter Mersch (eds), *Philosophy of Computer Games Conference Proceedings*, 56–66. Potsdam: Potsdam University Press.
- Karatani, Kōjin. 2012. *Auf der Suche nach der Weltrepublik – Eine Kritik von Kapital*,

200 Thought-Provoking Play

Nation und Staat. Translated by Martin Roth. Leipziger Ostasien-Studien 16. Leipzig: Leipziger Universitätsverlag.

———. 2014. *The Structure of World History. From Modes of Production to Modes of Exchange*. Translated by Michael K. Bourdaghs. Durham, NC/London: Duke University Press.

Kasavin, Greg. 2004. “Ace Combat 5: The Unsung War Review,” October 25, <http://www.gamespot.com/ace-combat-5-the-unsung-war/reviews/ace-combat-5-the-unsung-war-review-6111374/>.

“Katamari Damacy Game | PS2 – PlayStation.” Accessed November 4, 2017. <https://www.playstation.com/en-us/games/katamari-damacy-ps2/>.

Katamari Damashii. 2004. Namco. PS2, Japan.

Katō [加藤], Hiroyuki [寛之] and Junichirō [淳一郎] Tamura [田村] (eds). 2003. *Shinseiki Evangelion 2 Kōryaku Gaido [新世紀エヴァンゲリオン2 攻略ガイド]*. Tokyo: Kadokawa Shoten [角川書店].

Kirkpatrick, Graeme. 2009. “Controller, Hand, Screen: Aesthetic Form in the Computer Game,” *Games and Culture* 4 (2): 127–43, <https://doi.org/10.1177/1555412008325484>.

———. 2013. *Computer Games and the Social Imaginary*. Cambridge: Polity Press.

Kitada [北田], Akihiro [暁大]. 2011. *Zōho: Kōkoku Toshi Tōkyō – Sono Tanjō to Shi [増補 広告都市・東京 その誕生と死]*. Tokyo: Chikumashobō [筑摩書房].

Kline, Stephen, Dyer-Witheford, Nick and Greig de Peuter. 2003. *Digital Play. The Interaction of Technology, Culture and Marketing*. Montreal: McGill-Queen’s University Press.

KoritheMan. 2008. “Chrono Trigger FAQ/Walkthrough (SNES),” <http://www.gamefaqs.com/ps/562913-chrono-trigger/faqs/42952>.

Koster, Raph. 2005. *A Theory of Fun for Game Design*. Scottsdale: Paraglyph Press.

Kotani [小谷], Mari [真理]. 1997. *Seibo Evangelion – A New Millennialist Perspective on the Daughters of Eve*. Tokyo: Magajinhausu [マガジンハウス].

Kōno [河野], Kazutoki [一聡]. Creation date unknown. “Strangereal Map.” Uploaded to wikia in July 2014 by SlyCooperFan1. Accessed December 1, 2017. http://acecombat.wikia.com/wiki/File:Strangereal_Map.jpg.

- Lamarre, Thomas. 2009. *The Anime Machine*. Minneapolis, MN/London: University of Minnesota Press.
- Lauteria, Evan W. 2015. "Assuring Quality: Early 1990s Nintendo Censorship and the Regulation of Queer Sexuality and Gender." In: Matthew Wysocki and Evan W. Lauteria (eds), *Rated M for Mature*, 42–59. New York & London: Bloomsbury Academic.
- Lefebvre, Henri. 2012 [1991]. *The Production of Space*. Translated by Donald Nicholson-Smith. Malden, MA/Oxford, Carlton: Blackwell.
- Lewis, David. 1986. *Philosophical Papers*. Vol. 2. New York/Oxford: Oxford University Press.
- Liebe, Michael. 2008. "There Is No Magic Circle. On the Difference between Computer Games and Traditional Games." In: Stephan Günzel, Michael Liebe, and Dieter Mersch (eds), *Logic and Structure of the Computer Game*, 324–41. Potsdam University Press.
- Malumbrus, NeoSarinatan and Mr_Big_Boss. 2011. "Discussion about Non-Lethal Playthrough in Metal Gear Solid 2," <http://www.gamefaqs.com/boards/913941-metal-gear-solid-2-sons-of-liberty/59601588>.
- Manovich, Lev. 2001. *The Language of New Media*. Cambridge, MA: The MIT Press.
- . 2002. "Data Visualisation as New Abstraction and Anti-Sublime," http://manovich.net/DOCS/data_art_2.doc.
- . 2013. *Software Takes Command*. New York: Bloomsbury.
- Massumi, Brian. 1995. "The Autonomy of Affect." *Cultural Critique* 31: 83–109. <https://doi.org/10.2307/1354446>.
- . 2015. *Politics of Affect*. Cambridge: Polity.
- Matsumoto [松本], Kentarō [健太郎]. 2014. "Gēmuka Suru Sekai' ga Motarashita Mono, Motarashitsutsu Aru Mono [「ゲーム化する世界」がもたらしたもの、もたらしつつあるもの]." In: Nihon kigō gakkai [日本記号学会] (ed.), *Gēmuka Suru Sekai – Konpyūta Gēmu no Kigōron* [ゲーム化する世界 コンピュータゲームの記号論], 2nd ed., 11–15. Tokyo: Shinyōsha [新曜社].
- Matsunaga [松永], Shinji [伸司]. 2012. "Bideogēmu ni okeru jikan [ビデオゲームにおける時間]." Ritsumeikan University Kyōto, <http://de.slideshare.net/zmzizm/ss-43378107>.

