Playing Place – On Digital Games, Spatiality, and Hegemonic Play

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Abstract

Playing Place develops a relational account of the emergence of spatiality in digital game play. Operating at the intersection of American cultural studies and game studies, it opposes formalist and static notions of space and place by emphasizing the processual, affect-based, and embodied aspects of practices of play. Through the metaphor of *playing place*, the project foregrounds the relational, spatially productive, and heterogenetic qualities of play ensembles. Its simultaneous critique of the anthropocentric subjectivity of classic theories of play on the one side and the neglect of game studies to think beyond docile and instrumental play on the other aims at an affirmative and yet critical perspective on forms of play and games as play partners. The resulting approach to the medialities of digital game play is dedicated to both exploring and questioning dominant spatialities and hegemonic forms of play in three case studies. A diverse range of recent titles is addressed as discursive cultural sites of ant/agonistic, extractivist, and mental spatialities produced and negotiated in digital game play. The project's three case-based chapters hence examine the racial connotations of the ghoul in the *Fallout* game series, neoliberal and colonial extractivisms of farming practices together with *Animal Crossing: New Horizons* and *Conan Exiles*, as well as counter-hegemonic practices of recent indie games in the context of mental health discourses. While reappreciating play as a vital force of socio-cultural spatialization, *Playing Place* thus also questions its non-innocent hegemonic forms in the wider play of politics and culture.

Keywords: digital games, spatiality, counter/hegemonic play, playfulness, processuality, antagonism, extractivism, mental health

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1. Introduction

Questions of space abound in the study of games. In a field as young and shifting as game studies, they have marked one of the lasting and disciplinarily overarching concerns. It is not without reason that Dietmar Meinel's introduction to the 2022 edited volume *Video Games and Spatiality in American Studies* has recently posited "the experience of space in video games" as "the decisive quality of the medium" (1). Along the same lines, Espen Aarseth and Stephan Günzel's introduction to their co-edited *Ludotopia: Spaces, Places and Territories in Computer Games* vividly testified to the relevance of space in describing it as the "sine-qua-non" (7) of video games at the end of the previous decade.

The present work asks a series of questions on the spatiality of digital games[1] that draws from this tradition and ties into it, but it is also a critical intervention into how spatial theory can enrich a cultural analysis of digital games and the role the practice of play is assigned in spatial approaches to the medium. How can space be accounted for beyond a formal feature of games, and what can the neglected concept of *place* contribute beyond locating and separating the player and the game world in a here and a there? How can spatiality be accounted for as emergent, fluid, and dynamic – as it is generated and arises in ongoing play? Which elements and processes are relevant for the mediality of games and play, out of which spatiality is produced, and where its power relations are worked out?

Stuart Hall has described popular culture in terms of a site where the "struggle for and against a culture of the powerful is engaged: it is also the stake to be won or lost in that struggle. It is the arena of consent and resistance. It is partly where hegemony[2] arises, and where it is secured" ("Notes" 360). Since digital games today need to be regarded as one of the most decisive, complex, and contested[3] parts of popular culture, is a spatial perspective on digital

[1] Here and in the following, I use the term *digital games* rather than *video* or *computer games* for its way of responding to the more-than-visual elements of (trans-medial) games and gaming practices, which relate to more platforms than the computer (the present approach towards digitality will be outlined throughout Chapter 3). In discussing the work of other scholars, the original terms used by the author(s) in question are kept.

[2] The concept of *hegemony* as Hall uses it here and as I will engage with it in this dissertation is marked by his reading of Antonio Gramsci, whose work suggests a more complex answer to the question of social rule in bourgeois society than Marxist thought before him was able to formulate. Instead of pointing to violence and compulsion, Gramsci's work focuses on the constant and more subtle processual formation of alliances and the securing of practical consensus (see Hall, "Gramsci's Relevance"). Hegemony, as Hall frames it, thus "depends on a combination of force and consent" ("Culture" 318). His definition of a hegemonic viewpoint is "(a) that it defines within its terms the mental horizon, the universe of possible meanings of a whole society or culture; and (b) that it carries with it the stamp of legitimacy – it appears coterminous with what is 'natural, 'inevitable,' and 'taken for granted' about social order" ("Encoding" 273).

