The handle http://hdl.handle.net/1887/28265 holds various files of this Leiden University dissertation

Author: Roth, Martin Erwin
Title: Disruptive conflicts in computopic space: Japanese sf videogames as sources of otherness and radical political imagination
Issue Date: 2014-08-27
2 Theory

The purpose of establishing these fictional spaces is less to increase the trade in conventional wisdom than to expand our perception of fictional possibilities. Fictional colonies established as bases for traveling back and forth to the actual world must therefore be distinguished from fictional settlements founded for the sake of adventure and investigation, after burning the ships. (Pavel 1986, 84)

In this chapter, I formulate a set of demands on how videogames can stimulate our political imagination and develop a perspective on them as contingent, action-based, and rule-defined spaces of expression. I discuss their distinct qualities as spaces which combine features of digital, audio-visual and computer-based media and games, with their focus on playful action. Given the ambiguity and diversity of play, games, and videogames, I do not aim to define what a videogame is, but instead to offer a consistent framework for analyzing games from a political-philosophical perspective interested in their contribution to novel, radical imagination.

2.1 Radical Political Imagination and Disruptive Conflicts

In this first section, I aim to develop a sense of the term radical political imagination and its conditions. Broadly speaking, imagination is “a faculty that enables us to envision that reality can be otherwise” (Carroll 1998, 79). In this general sense, the quality of the difference to a given empirical reality is not specified. For example, I could imagine to be at home in bed rather than trying to stay awake in front of my office computer screen, or use my magic powers to fight evil dragons in a fantasy world. However, a more specific understanding of such difference is necessary when imagination is, as Hannah Arendt (1970, 81) proposes, regarded as one of the “preliminary conditions for political action,” as such allowing us to direct action towards a desired result that is different than the status quo.

Raymond Geuss (2010, ix-x) emphasizes the importance of the imagination in all forms of politics, claiming that “[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.” Noël Carroll (1998, 79) 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.

For the purpose of this thesis, the term "political imagination" specifies the general faculty towards the visions of political alternatives to our 'empirical reality'—visions of different, novel conditions, structures, practices, and environments for life in community, which serve as the basis for political action.

Claiming that we lack imagination or even political imagination today would be a mistake. Neither do I believe that our contemporary media culture cannot offer vast arrays of products, works and ways that stimulate our imagination and phantasy. In this, I agree with Carroll (1998, 15-109), who refutes generalizing instances of philosophical resistance to “mass art” on the grounds that it renders the audience passive. Defining mass art by its intent to be easily accessible to a global mass audience on the one hand, and its technological production and distribution process on the other, he argues that such art stimulates a variety of activities among its audiences, including imaginative and reflective powers (82-84). “[I]f we are to understand as examples of the play of the imagination such spectatorial activities as interpreting dramatic situations and metaphors, as well as inferring, mass art does afford the opportunity to exercise the imagination” (82).

However, such imagination is not radical in the sense I use here in this dissertation. Examining the ways in which mass art features emotions, morality, and ideology, Carroll 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

---

1 Throughout this thesis, the phrase ‘empirical reality’ is used to refer to the world as we experience and know it from scientific studies as much as from our everyday life. As such, it always entails a subjective factor and is not meant to point to the existence of an entirely objective truth.

2 In detail, Carroll’s (1998, 196) definition reads: “X is a mass artwork if and only if 1. X is a multiple instance or type artwork, 2. produced and distributed by a mass technology, 3. which artwork is intentionally designed to gravitate in its structural choices (for example, its narrative forms, symbolism, intended affect, and even its content) towards those choices that promise accessibility with minimum effort, virtually on first contact, for the largest number of untutored (or relatively untutored) audiences.”
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” (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 (207-209, 242-244). However, it highlights the limitations of such broad understanding of the imagination. For if imagination merely points us to situations different from our own but not entirely unfamiliar or “uncommon”—to use Carrol’s carefully picked term—it can hardly be expected to aim for the radical alternatives and drastic change on a systematic level.

Geuss (2010, 68) claims that “[i]maginary constructs can under some circumstances have a force capable of creating realities that go far beyond the structuration of merely subjective spheres of action.” The question is, what these circumstances are and in what ways videogames can create, aid or amplify them. According to Susan Buck-Morss (2002, 62-63),

[t]he power of any cultural object to arrest the flow of history, and to open up time for alternative visions, varies with history’s changing course. […] What counts is that the aesthetic experience 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.

Along with historical factors, she emphasizes novelty, shock and critique as central factors for stimulating radical imagination. These factors are widely discussed in literary theory, in particular where the inquiry focuses on literary “universes contaminated by radical otherness” (Pavel 1986, 106). Most explicitly, this is the case in science fiction (hereafter sf) and utopian studies and their respective literary objects, which display a relation with all three factors. Pioneer sf theorist Darko Suvin (1979, 7-8, italics in original), for example, defines sf 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.” He claims that “SF is distinguished by the narrative dominance or hegemony of a fictional ‘novum’ (novelty, innovation) validated by cognitive logic” (63, italics in original). In other words, sf deploys a novum to create an alternative environment geared towards estranging the reader cognitively.
Frederic Jameson (2007, xiv) identifies a similar mechanism at the heart of the utopian genre—which he regards as a socio-economic sub-genre of sf. In his view, utopian thought experiments are “a critical and analytical method” that answers “the universal ideological conviction that no alternative is possible, that there is no alternative to the system” (230-232). Presenting us with alternative, unfamiliar places of Otherness, utopian narratives distance us from our empirical reality and are political through their “disruptive” effect on our common perception and our resignation (231).

Common to these descriptions is a sense that some kind of novelty or Otherness that distances us from our own empirical reality can have an estranging or disruptive effect. However, specifying these two aspects in the context of radical political imagination is a difficult task. Not only is it unclear if such disruption can amount to more than a critical review of the already existing situation and the awareness of one’s own “complacency,” it also remains questionable if total Otherness is possible and what it would look like. Jameson (2007) is well-aware of the problem this paradoxical question hints at. On the one hand, he claims that the possibility of a radical Other, such as, for example, a new colour “is allegorical of the possibility of imagining a whole new social world” (120). On the other hand, he remains sceptical 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 (111, 211). 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 (134).