202 Thought-Provoking Play

- . 2014. “Bideogēmu ni okeru imisayō [ビデオゲームにおける意味作用].” Tokyo University of the Arts [東京藝術大学大学院美術研究家].
- “M.C. Escher – Image Categories – Impossible Constructions.” Accessed November 4, 2017. <http://www.mcescher.com/gallery/impossible-constructions/>.
- McFadden, Steve. 2002. “Chrono Trigger – Walkthrough/FAQ (PSX),” August 14, <http://www.ign.com/faqs/2003/chrono-trigger-walkthroughfaq-psx-403825>.
- McGonigal, Jane. 2012. *Reality Is Broken: Why Games Make Us Better and How They Can Change the World*. Vintage.
- “Media Art Database.” <http://mediaarts-db.bunka.go.jp>.
- Metal Gear Solid*. 1998. Konami Computer Entertainment Japan. PS, Japan.
- Metal Gear Solid 2: Sons of Liberty*. 2001. Konami Computer Entertainment Japan. PS2, Japan.
- Metal Gear Solid 3: Snake Eater*. 2004. Konami Computer Entertainment Japan. PS2, Japan.
- Metal Gear Solid 4: Guns of the Patriots*. 2008. Konami Computer Entertainment Japan. PS3, Japan.
- Metal Gear Solid HD Edition*. 2011. Kojima Production and Bluepoint Games, PS3, Japan.
- “METI – Content Industry: Current Status and Direction of Future Development.” Accessed June 8, 2016. http://www.meti.go.jp/english/policy/mono_info_service/content_industry/pdf/20160329001.pdf.
- “METI – Cool Japan Strategy.” Accessed June 8, 2016. http://www.meti.go.jp/english/policy/mono_info_service/creative_industries/pdf/121016_01a.pdf.
- MHamlin. 2006. “Metal Gear Solid 3: Snake Eater Game Script,” <http://www.gamefaqs.com/ps3/643148-metal-gear-solid-hd-edition/faqs/34684>.
- Miller, Pat. 2006. “Metal Gear Pacifist.” *The Escapist*, January 24.
- Minna Daisuki Katamari Damashii*. 2005. Namco. PS2, Japan.
- Miyake [三宅], Yōichirō [陽一郎]. 2012. “The Future of Game, AI, and Computer Graphics.” Kyoto: Ritsumeikan University.