[3] A current cultural site of the contested nature of games and their spatiality, the struggle of hegemonic and counter-hegemonic forces, has recently become known through the hashtag Sweet Baby Inc. The hashtag refers to the Canadian consultant company of the same name that was targeted by online harassment and doxing (i.e. the

game play[4] not already confronted with, indeed, already occupying a position within this struggle? How can games be approached as both active participants in play on the one and this hegemonic struggle on the other hand, or put differently, are they not both practitioners of dominant spatialities and carriers of practices of play at the same time? If such a perspective can be established, how can we start to characterize dominant spatialities, their role in play, and the capacities of games to reimagine them?

Both space and play lend themselves to distorted readings that trivialize and depoliticize them; space, in that it might be made to appear as a globally and equally shared borderless condition of human existence - play, in that it is often linked to the realm of idlers, children, and the private, but also treated as an allegedly unquestionable universal, a common-place and constant of human beings and the logics of common sense and tradition that must be protected lest all be lost. Particularly from a cultural studies perspective on play, games, and spatiality, the two concepts must be defended against these shallow readings in the course of this work if the formation of consensus, which also informs scholarly readings of the two concepts, is itself to come under scrutiny. For the remainder of this introduction, the theoretical and disciplinary backgrounds for the present project will be clarified. Then, the most important contributions on the phenomena of space and place in the field of game studies will be compiled in an initial literature review. Answering to the desideratum of research thus highlighted, the aim of the present work can be refined and concretized before the outline of the chapters can take shape.

harmful public exposition of personally identifiable information often enabling further crime) at the end of 2023 (though the racist, sexist, ableist, and antisemitic memes, slurs, and conspiracy theories have, at the date of writing not faded). The company specializes (i.e., gets hired to pursue a game company's own goals) in narrative development (script writing, story consultation, etc.) and has contributed to a series of commercially successful games such as *Alan Wake 2* (2024) and *God of War Ragnarök* (2023). Online harassment targeted the company for its emphasis on diversity and inclusion, blaming supposed woke agendas often under the cloak of ethical debates. While the events are already described in terms of a "return of Gamergate" or "Gamergate 2.0" (see Parrish), this framing implies that the fascist ideology (unable and unwilling to accept any disconcertion of the hegemonic image of the White gamer), which, in part, only gave rise to a resurgence of White supremacism, sexism, and transphobia with Gamergate, and which currently appears again condensed and equally ugly, has, at some point, stopped existing.

[4] Generally, the term *gameplay* (along with game mechanics, its individual components), is used in gaming discourse to refer to the level of interaction between game and player in differentiation from sonic and graphical presentation. Throughout this dissertation, this term is alternated and differentiated via the composite term *game play*, which is used to more explicitly highlight the activity referred to as an instance of play (with a game), pointing to as well as questioning the specific form of this processual entanglement.

1.1. Games as Culture and the Question of Spatiality and Play

To approach the questions raised, the present work operates at the intersection of American cultural studies and game studies, employing a perspective informed by play theory and spatial theory. Its specific interest in digital games and play is hereby rooted in a wider occupation with the study of culture[5], which British cultural studies, pioneered by thinkers such as Richard Hoggart, E. P. Thompson, Raymond Williams, and Stuart Hall, have conceptually freed from the economic determinism of Marxism at the middle of the 20th century.[6] While ultimately futile as a telic endeavor, the very definition of *culture* played a decisive role in the formation of cultural studies, their self-positioning as a political project, its gradual and yet uneasy (post)disciplinarization into an interdisciplinary field in the academy, and the emancipation of its general object of study and varied methodologies. A common effort to many of the reconceptualizations of culture was to "democratize [. . .] and socialize [. . .]" (Hall, "Cultural Studies" 50) it, moving away from an idea of high culture in favor of a perspective of common culture. Accordingly, Hall thought of culture as "the sum of the different classificatory systems and discursive formations, on which language draws in order to give meaning to things" ("Centrality" 327). As this discursive nexus of classifications is not reducible to language and points to the sayable as well as the conceivable, feelable, and thinkable, the connotative ground from which meaning arises in the first place, it is tied to the unconscious milieu of power relations, as Marchart summarizes: "The 'micropolitical' actions of everyday life have a 'macropolitical' dimension that we, entangled in our everyday practices, remain

[5] The emphasis on culture includes rather than replaces a general interest in the social, as Stuart Hall's heuristic form/content metaphor conveys: "'culture' refers us to the arrangement – the *forms* – assumed by social existence under determinate historical conditions. Provided the metaphor is understood as of heuristic value only, we might say that if the term 'social' refers to the *content* of the relationships into which men involuntarily enter in any social formation, then 'culture' refers to the *forms* which those relationships assume. [. . .] 'Culture,' in this sense, does not refer to something substantively different from 'social': it refers to a different aspect of essentially the same phenomena." ("Culture" 301-2).