This notion of productive contradictions can also be found in the writings of Theodor W. Adorno, who remains one of the most provocative thinkers of the potentials and dangers of works of art and culture, despite his tendency towards elitisms and his arguably arrogant and sometimes apparently ignorant, generalizing dismissal of mass culture3, jazz music, and especially “the other” of extra-
European art (see Geuss 1998, 310-311). In his insightful discussion of Adorno’s understanding of art, Geuss observes that Adorno emphasized the importance of art with its potential for internal criticism and its ability to produce something new (Geuss 1998, 298-303), against the tendency of the Enlightenment rationality towards universal instrumental reason and its repressive homogenization, which he rejected (299, 309).

Geuss highlights the importance of negativity and critique in Adorno’s thought, as well as the influence that, on the one hand, Kant and Hegel play in his writings, and, on the other hand, his experience of Nazi Germany had on him (306). For Adorno, he claims,

[t]he most radically negative kind of art would be one which did two things at the same time. First, one which through exclusively artistic means turned the most fundamental received laws of a certain kind of artistic activity upside down or inside out, and did so precisely by treating these received laws, principles, and rules of procedure with the highest seriousness and developing them consistently in a non-arbitrary way into their opposite. Second, a fully radical form of art would be one which by its internal negation of the artistic tradition also succeeded in inculcating into people an appropriately cognitively grounded negative attitude toward their own society. (307)

At the same time, Geuss reminds us that Adorno also laboured 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” (310). It is here that I believe one can find traces of a more prospective project in Adorno’s writing. In his emphasis on critique, Adorno not only displays a deep concern for society, he also formulates demands on culture and art to realize their political potential. It is this aspect, which might contribute substance to the vague concepts of Otherness and disruption mentioned above.

Despite his pessimism, Adorno (2001b, 106) believed in a free society of “autonomous, independent individuals who judge and decide consciously for themselves.” His insistence on ideas and thought as the decisive factors in social change is most explicitly expressed in his statement that “[t]he Utopian impulse in thinking is all the stronger, the less it objectifies itself as Utopia – a further form
of regression – whereby it sabotages its own realization. Open thinking points beyond itself” (Adorno 2001e, 202). While cautioning against the threat reification poses to thought, Adorno (2001c, 193) also stresses the possibility of novelty and alternative, “new” thoughts or productivity as “the ability to bring forth something that was not already there.” In a way, this potential to invite productive thought may be regarded as his standard for judging art and culture—by which most mass cultural products of his time failed to be genuine. It also specifies the demands on disruption beyond mere negativity or criticism, as a shock that stimulates our imagination.

In line with his rejection of instrumental reason, Adorno insisted on the importance of individual “Phantasie” for novelty. Translated as “imagination” into English (see Adorno 2001c, 192), Phantasie is a faculty which “might of its own accord gather together the discrete elements of the real into its truth” (2001f, 63). With this concept, Adorno not only opposes purely schematized, “rational” thought, but also his critique of a unimaginative “spirit (Geist) of a science which is no longer spirit” (Adorno 2001c, 192). His emphasis on “a certain unruliness of mind which was incompatible with the efficient [rationelle (Adorno 1977, 648)] division of human life” (Adorno 2001c, 190), or the fact that “[e]ven fooling around need not be crass, and can be enjoyed as a blessed release from the throes of self-control” (192), point to a broad but decisively political understanding of Phantasie or imagination as a faculty opposed to the systematic status quo. Specifically, he regards Phantasie as an opposing force to the culture of administration:

For that which is administrated, administration is an external affair by which it is subsumed rather than comprehended. This is precisely the essence of administrated rationality itself, which does nothing but order and cover over. In the chapter on amphiboly in the Critique of Pure Reason, Kant […] denied rationality the ability of cognition of ‘the interior of things’ . Aporia prevails between the absolute purpose of the cultural and the absolute rationality of administration, which is nothing but the rationality of scientific ratio. (Adorno 2001a, 112-113)

In this sense, Phantasie refers to a way of accessing the inner logic of a work that includes a “sensuous moment” beyond “measurement, comparison, and assessment of physical phenomena” (Adorno 2001f, 87). 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.
Most importantly, Adorno believes that culture and art can stimulate and trigger *Phantasie* by confronting us with internal conflicts, which, neither solved within the work nor obvious, confront the individual with a new situation, demanding for independent thought and autonomous judgments. 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. Against this background, I propose the following working hypothesis for my project:

**videogames can be disruptive of our common beliefs and experiences, thus stimulating our radical political imagination, if they succeed in confronting us with a contradictory situation, the novelty of which requires us to think about solutions independently and judge autonomously.**

Interestingly, Ian Bogost (2007) mentions a similar notion of disruption in his analysis of *Persuasive Games*. 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” (58), he argues that a videogame and its procedural rhetoric “persuades when it helps discern the evental site of a situation—the place where current practice breaks down.” (333) However, while claiming that “procedural rhetorics make claims about the structure of a situation, in the hopes of inspiring a disruptive event,” Bogost remains vague about the status and potentials of such events in games, because he thinks of them as representations of social and cultural reality: “Persuasive games expose the logic of situations in an attempt...”

---

4 In “How to look at Television,” Adorno (2001d, 159), for example, states that “the present rigid division of art into autonomous and commercial aspects is itself largely a function of commercialization.” 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 (Adorno 1977, 648)] is suspicious of anything which is miscellaneous, or heterogeneous, of anything which has not clearly and unambiguously been assigned to its place” (Adorno 2001c, 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 (2001a, 116-117) agrees with Paul Valéry that true art can only exist where it abandons its ambition to be art.
to draw player’s attention to an evental site and encourage them to problematize the situation. Videogames themselves cannot produce events; they are, after all, representations” (331-332). In line with his focus on games as tools for political communication, education, and advertisement, he emphasizes that persuasive games use “procedural rhetoric to support or challenge our understanding of the way things in the world do or should work” (59).

Whereas Bogost thus seems to regard videogames as representative structures, granting them a critical potential towards a situation without questioning the status of their author and their representative (simulating) relation to the empirical reality, this thesis asks if disruptive conflicts with that reality can be possible as internal contradiction within a work. The question, in other words, is, if the disruptive conflicts can produce expressive novelty or Otherness. I hesitate to embrace Jameson’s claim about the impossibility of imagining absolute Otherness—interestingly, he himself is rather evasive in this context. Instead, my hypothesis entails the question, whether the conflicts that result from reconfigurations of (existing) elements—here I agree with Jameson—deserve to be called radical Otherness. This question has to be answered in the analysis. At least on a very general level, I believe that a search for political alternatives and Otherness has to start from a position best expressed by Thomas Nagel (1979, 171), who argues that “to deny the reality or logical significance of what we can never describe or understand is the crudest form of cognitive dissonance.” This is why I have capitalized [O]therness. At the same time, Nagel’s remark conveys a considerable portion of my scepticism about the possibility of identifying and describing such Otherness.