- Mobile Suit Gundam*. 1996. Bandai. PS, Japan.
- Mobile Suit Gundam: Climax U.C.* 2006. Bandai. PS2, Japan.
- Mobile Suit Gundam: Giren No Yabō – Jion Dokuritsu Sensōki* [Gihren's Ambition – Chronicals of the Zeon Liberation War]. 2002. Bandai. PS2, Japan.
- Mobile Suit Gundam: Gundam vs. Z Gundam*. 2004. Capcom. PS2, Japan.
- Mobile Suit Gundam: Gyakushū No Shā* [Chars Counterattack]. 1998. Bandai. PS, Japan.
- Mobile Suit Gundam: Ichinen Sensō* [One Year War]. 2005. Namco. PS2, Japan.
- Mobile Suit Gundam: Renpō vs. Jion DX* [Federation vs. Zeon DX]. 2001. Capcom. PS2, Japan.
- Mobile Suit Gundam Seed*. 2003. Bandai. PS2, Japan.
- Mobile Suit Gundam Seed: Rengō vs. Z.A.F.T.* [Federation vs. Z.A.F.T.]. 2005. Capcom. PS2, Japan.
- Mobile Suit Z Gundam: AEUG vs. Titānzu* [AEUG vs. Titans]. 2003. Capcom. PS2, Japan.
- “Mobygames: Final Fantasy XIII Credits (Playstation 3).” Mobygames. Accessed November 4, 2017. <http://www.mobygames.com/game/ps3/final-fantasy-xiii/credits>.
- Mori, Masahiro. 2012. “The Uncanny Valley.” Translated by Karl F. MacDorman and Norri Kageki. *IEEE Robotics & Automation Magazine* 19, (2): 98–100.
- Mukherjee, Souvik. 2011. “Re-Membering and Dismembering: Memory and the (Re)Creation of Identities in Videogames,” 1–13. 5th International Interdisciplinary Conference on Philosophy of Computer Games, Athens, April 7. <http://gameconference2011.files.wordpress.com/2010/10/re-membering-and-dismembering-final.pdf>.
- . 2015. *Video Games and Storytelling – Reading Games and Playing Books*. Basingstoke/New York: Palgrave Macmillan.
- Munro, Thomas and Roger Scruton. “Aesthetics (Philosophy).” 2013. *Encyclopædia Britannica Online*, August 21, <http://www.britannica.com/EBchecked/topic/7484/aesthetics>.
- Muroi [室井], Hisashi [尚]. 1988. *Posutoōto Ron* [ポストアート論]. Tokyo: Shoshi Kaze no Bara [書肆風の薔薇].

204 Thought-Provoking Play

- Muroi [室井], Hisashi [尚], and Hiroshi [洋] Yoshioka [吉岡]. 1993. *Jōhō to Seimei – Nō, Konpyūta, Uchū* [情報と生命—脳・コンピュータ・宇宙]. Tokyo: Shinyōsha [新曜社].
- Murray, Janet H. 1997. *Hamlet on the Holodeck: The Future of Narrative in Cyberspace*. 2nd ed. New York: The Free Press.
- Nagel, Thomas. 1979. “What Is It like to Be a Bat.” In: Idem (ed.), *Mortal Questions*, 165–80. Cambridge: Cambridge University Press.
- Nakajima [中島], Norihiko [理彦], Kariya [刈屋], Kōji [幸治] and Ayumi [歩] Miyazaki [宮崎] (eds). 2004. *Neon Genesis Evangelions: The Complete Guide* [新世紀エヴァンゲリオン2 ザ・コンプリートガイド]. Tokyo: Media Works.
- Nakamura, Miri. 2002. “Horror and Machines in Prewar Japan: The Mechanical Uncanny in YUMENO Kyūsaku’s Dogura Magura,” *Science Fiction Studies* 29 (3): 364–81.
- nemiminijam. 2002. “Kurono Torigā Zen Endingu Risuto,” June 14, <http://www.geocities.co.jp/Milkyway-Orion/3470/sub15.htm>.
- Nitsche, Michael. 2007. “Mapping Time in Video Games,” edited by Akira Baba, 145–51, http://lmc.gatech.edu/~nitsche/download/Nitsche_DiGRA_07.pdf.
- Noon, Derek and Nick Dyer-Witheford. 2010. “Sneaking Mission: Late Imperial America and Metal Gear Solid.” In: J. Talmadge Wright, David G. Embrick and András Lukács (eds), *Utopic Dreams and Apocalyptic Fantasies: Critical Approaches to Researching Video Game Play*, 73–95. Lanham, MD/Plymouth: Lexington Books.
- Nozawa, Shunsuke. 2013. “Characterization,” *Semiotic Review* 3 (November): n.p., <https://www.semioticreview.com/ojs/index.php/sr/article/download/16/15?inline=1>.
- Nussbaum, Martha. 2006. *Frontiers of Justice: Disability, Nationality, Species Membership*. Cambridge, MA: Harvard University Press
- Ogiue [荻上], Chiki [チキ] and Tetsurō [哲朗] Irie [入江]. 2010. “Sen’yū Taidan – Ogiue Chiki x Irie Tetsurō [潜友対談 荻上チキ×入江哲朗].” Edited by Soshiogurafū Kenkyūkai [ソシオグラフィ研究会]. *Config*, 1, Integral: 12–19.
- Ōtsuka [大塚], Eiji [英志]. 2001. *Teihon Monogatariishōhiron* [定本 物語消費論]. Tokyo: Kadokawa shoten.
- . 2014. “Kadokawa Tsuguhiko to Mediamix No Jidai [角川歴彦とメディアミ

- ツクスの時代].” Saizensen [最前線] (blog), June 4, <http://sai-zen-sen.jp/editors/blog/works/kadokawatsuguhiko/>.
- Owen, Taylor. 2015. *Disruptive Power: The Crisis of the State in the Digital Age*. Oxford: Oxford University Press.
- Oyama, Shinji. 2016. “Japanese Creative Industries in Globalization.” In: Larissa Hjorth and Olivia Khoo (eds), *Routledge Handbook of New Media in Asia*, 322–32. New York/London: Routledge.
- Pavel, Thomas. 1986. *Fictional Worlds*. Cambridge, MA/London: Harvard University Press.
- Pearce, Celia. 2011. *Communities of Play*. Cambridge, MA: The MIT Press.
- Penny, Simon. 2010. “Twenty Years of Artificial Life Art,” *Digital Creativity* 21 (3): 197–204, <https://doi.org/10.1080/14626261003654640>.
- . 2013. “Art and Robotics: Sixty Years of Situated Machines,” *AI & SOCIETY* 28 (2): 147–56, <https://doi.org/10.1007/s00146-012-0404-4>.
- Pentzold, Christian, Bischof, Andreas and Nele Heise (eds). 2018. *Praxis Grounded Theory. Theoriegenerierendes Empirisches Forschen in Medienbezogenen Lebenswelten. Ein Lehr- Und Arbeitsbuch*. Wiesbaden: Springer VS.
- Perron, Bernard. 2005. “A Cognitive Psychological Approach to Gameplay Emotions.” In: *Proceedings of DiGRA 2005 Conference: Changing Views – Worlds in Play*. Vancouver, Canada, <http://summit.sfu.ca/item/262>.
- Perron, Bernard, and Felix Schröter (eds). 2016. *Video Games and the Mind. Essays in Cognition, Affect, and Emotion*. Jefferson, NC: McFarland.
- Pias, Claus. 2000. “Computer Spiel Welten.” Bauhaus-Universität Weimar, <http://e-pub.uni-weimar.de/volltexte/2004/37/>.
- Picard, Martin. 2013. “The Foundation of Geemu: A Brief History of Early Japanese Video Games,” *Game Studies* 13 (2), <http://gamestudies.org/1302/articles/picard>.
- Picard, Martin and Jérémié Pelletier-Gagnon. 2015. “Introduction: Geemu, Media Mix, and the State of Japanese Video Game Studies,” *Kinephanos* 5 (1): 1–19.
- Pineda, Angelo D., Thompason, Kyle A. and Wilson K. Tam. 2011. “Front Mission,” <http://www.hardcoregaming101.net/frontmission/frontmission.htm>.
- Pringle, Bill. 2009. “Chrono Trigger Endings,” March 1, http://billpringle.com/games/ct_end.html.

206 Thought-Provoking Play

- Queer Power*. La Molleindustria. Flash, Online. Accessed July 13, 2016. <http://www.molleindustria.org/en/queer-power/>.
- Radford, Michael. 2006. "Ace Combat 05: The Unsung War FAQ/Walkthrough," <http://www.gamefaqs.com/ps2/562459-ace-combat-5-the-unsung-war/faqs/35833>.
- Rämisch, Florian. 2017. "Game Publications by Platform and Year (MediaArtsDB)." Image created for the project diggr – Databased Infrastructure for Global Game Culture Research. <http://diggr.link>.
- Raessens, Joost. "The Ludification of Culture." 2014. In: Mathias Fuchs, Sonia Fizek, Paolo Ruffino and Niklas Schrape (eds), *Rethinking Gamification*, 91–114. Lüneburg: Hybrid Publishing Lab.
- Ramza411sb. 2013. *Interactive Let's Play Armored Core: For Answer – Part 1 – Introduction*. YouTube, <http://www.youtube.com/watch?v=DrW246pu4kg>.
- Rancière, Jacques. 2004. *The Politics of Aesthetics*. Translated by Gabriel Rockhill. London/New York: Continuum.
- . 2008. *Das Unbehagen in der Ästhetik*. 2nd ed. Wien: Passagen Verlag.
- Rez. 2001. United Game Artists & SEGA. PS2, Japan.
- Ricoeur, Paul. 1980. "Narrative Time," *Critical Inquiry* 7 (1): 169–90.
- . 1984. *Time and Narrative, Vol. 1*. Chicago, IL: The University of Chicago Press.
- Rieder, Bernhard and Theo Röhle. 2012. "Digital Methods: Five Challenges." In: David M. Berry (ed.), *Understanding Digital Humanities*, 67–84. Basingstoke/New York: Palgrave Macmillan.
- riesenkartoffel. 2012. "Comment in the Discussion of 'METAL GEAR SOLID 3. NO KILLS. NO ALERTS. NO DEATHS RUN COMPLEEEEEETEEEEED'" on the *Metal Gear Solid 3* Board of IGN, posted on May 29, <http://www.ign.com/boards/threads/metal-gear-solid-3-no-kills-no-alerts-no-deaths-run-compleeeeteeeed.452501990/#post-453635202>.
- Roberts, Adam. 2006. *Science Fiction*. Abingdon: Routledge.
- Roberts, Neil. 2004. "Fanon, Sartre, Violence, and Freedom," *Sartre Studies International* 10 (2): 139–60.
- Roth, Martin. 2011. "Otaku in Szene Gesetzt: Möglichkeiten für Identitätsarbeit und