2.2 The Otherness of Reified Play

With these general conditions for radical political imagination in mind, I would like to proceed to discuss the structural potentials and limitations videogames have in this context. By now, the study of play, games, and videogames can look back on a great variety of stimulating contributions made in multiple fields and from diverse perspectives. However, while the majority of discussions focuses on questions of the nature and impact of play, game design, or player engagements, theoretical considerations of games and videogames as spaces of Otherness and radical imagination are rather few in number.
Theorists who discuss the status of ideas in games tend to stress their relation to our empirical reality. Ian Bogost, for example, regards games as simulations. In *Unit Operations*, he argues that “more than merely seeking to model the function of the material world, simulations also mark a meeting place between unit-based rules and subjective experiences” (Bogost 2006b, 94). He defines the concept of simulation as “the gap between the rule-based representation of a source system and a user’s subjectivity” (107). Importantly, this definition recognizes the influence of subjective choices as well as ideological influences, thereby providing an interesting perspective on videogame play. However, in his examples and in his framing of the idea, Bogost’s notion of the source system focuses on the existing and its mimesis. This tendency is even stronger in his later book *Persuasive Games* (Bogost 2007).

In his inspiring attempt to situate videogames in a philosophical discourse on art, Grant Tavinor (2009) develops an approach to videogames as interactive fictions. However, his focus on the quality of the “representational beauty” of videogame worlds rather than its content, and where the latter is focused, the discussion frequently tends towards an emphasis on adequate, realistic representation. 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” (68).

In order to approach the specificity of Otherness in videogames from a different direction, I would like to start with a brief discussion of their relation to play. In many discussions of play, the concept is defined by its separation from ordinary life.5 Heideggerian philosopher Eugen Fink (1960, 1968) regards it not only as detached, but as opposed to the ordinary. Whereas everyday life is dominated by the “futuristic mode of being,” in which any activity is directed towards a “telos” or “final goal” in the future, play “interrupts the continuity and purposive structure of our lives” (Fink, Saine, and Saine 1968, 20-22). For Fink and his co-authors Ute and Thomas Saine, play offers a radical alternative to the ordinary, because it has only immanent purpose and is “not subordinate to the ultimate purpose served by all

---

5 Johan Huizinga (1970, 47) 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.’” Roger Caillois (1961, 9-10), uses the terms free, separate, uncertain, unproductive, governed by rules, and make-believe to describe play.
other human activity” (21). Given his ontological quest and his emphasis on play as an opposing force, it may seem surprising that he nevertheless qualifies it as “finite creativity in the magic dimension of illusion” (28).

This remark, I believe, can be read as an attempt to bridge the gap between play as theoretically conceptualized ontological entity, and playing as human activity. In other words, Fink, Saine and Saine acknowledge the ideal character of play and concede that it can only be realized illusively. Hans-Georg Gadamer (2004, 102-103) expresses this illusive quality with regards to “playing” more explicitly: “The player himself knows that play is only play and that it exists in a world determined by the seriousness of purposes.” He thereby points to the commitment to the illusion of play required of the players. In a similar thrust, Huizinga ([1949] 1970, 40) 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.” These statements underline that play depends on a social contract between the players, who agree on upholding its illusion.6

Gadamer (2004) 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 (104). Human play, he claims, always plays “something”, meaning that it is necessarily structured by rules and orders as “the way the field of the game is filled” (107). Whereas Fink, Saine and Saine (1968, 21) regard play as a mode of human being which rejects the purposive structure of the ordinary and is not afraid of the “profound uncertainty,” Gadamer (2004, 107) argues that one cannot abandon the ordinary and is

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

---

6 This is why Huizinga (1970, 30) makes a telling distinction between the “false player” or “cheat,” who “pretends to be playing the game and, on the face of it, still acknowledges the magic circle [that separates play from the ordinary, mer]”; and the “spoil-sport,” who “trespasses against the rules or ignores them,” thus shattering the play-world itself. “By withdrawing from the game he reveals the relativity and fragility of the play-world in which he had temporarily shut himself with others. He robs play of its illusion” and “threatens the existence of the play-community.” He claims that the play society is much more “lenient” with the false player than with the spoil-sport, because the former disguises his cheating.
himself out without transforming the aims of his purposive behavior
into mere tasks of the game.

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 of the playing field […]
sets off the sphere of play as a closed world, one without transition and mediation
to the world of aims” (107). In this sense, human play can only exist in a structured
form with rules, orders and tasks or “make-believe goals” (108). Huizinga (1970,
29) suggests a similar understanding when he refers to play spaces as “temporary
worlds within the ordinary world, dedicated to the performance of an act apart.”
These observations suggest the importance of rules and goals, which have to be es-
tablished intentionally in order to separate a space for play from the ordinary. This
is not to say that such separate spaces cannot, in Roger Caillois’ (1961, 13) terms,
rage in their character on a continuum between the convention-oriented “ludus”
and the uncontrolled “paidia.” However, I do follow Gadamer insofar as I believe
that uncontrolled play (paidia) in its ideal form can only exist in brief instances.
This to be another way of saying that in human conduct, ideal play can only exist
in its reified form as game, and must be consciously upheld by the players.9

In its reification, the temporary game world distances the action from the
ordinary but never manages to detach it completely.10 In Spiel als Weltsymbol, Fink

---

7 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 [1939] 2009, 19).
8 In a similar way, Juul (2005, 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 (2003, no pn) 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.”
9 Notably, most of the above-mentioned thinkers thought and published in languages which 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 (1997, 214) shows that it majorly 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” (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.
10 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 (2009, 415) for example argues that “There is No Magic Circle,” because “players never play a new game or fail to bring outside knowledge about games
(1960, 229, my translation) 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” (234, my translation).

How then, are games related to ideational Otherness and conflict? Huizinga (1970, 96) famously claims that play is a sphere in which “the antithetical and agonist basis of civilization is given from the start,” and suggests, in the words of Thomas S. Henricks (2010, 16), “that play was once an energizing, even culture-creating activity in the life of societies.” This conclusion invited substantial criticism for its limitation to agonistic games (see Caillois 1961, 3-4) and his rough historical analysis and methodology in general (see Henricks 2010, 16-17). Moreover, my claim that all human play is reified suggests that human creativity in play is limited to the extent to which it depends on predefined rule-structure. 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 how Jameson (2007, 15-16) positions utopia as “imaginary enclave within real social space.” This 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.” Against this background, it is not surprising that the court of justice can serve as a historical example of gameplay into their gaming situations. [...] There is no innocent gaming.” In a keynote given at the second Under the Mask conference, Garry Crawford (2009, 9), points out that videogame players’ and, more general, “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 on the interrelation and interaction between games and their social contexts. Jesper Juul (2008, 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 argument 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.
such an enclave for Jameson (15-16), and as one of the spaces of play for Huizinga (1970, 28-29), “in form and function play-grounds, […] isolated, hedged round, hallowed, within which special rules obtain.”

For Jameson (2007, 5), the enclave and its distancing closure are necessary conditions for developing utopian and science fictional alternatives to the present from within. In a similar way, Phillip Wegner (2002) identifies utopia as a closure towards everyday experience and ideology on the one hand, and abstract theorizing on the other. Applying Henri Lefebvre’s tripartite model of space\(^\text{11}\), 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 (xviii). 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” (37).

While 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. (38)

In other words, Wegner claims that ensembles or patchworks of existing elements can open spaces neither found in our empirical reality, nor accessible to theoretical summary, which have the potential to point our thinking to new directions. Importantly, he emphasizes the contradictory nature of these patchworks, thus supporting my earlier emphasis on the conflict in Adorno’s writing as a specifically powerful and stimulating structure of Otherness. This is why Wegner (xx) can

---

\(^{11}\) Lefebvre (1991, 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 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 (2002, 14), 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.”
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.”

It is tempting to argue that, in the attempt to secure a space for “an act apart,” games occupy a similar middle ground. Their dual character arguably suggests a potential for the “pretheoretical” and the “not yet existing” alike. Games and videogames are distanced from the “ordinary” by means of spatial and temporal boundaries, as well as rules that do not apply in the everyday. However, this existence of well-defined rules and their status as reified play in general can also be interpreted as a strong theoretical foundation, particularly because these rules have to be determined in advance, deliberately securing the playing field. The following sections show that, in contrast to ‘conventional’ games—for lack of a better term—videogames as a particular case of reified play can in fact be host to distinct spaces of a middle-ground Otherness in Wegner’s sense and can host a variety of conflicting elements.

2.3 The Computopic Universe

If rules are important for human play, they are indispensable to videogames. Conventional games not only present the player with spaces for action, but also feature rule sets which can be subjected to change within certain boundaries.12 Such changes take on the form of agreements between the players, which also exist in the realm of videogames. In contrast to conventional games, however, in videogames “there is no ‘ball’ that can be out of bounds” (Juul 2005, 165), because the rules are authored by the designer13 in the program code. Except through manipulations to the code, these rules cannot be changed. In conventional games, all rules have to be agreed on and consciously renewed in a kind of social contract by the players.

12 Game rules may be adapted to the specific spatiality of this environment or the context in which the game is played. An example would be soccer games played in parks. In cases where the requirement of 22 players or that of sufficient space for a standard playing field are not available, a similar game can still be played in a slightly adapted form.

13 The use of this term requires a brief explanation. In the context of this thesis, I adapt this term from conventional videogame jargon, in it refers to the person supervising the creative process of design and development that leads to a complete videogame software. Considering the number of people and companies involved in this process in most cases, this is a gross simplification. However, in this thesis, I cannot do justice to the complexity of this creative process. The term designer thus refers to all those involved in creating the final product as I experience and analyze it. Where instructive, I mention influential key persons.
In videogames, a large part of the rules is 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” (Juul 2005, 53-54). Michael Liebe (2008, 332) claims that while in traditional games, restrictive rules differentiate the game space from ordinary life, in videogames, on the contrary, the virtual game field and the virtual space surrounding the playground are both based on the same code. […] The consequences of this are that 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.

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 affords the game goals and the challenge, or, as Marry Flanagan (2009, 61) puts it, “the pleasures of gaming derive from the structures of rules that define the game environments.” On the other hand, rules may be learned in the process. I will come back to this point below. Before, I would like to examine the status of the rules as such in more detail. Despite his general tone, Liebe's examples suggest an unnecessarily narrow conception of the term “computer game,” limited to the game intended by its designer. Discussing the difference between the conventional version of Solitaire and its computer counterpart, he argues that in the latter, “the software program fulfils the function of the referee, so it is impossible to change the rules or winning conditions spontaneously. […] [I]t is even impossible to make accidental mistakes” (Liebe 2008, 335-336). Here, Liebe runs the risk of ignoring the existence of cheating and bugs, the flexibility of the game rules and subversive player practices.

In Cheating, Mia Consalvo (2007, 2) shows that, despite rigid rule-sets, videogame players nonetheless cheat and “challenge the notion that there is one ‘correct’ way to play a game.”14 Likewise, Talmadge Wright, Eric Boria, and Paul

---

14 Consalvo (2007, 87-89) points out that players define cheating differently have different ways of defining cheating. While generally regarded as an act that gives a player an unfair advantage, player's 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
Breidenbach (2002, no pn) 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.” Flanagan (2009), who emphasizes the critical practices of “unplaying” (enacting forbidden scenes and alternative scenarios), “reskinning” (altering characters or objects) and “rewriting” (redefining play from within) (33-34), goes as far as to claim that “[t]he digital ‘magic circle’ that players enter is an open environment focused on experimentation and subversion” (61). I am not ready to generalize this claim for all videogames. However, Wright, Boria and Breidenbach show that it is advisable to distinguish the sum of all rules of the game world at least theoretically from those of the game intended by the designer.

If alternative and subversive player actions are not to be excluded from the analysis from the start, it has to encompass the sum of all rules defined in the software, including the pre-defined rules of representation and graphical, audio, or other databases the game involves, as well as those rules that make modifications to these databases and other elements by the player possible. Liebe’s observations are nevertheless important and, I believe, can be maintained if they are applied to the totality of all rules in the software. Within this totality, 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.