- Kompetenzerwerb in einer Japanischen Jugendkultur,” *Bochumer Jahrbuch Zur Ostasienforschung* 34/2010: 261–82.
- . 2013. “Playing ‘Naruto’: Between Meta-Narrative Characters, Unit Operations and Objects.” In: Jaqueline Berndt and Bettina Kuemmerling-Meibauer (eds), *Manga’s Cultural Crossroads*, 243–58. New York/London: Routledge.
- Roth, Martin Erwin. 2014. “Disruptive Conflicts in Computopic Space: Japanese Sf Videogames as Sources of Otherness and Radical Political Imagination,” Phd, Leiden University. <https://openaccess.leidenuniv.nl/handle/1887/28265>.
- . 2015. “At the Edge of a ‘Digital Area’ – Locating Small Scale Game Creation,” *Asiascape: Digital Asia* 2 (3): 183–212.
- . 2016. “Review of Alexander R. Galloway, Eugene Thacker, and McKenzie Wark, *Excommunication*,” *Asiascape: Digital Asia* 3 (3): 206–8.
- Rothbauer, Paulette. 2008. “Triangulation.” In: Lisa M. Given (ed.), *The SAGE Encyclopedia of Qualitative Research Methods*, 893–95. Thousand Oaks, CA: SAGE Publications, <http://dx.doi.org/10.4135/9781412963909>.
- Runciman, David. 2014. *Politics*. London: Profile Books.
- Ryan, Marie-Laure. 2009. “Temporal Paradoxes in Narrative,” *Style* 43 (2): 142–64.
- Said, Edward W. 2012. *Orientalismus*. Frankfurt (Main): S. Fischer Verlag.
- Sakai, Naoki and Harry D. Harootunian. 1999. “Japan Studies and Cultural Studies,” *Positions: East Asia Cultures Critique* 7 (2): 593–647.
- Salen, Katie and Eric Zimmerman. 2004. *Rules of Play. Game Design Fundamentals*. Cambridge, MA: MIT Press.
- Sartre, Jean-Paul. 2004. “Preface.” In: Frantz Fanon (ed.), *The Wretched of the Earth*, xliii–lxii. New York: Grove Press.
- Schäfer, Fabian. 2010. “Virtual Death of the Human Being: Time and the (Ir)Reversibility of Choice in Digital Media.” In: Christopher Goto-Jones (ed.), *The Asiascape Collection v.1*, 103–14. Leiden, Netherlands: Asiascape.net, http://www.asiascape.org/resources/publications/asiascape_collection.pdf.
- Schäfer, Fabian and Martin Roth. 2012. “Otaku, Subjectivity and Databases: Hiroki Azuma’s Otaku: Japan’s Database Animals,” *Digital Culture & Education* 4 (2): 127–45.
- Schmitt, Carl. 1933. *Der Begriff des Politischen*. Hamburg: Hanseatische Verlagsanstalt.