15 In their analysis of creative player actions in the computer game “Counter-Strike”, Wright, Boria and Breidenbach (2002) 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.

16 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 colour of the card appearing next. Of course, this is first and foremost a theoretical point to highlight the flexibility of even the most rigid rule structure.

17 For the purpose of this thesis, this excludes the practice of modding, although the boundary here is arguably not clear-cut. Furthermore, I will not pay attention to uses of videogames other than playing, like machinima, a practice of creating film sequences by recording the action in the game world.
The rule system does not have to be magically upheld by aware players. The rules are upheld by the program code” (Liebe 2008, 333-334). This conclusion allows me to identify the object of this study as the ideational space defined and qualified by the sum of all rules in the software. I call this the computopic space of a videogame. The computopic space is not identical with the software, nor can it be reduced to the software 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 behaviour, and in most cases, their appearance in the shape of included databases. Yet, these abstract definitions are different from the game world a player encounters in play in crucial ways. In its concrete instantiation, the computopic is a dynamic space generated by the computer based on the programmed algorithms, the data provided with the software and the player’s input.

A look at contemporary software design and its guiding principle of object orientation helps to explain this difference. Object-oriented programming (hereafter oop) follows the idea that a program is most efficiently structured in the form of independent objects which are instantiated and interact during run-time. Bogost (2006b, 39) mentions four main characteristics of oop. It has to follow the principle of abstraction, meaning that programmed objects have to 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 behaviours. It is 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.

18 The term “computopic space” is inspired by a blog post by Pink Tentacle (2009) on the “~pink tentacle” blog from October 22, 2009, entitled “Computopia: Old visions of a high-tech future,” which discusses a 1969 Shōnen Sunday feature series of illustrated articles about a computerized future called “Computopia.” Recently, I have come across a book by historian of Japan and Korea Tessa Morris-Suzuki (1988), entitled Beyond Computopia, in which she analyzes the emergence of “information capitalism.” Morris-Suzuki discusses the implications of this trend and the possibilities for its transformation, concluding her analysis by sketching a vision of an “information democracy,” in which the “private appropriation of social knowledge and its conversion into a source of corporate profit” is reversed into a “re-socialization of knowledge” (205).
This dual structure of software is not new to informatics. However, in combination with the importance of player input and the dynamic, algorithmic character of videogames, it has several far-reaching consequences for the computopic. First and foremost, this combination means that the computopic space hosts multiple material realities or worlds, the quantity of which depends on the number of variables, their type, the predefined values that can be assigned to these variables and their dynamic behaviour. If all the ways in which a player can act on the game in each moment are taken into account, their number easily approaches infinity. This means that the computopic is also the sum of all instances it hosts and affords.

In his discussion of *Fictional Worlds*, Thomas Pavel (1986, 51) offers a helpful model for a similar situation. He regards any number of fictional worlds as members of universe or set K if they meet the conditions specified by an actual member of K and a relation R of alternativeness. Any world x1 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 a specific computopic space by referring to any of its instances as it appears to the player at play with the term *computopic world*. If R is simply defined as a link to the same software, the entirety of possible computopic worlds can be called *computopic universe*. The term *computopic space* remains viable throughout this thesis as an abstract signifier for the sum of all rules of the software.

The computopic universe is virtual and digital, which, within the limitations of what soft- and hardware afford, frees it from the physical and social laws of our empirical reality. This in itself marks it as a space of Otherness, albeit not distinct from fictional worlds in other media. I have mentioned that this space cannot be reduced to the sum of its rules as it is represented in the software code. It is neither

---

19 In his sensible and innovative approach to *Cybertext*, Espen Aarseth (1997, 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 (40). Since the early 2000s, databases have gained more and more attention from media scholars and philosophers like Lev Manovich (2001) or Azuma Hiroki (2001), reflecting their increasing importance and pervasiveness (see Schäfer and Roth 2012).
intelligible as material manifestation on the computer memory during run-time. Rather, access to it is only possible in the experience of its sensual representation on the screen, in the speaker, and with the vibrating controller in hand.

Due to its definition as the sum of all rules, the computopic space includes its rules of sensual representation and their content. Usually, a computopic world and its objects exceed the actual, momentary representation on the screen. In addition to this partiality, the representation of the computopic space is also selective and involves a transformation. Lev Manovich (2002, no pn) explores this dimension in the case of visualization. He defines visualization as particular subset of the general practice of mapping data, understood as re-presentation of data in another way or form. As such, visualization refers to the transformation of non-visual data into (novel) visual representations of that data. Observing that most data is more complex than the four dimensions human beings are used to in the everyday (3D space and time), Manovich claims that visualization is based on a politics of mapping, in which actors decide on which mapping to apply, what dimensions to select, and what interface to provide the user with. In the context of this thesis, the term “representation” is used to convey this double transformation of the computopic space in its sensual mapping, reduced both to a partial and abstracted appearance in sound, visuals, and vibration. This notion of representation is similar to Gadamer’s (2004, 114) understanding of mimicking as a decontextualizing practice of abstracting and emphasizing, in which “imitation, as representation, has a special cognitive function” because it makes us recognize something new. In Figure 1, I have visualized the idea of the computopic space, consisting of a contingent universe based on the software and concrete reifications in worlds generated by the computer and player input.

2.4 Action

The computopic space is not only represented, its worlds are also enacted. In his discussion of “Gamic Action,” Alexander Galloway (2006, 2) 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.” Galloway distinguishes videogame action into machine acts and operator acts, and into diegetic and non-diegetic acts. The latter division refers to “the game’s total world of narrative action” as opposed to “those elements of the
gaming apparatus that are external to the world of narrative action” (7). Given my definition of the computopic space as the sum of all rules in the software, the difference between diegetic and non-diegetic is not central at this point. However, the emphasis on machine acts and operator acts is helpful to discuss the different qualities both have.

20 Galloway (2006) himself acknowledges the vagueness of this distinction, both with regards to operator and machine acts. In the sphere of operator (player) acts, the non-diegetic refers to actions of configuration, like pause, cheats, hacks, not explained or motivated by events in the game world (12). Opposed to this, diegetic operator acts are either move acts (movement in the space of a game world) or expressive acts (linking the player character to an actionable object in the game world) (22). In a self-critical remark, Galloway points out that “actions of configuration are often the very essence of the operator’s experience of gameplay—simple proof that gaming may, even for limited moments, eschew the diegetic completely” (14). In the sphere of machine acts, he distinguishes between diegetic machine acts or “pure processes,” meaning ambience acts by the computer in which “[t]he game is still present, but play is absent” (10), and non-diegetic machine acts, meaning “actions performed by the machine and integral to the entire experience of the game but not contained within a narrow conception of the world of gameplay. […] Included here are infernal forces like power-ups, goals, high-score stats” (28). Here, too, Galloway admits that the distinction between diegetic and non-diegetic is blurry, particularly with regards to this last category. Indeed, it seems very plausible to conceive of a power-up or other item as crucial for the narrative progression of a game. Since my framing of videogames does not distinguish between diegetic and non-diegetic elements, all examples Galloway mentions have to be regarded as part of the computopic space.
I would first like to take a look at operator acts or player actions. Player input is one of the most basic, most important features of videogames—without it, playing would not be possible (Juul 2005, 60). Player input is also an important factor in universal contingency and world plurality. It affords choices about the direction and character of the game world, from difficulty and sound volume, to narrative paths or the choice of weapons. In combination with the possibility of repetition and saving featured in many games, this means that a world or universe can be revisited and enacted differently, thus allowing for the exploration of multiple instances—a repetitive practice arguably at the heart of videogame play.

In contrast to literature, videogames thus allow the player to act physically on their universe and shape or alter its materiality. In the above section, 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 to the possibilities authored in the software. The existence of such absolute limitation may lead to the conclusion that videogames are indeed spaces of predefined behaviour or even reaction rather than creativity and autonomy. However, as discussed above, the computopic rules are often somewhat different from this initial set, either because they are intentionally left vague and only disclosed partially, or because the available rules can be subjected to alteration or used subversively to create new games. Whereas the conscious effort of maintaining the rules in conventional games is a struggle against the intrusion of the ordinary, the struggle to overcome or experiment with the rules of a computopic universe does not risk opening the door to reality, but rather allows for a direct assault on reality’s boundaries.

The double structure of absolute limitation on the one hand, and vagueness and flexibility on the other, opens up a space that affords speculative, non-predefined player action. In *The Aesthetics of Music*, Roger Scruton (1999) discusses the

---

21 I believe that 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.

22 In a more detailed fashion than Paul Virilio’s brief remarks (see Introduction, p. 4), Claus Pias (2000) 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 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 (123).
importance 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” (88). In a sense, speculations are important in videogame play, because they allow us to project the possible outcomes of our actions and speculate about the computopic space. As Juul (2005, 176-177) 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.

In other words, the appearance and behaviour of the game world, and the actions that correspond to input serve as the basis for a player’s assumptions about a computopic universe. In videogames as much as elsewhere, such speculations always depend on earlier experiences and knowledge. Yet, games are virtual spaces of Otherness in which the rules of our empirical reality do not necessarily apply, and the rules of which we may not know in their entirety—where we need to experience a world in order to make sense of it. Espen Aarseth (1997, 1-3) 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. Given the totality of rules for the respective effort, this also means that an ergodic work “in a material sense includes the rules for its own use” (179). In other words, they are explored in action. What is more, the process of making sense of the game world is not geared towards interpretation, but often towards configuration—a practice of acting in favour of a specific goal or situation rather than in a sensible manner in harmony with the narrative. In his attempt to rescue videogame studies from the colonization by literary or film studies, Eskelinen (2001, no pn) 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.” This argument is inspired by Aarseth (1997, 110-111), who distinguishes between a narratologist understanding of game tasks as gaps in the narrative filled in by the users on the one hand, and “openings” or “keyholes” in games, which are filled in order to make the game continue, on the other. According to Aarseth, the adventure game “disintegrates any notion of story by forcing the player’s attention on the elusive ‘plot’” (112). Although I don’t believe that interpretation and configuration practices are ever exclusive in the engagement with the computopic space, these observations highlight the importance of both categories and shows that action in videogames does not necessarily depend on interpretation and may neither be restricted to acts that contribute to narrative consistency.

On a subjective level, the limited action possibilities can at least hypothetically be deployed on a computopic world in a spontaneous fashion, not based on the highly probable predictions that define large portions of gaming.23 An example can be found in the counter-intuitive practice of “rocket jumps,” which directs explosives to the ground while jumping, thereby injuring the player character but also accelerating it (Wikipedia 2013o). In a limited sense, this technique has to be discovered by the player, both as a way of moving and in 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. One might point out that, in most cases, the designers intended rocket jumping. Yet, for the individual, this possibility may still have to be discovered in trial-and-error fashion or by chance. Furthermore, there are numerous examples of a more radically unpredicted and unpredictable “emergent gameplay” resulting from rule

23 An inspiring thinker of action and matter, although probably outdated by any contemporary biological or cognitive science standards, Henri Bergson (1912) distinguishes between those actions grounded in the intellectual mind, and those pursued by the creative mind in Schöpferische Entwicklung [Creative Evolution]. The intellect, he claims, orders the world and presupposes space, but cannot construct it (215). Moreover, this order exists for the intellect and reflects it in the ordered objects (227). The free mind, on the contrary, is perpetual progression and creation (227). I do not propose to follow Bergson in all his questionable distinctions. However, his framing of creative action as “jumping in at the deep end” (197-198) describes the potential for creative, spontaneous action in videogames rather well. Such action is disruptive of the intellectual ordering, which denies the uniqueness and unpredictability of life and, instinctively, attempts to identify resemblances to the already known in any situation (35-26). I believe Bergson’s understanding of action and matter could contribute to a philosophical perspective on videogames fruitfully. However, it would stretch the boundaries of this thesis too far to engage with his thought in the necessary depth, particularly given his problematic terminology and his tendency towards mysticism.
complexity or glitches (Wikipedia 2013g).

This discussion suggests that the difference between the accessible or knowable (and maybe even the intended) rules and the actual sum of all rules in the computopic might correspond to a difference between rule-based and creative player engagement. Raymond Geuss (2010, ix) 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.” The broad understanding of action and novelty this statement suggests, may tempt us to conclude that the possibility of action alone marks videogames as spaces in which the player can not only imagine, but also create novelty or Otherness. However, it remains to be seen whether the tendency towards creative play is strong enough to justify the term action in its narrow, political sense, as well. In any case, the tension between analytic, calculating play directed towards the intended goals and playful, creative explorations of the computopic is crucial for understanding the character of its Otherness, and provides some of the potentials for conflict.