208 Thought-Provoking Play

- Schrank, Brian. 2014. *Avant-Garde Videogames*. Cambridge, MA/London: The MIT Press.
- Schules, Douglas. 2015. "Kawaii Japan: Defining JRPGs through the Cultural Media Mix," *Kinephanos* 5: 53–76.
- Scott Card, Orson. 2001. *How to Write Science Fiction and Fantasy*. Cincinnati, OH: Writer's Digest Books.
- Scruton, Roger. 1999. *The Aesthetics of Music*. Oxford/New York: Oxford University Press.
- SD Gundam G Generation Neo*. 2002. TOM CREATE. PS2, Japan.
- SD Gundam G Generation Seed*. 2004. TOM CREATE. PS2, Japan.
- SD Gundam G Generation Spirits*. 2007. TOM CREATE. PS2, Japan.
- SD Gundam G Generation Wars*. 2009. TOM CREATE. PS2, Japan.
- September 12th*. Newsgaming.com. Online. Accessed November 4, 2017. <http://newsgaming.com/games/index12.htm>.
- Shibamura [芝村], Yūri [裕吏]. 2003. "Shinseiki Evangerion 2: About," <http://www.bandaigames.channel.or.jp/list/eva2/about.html>.
- Shinseiki Evangerion 2*. 2003. AlfaSystem & BANDAI. PS2, Japan.
- Sicart, Miguel. 2011. "Against Procedurality," *Game Studies* 11 (3), http://gamestudies.org/1103/articles/sicart_ap.
- Sorel, Georges. 1976. "From Reflections on Violence." In: John L. Stanley (ed.), *From Georges Sorel: Essays in Socialism and Philosophy*, 192–226. New York: Oxford University Press.
- Square Enix. 2009. "Cease & Desist: Chrono Compendium, Chrimson Echoes," May 8, <http://www.chronocompendium.com/CEOrder.PDF>.
- Stalder, Felix. 2005. "Culture without Commodities: From Dada to Open Source and Beyond." In: *Open Cultures and the Nature of Networks*, 23–29. Novi Sad, Serbia, Montenegro / Sarajevo / Frankfurt: Futura publikacije / Sarajevo Center for Contemporary Art (SCCA) / Revolver – Archiv für aktuelle Kunst.
- . 2016. *Kultur der Digitalität*. Frankfurt (Main): Suhrkamp.

- Stanley, John L. 1976. "Introduction." In: John L. Stanley (ed.), *From Georges Sorel: Essays in Socialism and Philosophy*, 1–61. New York: Oxford University Press.
- Steinberg, Marc. 2012. *Anime's Media Mix: Franchising Toys and Characters in Japan*. Minneapolis, MN: University of Minnesota Press.
- Steinberg, Marc, and Alexander Zahlten. 2017. "Introduction." In Marc Steinberg and Alexander Zahlten (eds), *Media Theory in Japan*. 1–29. Durham & London: Duke University Press.
- suba. 2005. "Eva2 Sūpā Kōryaku: Hajime ni," http://www.geocities.jp/s_shin_r/eva2/index.html#2.
- . 2005. "Eva2 Sūpā Kōryaku, Furi tātān," http://www.geocities.jp/s_shin_r/eva2/free.html.
- Sutton-Smith, Brian. 1997. *The Ambiguity of Play*. Cambridge, MA/London: Harvard University Press.
- Sutin, Darko. 1979. *Metamorphoses of Science Fiction*. New Haven, CT/London: Yale University Press.
- . 1982. "Narrative Logic, Ideological Domination, and the Range of SF: A Hypothesis with a Historical Test," *Science-Fiction Studies* 9 (1): 1–25.
- Takenami [竹並], Shin [伸]. 2004. *The Answer of Evangelions [新世紀エヴァンゲリオン2読本・I772の㊦]*. Tokyo: Illusion Factory.
- Tane [多根], Kiyoshi [清史]. 2011. *Kyōyō toshite no Gēmushi [Videogame History as Part of Our Education]*. Tokyo: Chikuma shobō [筑摩書房].
- Tavinor, Grant. 2009. *The Art of Videogames. New Directions in Aesthetics 10*. Malden, MA: Wiley-Blackwell.
- Tenmou.net. 2013. "Tenmou.Net (Front Mission Fan Site)," <http://www.tenmou.net>.
- . "World Map." Accessed December 1, 2017. <http://www.tenmou.net/encyclopedia/world/index.html>.
- THE Saigo no Nihonhei: Utsukushiki Kokudo Dakkan Sakusen* [The Last Japanese Soldier: Taking Back the Beautiful Home Land]. 2007. TAMSOFIT & D3 Publisher. PS2, Japan.
- Thon, Jan-Noël. 2016. *Transmedial Narratology and Contemporary Media Culture*. Lincoln, NB: UNP –Nebraska.