Next, I would like to turn to the role the computer plays for the computopic space. 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” (Galloway 2006, 2). In combination with the contingency of the player actions and the indeterminate character of the software algorithms, the involvement of the computer shifts the designer’s role from an artist of a work of art to an artist of a variable structure. In order to explain this shift, a brief excursus to Carroll’s (1996b) ontological effort towards defining the “moving image” may be helpful. Carroll identifies five necessary conditions for what he terms “the moving image”:

\[W\]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. (70)

He adds the fifth category of “two-dimensionality” in order to distinguish moving images from three-dimensional, moving sculptures. For my purpose, conditions 3 and 4 are most relevant. Carroll arrives at these conditions by distinguishing the moving image from play performances (66-70). Play performances are tokens generated by interpretations, whereas moving images are “generated from tem-
plates which are tokens.” In contrast to plays, Carroll regards their performance (the showing) itself not as artistic, but as a technical engagement with an apparatus. Although I disagree with the observation that the technical process of performing a moving image—and other kinds of media, for that matter—is not also an artistic process, 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 designer. This generative process, however, differs from that of the moving image, because it involves mediation by the computer, which cannot be reduced to a technical engagement in Carroll’s sense. The variability and contingency of the computopic implies that the concrete instance of the designer’s ideas created by the computer can potentially involve an interpretation—it is not a coincidence that the “interpreter” is a common term in computer science, referring to a program that “executes, i.e. performs” a source code (Wikipedia 2013). Interpreting and performing the instructions in the software, the computer adds a layer to the artistic process.

If technology in general is not seen as “neutral,” the performance of a template could be said to involve a transformation of the original data already in the case of moving images. However, I would argue that the relationship between template and token remains linear in most cases, meaning that it could 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. In contrast, world-plurality, contingency, player input, as well as indeterminate algorithms—most famously, random functions—turn the performance of a videogame at least theoretically into a non-linear, unpredicted and in some cases unpredictable transformation of the coded template.

In this sense, the computopic can be characterized as a space that does not fully originate in the designer’s imagination. In other words, the concrete computopic worlds are in part unimagined, and so thus by extension is their universe.24 It allows the designer to author variable, contingent ideational structures or meta-

---

24 The intense testing period prior to a game release not only targets errors in the program code, but is also a necessary means to verify the predictions made in the design phase in the actual, playable form. Together with the established practice of updates and patches issued after the game release, this testifies to the unimagined quality of software and the lack of control the designer has over its complexity and thus the results of the creation process, as well as to its flexibility and receptivity to post-release changes. This corresponds to the emergent quality of player actions.
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 computopic 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, 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 designer.

2.5 Expression

With the abovementioned characteristics in mind, I would like to take a look at the concrete expressive elements of the computopic. For the purpose of this thesis, the term expression is used in a practical sense to encompass all ways in which videogames convey ideas, whether abstract, philosophical or concrete, sensually perceivable. In this broad definition, it includes diverse elements such as rules (action, world and object behaviour, goals, etc), sensual representations (visuals, sound, movement), narrative content (story, setting), or controls. Given this breadth and diversity, I don’t intend to discuss all elements in detail. Instead, I propose to focus on the general character of computopic expression and its potentials and limitations for Otherness, leaving elaborations on concrete elements for the analysis.

It seems helpful to begin with the relation between different expressive elements. In the attempt to establish videogames as a distinct medium in its own right, much attention is directed to the rules as main expressive element of games. Bogost (2007, 2-3) emphasizes the potential games have due to their “procedurality,” meaning “a way of creating, explaining, or understanding processes.” He claims that computers and videogames are “particularly adept at representing real or imagined systems that […] operate according to a set of processes” (5). For Bogost, this includes representations of culture, society and human behaviour (7-9). He goes as far as to claim that in videogames, “image is subordinate to process” (25). This view is representative of a widely shared conviction that in the computopic space rules are
superior to other elements. According to Juul (2005, 121)

[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.

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” (199).

Procedures and algorithms doubtlessly constitute a central element of computopic expressivity. The focus on procedures seems even more plausible, considering that they also regulate sensual representations and organize the image or representation. In this sense, representations might be understood as subordinate to process. However, I hold against this view that, as I have argued above, the procedures or processes, as they exist in the software or in their instantiated form on the computer hardware, are not sufficient to afford gameplay. On the contrary, they depend on representation to be perceivable and intelligible for 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 itself can have a deep impact on the ideational content of a game. From a perspective on games as interpretations of experience, Janet Murray (1997, 143-144) argues that Tetris is a “a perfect enactment of the overtasked 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.” Juul (2005, 133) remarks that this is one possible, allegorical reading of the game, albeit not a very convincing one. Yet, it

25 See, however, a recent article by Miguel Sicart (2011, no pn), who criticizes “proceduralists” for their focus 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 by far not being ignored by Bogost or Flanagan, whom Sicart mentions as representatives of “proceduralists.”
should not be too difficult to imagine a version of Tetris where the bricks falling down look like documents and files, and the bottom of the playing space like a desk. In a blog post on his website, game designer Raph Koster (2009) reports that his hypothetical, distasteful version of Tetris skinned as a gas chamber he proposed in *A Theory of Fun for Game Design* (Koster 2005) was realized by a team of designers. As the blog-post recalls, this extreme thought experiment should prove that “[y]ou could have well-proven, stellar game design mechanics applied towards a quite repugnant premise.” This point could have been proven in a far less extreme way, but the experiment emphasizes the fact 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 have a strong influence on their ideational content, and its perception and experience.26 Extending these findings to videogame expression in general, I propose to regard computopic expressivity in principle as generated from a flexible combination of multiple elements. 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.

Despite his strong emphasis on the dominance of processes in videogames, Bogost (2006b) offers a helpful framework in his earlier proposal to regard contemporary media products as *Unit Operations*.27 Here, Bogost demands that “[w]e should

---

26 Notably, Bogost’s (2007, 103-109) own example of the game *Tax Invaders* does not support his claim convincingly. *Tax Invaders* is a reskinned version of the popular game *Space Invaders* created by the Republican party in the U.S., 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 is an interesting 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.

27 Sharing a quite similar intuition to that of Bogost, Linda Hutcheon (2006, 31-32) mentions Richard Dawkin’s concept of “memes,” or “units of cultural transmission or units of
attempt to evaluate all texts as configurative systems built out of expressive units” (70). He 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” (ix). 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 (5). “Unit operations” point to a dynamic representation of units created by spontaneously deriving meaning from the interrelations of their discrete components (4, 8). As such, this model provides an adequate description of the combinatory character of computopic expression, and will serve as a guideline for the following analysis and its methods.28

What are the boundaries of such expression with regards to Otherness? An initial observation is that despite its actionable character, computopic expression is not limited to the physical environment in the same sense as conventional games are, because it is not only fictional, but 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 computopic space only through remote control. Accordingly, player actions take place within one system to which Newton’s laws of force, impulse, and reaction apply (even if the objects force is applied to have a meaning different from the ordinary). In the case of videogames, the player environment and the computopic 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.29

28 Beyond its compatibility with the multifarious character of videogame worlds and its representations, this definition further takes the character of software into account, stressing the similarities the unit shares with the encapsulated (discrete), polymorphic objects of object-oriented programming, thus potentially preparing the ground for a technologically oriented discussion that may be related back to the elements of the computopic, where it identifies objects through their representation.

29 The force applied to a key or button to generate input may be irrelevant to the electronic signals sent to the computer or the digitalized input that arrives in the game world, not due to friction, but due to the process of abstraction called “digitalization” itself. The mouse may serve as an even better example. Whereas the force applied to the mouse on the table seems to be reflected in the movement of the cursor on the screen or in the game world, the possibility of changing mouse sensitivity rather reveals it as a relation of scalable congruency. The same may be said for contemporary trends like Nintendo’s Wii or other
A similar arbitrariness characterizes the semantics of the computopic space. As mentioned above, computopic 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. With respect to its representation, the computopic 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 representational and object features may change over time, due to player actions, or depending on the player—weapon upgrades or player character appearance are but a few examples of this.

In sum, the computopic space is distanced from ‘empirical reality’ from the start in that it initially always appears as an Other space. Whereas 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 (Wegner 2002, 17), the computopic reverses this process insofar as the Otherness of its objects and environments is dimmed down by the introduction of familiar signifiers, behaviours and rules, both based on our empirical reality and on other games and conventions. One of the most concrete expressions of this reversal is the strong tendency towards realism in the representation of the game world and the respective theoretical framings of videogames as simulations of our empirical reality. Such realism strengthens the status of a game as mass art in Carroll’s sense, increasing mass accessibility through commonplace references to the everyday. In turn, it serves to reduce, or, reverse Otherness.

---

30 Juul (2005, 184) mentions the productive, satirical potential of incongruities between rules and fiction, but does not expand on this issue.

31 A freely available multiplayer first-person shooter created by the U.S. military as a recruiting advertisement, *America’s Army* shows that even the appearance of the same object in the same computopic world can differ between multiple users. Although the players are divided into two opposing teams, the respective adversaries are represented as “threat” to the American army to which all players belong. While fighting against each other, all players are U.S. soldiers, always fighting an external enemy (see Bogost 2007, 77-78).

32 I am not arguing that realism in games and their qualities as simulations cannot make a contribution to specific aims. Scholars like Fujimoto Tōru (2007) or Ian Bogost (2007) 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 (2013) or newsgaming.com (2013) show the...
In the context of this analysis, the focus lies on the concrete ways in which computopic expressivity can generate disruptive conflicts. In the broad sense in which Adorno understands this term as stimulating *Phantasie*, such conflicts might target any kind of cognition, including its emotional dimension. Grant Tavinor (2009, 131) argues that emotions are involved in videogames in many ways. Given my emphasis on action, this is particularly important, because “[n]ot only do the fictions of videogames arouse our emotions, but these emotions have an impact on what the player is and is not willing to do in a game world” (132). Tavinor claims that emotions work to “frame the world as represented, by making salient those parts that deserve our attention. Faced with a rich decision space in which we need to act, emotions not only focus our attention, but also help to bias the choice over options so that efficient decisions can be made” (144).

Tavinor observes that, “[t]he fictional status of videogames means that our emotional buttons can be pushed in absence of the consequences with which they are usually associated. Fictional 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” (146). Thus, emotional and moral elements deserve attention and may turn out to make relevant contributions to disruptive conflicts in a virtual environment in which theoretically, “anything goes.” What elements are actually disruptive in which constellation, is a question that the analysis will need to answer.

The detached, virtual character of games does not mean that anything is

---

33 In his analysis of emotions in videogames, Tavinor (2009, 133-136) 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” (139-140).
possible. It seems appropriate to point out some of the limitations of computopic expression. Videogames can target our sight, hearing and touch sense, 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 boring, joyful and empowering to horrible and angst inducing. The intensity of shooter games and the adrenaline fast-paced action can induce are comparable to or maybe 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 (2007, 126-129) makes an argument in this direction in his discussion 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.” Here, Bogost certainly points to the very important 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 sceptical about the physical dimension of this potential. Despite involving button-mashing and player input, I believe that videogame experiences are still dominantly cognitive, and by no means comparable with the actual experience of life-threatening situations human beings experience, with all their immediacy and physicality. The significance of player action and the variability and potential for repetition in videogames can arguably offer distinct and possibly novel ways of conveying ideas and emotions. However, such limitations should be kept in mind during the exploration.

### 2.6 Conclusions

This chapter established the theoretical framework for the following analysis. Claiming that alternatives to the current system require radical political imagination, I identified the disruptive conflict as its stimulus. Based on this, I argued that human play is always reified in rule structures and defined the ideational dimension of videogames that concerns this analysis as computopic space or the sum of all rules in the software. A closer examination of this space has pointed to several
characteristics, such as world contingency, partiality of representation, enactment by player and computer, its broad-ranged, combinatory expressivity and its principle physical and semantic flexibility and arbitrariness.

These qualities render the computopic space an active, contingent, partly unimagined and necessarily Other space, which has a wide variety of potentials for disruptive conflicts, but remains limited in several directions. The consecutive analysis maps these potentials and limitations and aims to answer the question formulated in the first section, whether Otherness and genuine disruptive conflicts are possible—a potential of which I have argued that it needs to be examined with a healthy amount of scepticism. This demands an adequate methodology, which I develop in the next chapter.