210 Thought-Provoking Play

- “Time Error.” Chronocompendium. Accessed June 16, 2016.
https://www.chronocompendium.com/Term/Time_Error.html.
- Ueno [上野], Chizuko [千鶴子]. 2005. “Datsu Aidentiti No Riron [脱アイデンティティの理論].” In: Chizuko [千鶴子] Ueno [上野] (ed.), *Datsu Aidentiti [脱アイデンティティ]*, 1–41. Tokyo: Keisōshobō [勁草書房].
- Unos Hambalos. 2007. “Front Mission 3 – Game Script (EMMA)”, 2 December.
<http://www.gamefaqs.com/ps/250588-front-mission-3/faqs/44651>.
- Unozawa [鵜之澤], Shin [伸] (ed.). 2012. *2012CESA Games White Paper [2012CESA ゲーム白書]*. Tokyo: Computer Entertainment Supplier’s Association (CESA) [一般社団法人コンピュータエンタテインメント協会 (CESA)].
- VaatiVidya. 2016. “Dark Souls 3 ▶ 10 Early Game Secrets.” YouTube, April 14,
<https://www.youtube.com/watch?v=q9TylxUtBf0>.
- vgchartz. 2012. *Video Game Charts, Games Sales, Top Sellers, Game Data – VGCharts*,
<http://www.vgchartz.com>.
- . 2012. *Video Game Charts: Methodology*, <http://www.vgchartz.com/methodology.php>.
- Virgil. 2001. “Shadow of Destiny Ending FAQ,” March 13,
<http://www.gamefaqs.com/xbox/582943-shadow-of-memories/faqs/10960>.
- Virilio, Paul. 2006. *Speed and Politics*. Los Angeles, CA: Semiotext(e).
- . 2009. *The Aesthetics of Disappearance*. Los Angeles, CA: Semiotext(e).
- Virilio, Paul and Jérôme Sans. 1999. “//.Dialogues./ the Game of Love and Chance: A Discussion with Paul Virilio.” edited by InfoTechWarPeace. The Information Technology, War and Peace Project, <http://www.watsoninstitute.org/infopeace/vy2k/sans.cfm>.
- Wade, Alex. 2009. “A Dromology of the Videogame.” In: *The Philosophy of Computer Games Conference Proceedings*. Oslo.
- Walther, Bo Kampmann. 2003. “Playing and Gaming – Reflections and Classifications,” *Game Studies* 3 (1).
- Walz, Steffen P. and Sebastian Deterding. 2014. “An Introduction to the Gameful World.” In: Steffen P. Walz and Sebastian Deterding (eds), *The Gameful World: Approaches, Issues, Applications*, 1–14. Cambridge, MA: The MIT Press.

- Wark, McKenzie. 2006. "A Hacker Manifesto [Version 4.0]," <http://www.neme.org/291/hacker-manifesto>.
- . 2007. *Gamer Theory*. Cambridge, MA: Harvard University Press.
- Washburn, Dennis. 2009. "Imagined History, Fading Memory: Mastering Narrative in Final Fantasy X." In: Frenchy Lunning (ed.), *Mechademia 4: War/Time*, 149–62. Mechademia 4. Minneapolis, MN/London: University of Minnesota Press.
- WaterExodus. 2013. *Let's Play Chrono Trigger Episode 11 – To the End of Time! Spekkio, Master of War!!!* YouTube, <http://www.youtube.com/watch?v=FrheqfhgvQ0>.
- Wegner, Phillip E. 2002. *Imaginary Communities*. Berkeley, CA: University of California Press.
- wikia. 2013. "Acedia (Ace Combat Wiki)," http://acecombat.wikia.com/wiki/Main_Page.
- . 2013. "Chronopedia – Chrono Trigger," http://chrono.wikia.com/wiki/Chrono_Trigger.
- . 2013. "Chronopedia – List of Chrono Trigger Endings," http://chrono.wikia.com/wiki/List_of_Chrono_Trigger_endings.
- Wikipedia. 2013. "Daihakai," <http://ja.wikipedia.org/wiki/%E5%A4%A7%E7%A0%B4%E5%A3%8A>.
- . 2013. "Shadow of Memories," September 15, http://en.wikipedia.org/wiki/Shadow_of_Memories.
- . 2017. "Interpreter (Computing)." November 15, [https://en.wikipedia.org/w/index.php?title=Interpreter_\(computing\)&oldid=810450178](https://en.wikipedia.org/w/index.php?title=Interpreter_(computing)&oldid=810450178).
- Wolf, Mark J.P. 2015. "Introduction." In: Mark Wolf (ed.), *Videogames Around the World*, 1–16. Cambridge, MA: MIT Press.
- Wright, Talmadge, Boria, Eric Boria and Paul Breidenbach. 2002. "Creative Player Actions in FPS Online Video Games – Playing Counter-Strike," *Game Studies* 2 (2), <http://www.gamestudies.org/0202/wright/>.
- Yoda, Tomiko. "A Roadmap to Millennial Japan." In: Tomika Yoda and Harry Harootunian (eds), *Japan After Japan: Social and Cultural Life from the Recessionary 1990s to the Present*, 16–53. Durham, NC/London: Duke University Press.
- Yoshida [吉田], Hiroshi [寛]. 2014. "Bideo Gēmu no Kigōronteki Bunseki – 'Sukurin no Nijūka' o Megutte [ビデオゲームの記号論的分析ー(スクリーンの二重化)をめ

212 Thought-Provoking Play

ぐつて].” In: Nihon kigō gakkai [日本記号学会] (ed.), *Gēmuka Suru Sekai – Konpyūta Gēmu no Kigōron* [ゲーム化する世界 コンピュータゲームの記号論], 2nd ed., 54–70. Tokyo: Shinyōsha [新曜社].

Yoshihara [吉原], Naoki [直樹]. 2011. *Komyuniti Sutadiizu* [コミュニティ・スタディーズ]. Tokyo: Sakuhinsha [作品社].

Zagal, José P. and Michael Mateas. 2010. “Time in Video Games: A Survey and Analysis,” *Simulation & Gaming* 41 (6): 844–68.

ZeaLitY. 2009. “Cease & Desist Letter.” *Chrono Compendium* (blog), May 10, <https://www.chronocompendium.com/Forums/index.php?PHPSESSID=qsvilk25rdhag89qh1mus17413&topic=7396.msg159819#msg159819>.

ZeaLitY et al. 2016. “Principles of Time and Dimensional Travel.” Accessed June 16, 2016, https://www.chronocompendium.com/Term/Principles_of_Time_and_Dimensional_Travel.html.

Zimmermann, Eric. 2014. “Manifesto for a Ludic Century.” In: Steffen P. Walz and Sebastian Deterding (eds), *The Gameful World: Approaches, Issues, Applications*, 19–22. Cambridge, MA: The MIT Press.

About the Author

Dr. Martin Roth is Assistant Professor of Japanese Studies at Leipzig University. His research interests include videogames and play, digital media and digital culture, political philosophy, communities, empirical methodologies and digital humanities. He founded the Japanese Videogames Research Initiative ([j]Games, <http://home.uni-leipzig.de/jgames/>) at Leipzig University.

Martin is trained in Japanese Studies and Media and Communication Studies. He received his PhD from Leiden University in 2014 for a thesis on the political potentials of Japanese videogames, as part of the VICI project *Beyond Utopia – New Politics, the Politics of Knowledge, and the Science Fictional Field of Japan* (<http://asiascape.org/beyondutopia.html>). Currently, he co-leads the DFG-funded project *diggr – data-based infrastructure for global game culture research* (<http://diggr.link>). Martin also acts as reviews editor of the journal *Asiascape: Digital Asia* and is co-founder of the open access publication forum *ReVisions* (<https://www.pubpub.org/revisions>).

Contact

- Email: m.roth@asobiba.de
- Facebook: <https://www.facebook.com/martin.roth.14606>
- Website: <http://www.asobiba.de/martin/>

About the ETC Press

ETC Press is a Carnegie Mellon publishing imprint with a twist. We publish books, but we're also interested in the participatory future of content creation across multiple media. We are an academic, open source, multimedia, publishing imprint affiliated with the Entertainment Technology Center (ETC) at Carnegie Mellon University (CMU) and in partnership with Lulu.com. ETC Press has an affiliation with the Institute for the Future of the Book and MediaCommons, sharing in the exploration of the evolution of discourse. ETC Press also has an agreement with the Association for Computing Machinery (ACM) to place ETC Press publications in the ACM Digital Library.

ETC Press publications will focus on issues revolving around entertainment technologies as they are applied across a variety of fields. We are looking to develop a range of texts and media that are innovative and insightful. We are interested in creating projects with Sophie and with In Media Res, and we will accept submissions and publish work in a variety of media (textual, electronic, digital, etc.), and we work with The Game Crafter to produce tabletop games.

Authors publishing with ETC Press retain ownership of their intellectual property. ETC Press publishes a version of the text with author permission and ETC Press publications will be released under one of two Creative Commons licenses:

- **Attribution-NoDerivativeWorks-NonCommercial:** This license allows for published works to remain intact, but versions can be created.
- **Attribution-NonCommercial-ShareAlike:** This license allows for authors to retain editorial control of their creations while also encouraging readers to collaboratively rewrite content.

Every text is available for free download, and we price our titles as inexpensively as possible, because we want people to have access to them. We're most interested in the sharing and spreading of ideas.

This is definitely an experiment in the notion of publishing, and we invite people to participate. We are exploring what it means to "publish" across multiple media and multiple versions. We believe this is the future of publication, bridging virtual and physical media with fluid versions of

216 Thought-Provoking Play

publications as well as enabling the creative blurring of what constitutes reading and writing.

<http://www.etc.cmu.edu/etcpres/wellplayed>

Twitter: @etcwellplayed