[6] The economic determinism of many strands of Marxist thought and practices at the beginning of the 20th century, according to which the cultural forms (as superstructure) were determined by the political economy (or base), posed a first bone of contention for theorists invested in the analysis of culture. Hall's influential essay "Cultural Studies: Two Paradigms" describes the evolving dilemma in terms of a choice between two problematic options: culturalism and structuralism. The first of the two thinks of culture as "threaded through *all* social practices" as the "sum of their interrelationship" (51) with a focus on "how they are 'lived' and 'experienced'" (56). The danger of neglecting issues of ideology by focusing primarily on the immediate access of lived experience is raised by the structuralist critique of culturalism. Against culturalism (I am repeating the strategic simplification of Hall's argument here), the structuralist approach to culture is occupied primarily with the wider socio-cultural structures of which the individual experience, as is maintained, is just the effect. Hall laments the disadvantages of either approach while sounding a note of caution regarding an "easy synthesis" (61) of the two (for a discussion of Hall's preference for the structuralist paradigm and a counter-argument, see Scannell). Historically, many of the founding thinkers of cultural studies turned to readings of Gramsci to overcome some of the impasses of Marxism (see Hall, "Gramsci's Relevance"). Some of Williams's efforts in *Marxism and Literature*, for instance, tackle the issue of how to bring to new life the concept of *determinism* in Marxist thought, arriving at the argument that determination is not full dictation of a content or being but tied to both a "setting of limits" and "the exertion of pressure" (87).

largely unaware of" ("Die 'mikropolitischen' in unsere alltäglichen Praktiken, weitgehend unbewusst bleibt"; my trans.; 13). The project of cultural studies, following from this, is for Marchart to bring "the original *political motivation* of seemingly apolitical cultural actions and phenomena back to light [. . .]. These actions are not 'political' because they have their origin in the social subsystem of politics, but [. . .] because they arise from power relations that cover the entire social space like a net" ("die ursprüngliche *politische Motivation* scheinbar unpolitischer kultureller Handlungen und Phänomene wieder ans Tageslicht [. . .]. 'Politisch' sind diese Handlungen nicht etwa, weil sie ihren Ursprung im sozialen Subsystem der Politik hätten, sondern [. . .] weil sie Machtverhältnissen entspringen, die wie ein Netz den gesamten sozialen Raum überziehen"; my trans.; 13). Culture, according to this perspective, is an enabling but also limiting dynamic field of power relations in which social identity categories such as class, race, gender, sexual orientation, age, religion, and others are articulated in conflict and linked to broader hegemonic patterns.

As their use of Gramsci's concept of *hegemony* shifted the attention of cultural thinkers towards the sites of meaning-making, cultural studies, historically, have held a close and critical relation to mass media.[7] Today, gaming has taken a dominant role among other mass entertainment media, with the global games market generating annual revenues of $184.0 billion and more than 41% of the global population engaging in digital game play in 2023 (Newzoo 17). As far as the U.S. population is concerned, 61% of Americans regularly played digital games in 2024 (Entertainment Software Association). In light of the unparalleled rise of digital games to global economic and social relevance throughout the past decades, the emergence of game studies as an interdisciplinary field has led to a renewed academic interest in (digital and non-digital) games as material artifacts of popular culture.[8]

The still rather young interdiscipline of game studies, which has, since its self-proclamation in the early 2000s (see Aarseth's editorial "Computer Game Studies"), grown to an extent not even close to matching the cultural rise of digital games themselves, has maintained a close but also conflictual relationship to cultural studies. Deterding's 2017 account of the field describes game studies as an "increasingly narrow interdiscipline" (532) pointing

[7] Hall's own work, for instance, tackles the mass media of British television, film and (news) photography (see "Encoding" and *Writings*). In his essay "Culture, the Media, and the 'Ideological Effect,'" Hall argues to speak, more generally, "only of the tendency of the media – but it is a systematic tendency, not an incidental feature – to reproduce the ideological field of a society in such a way as to reproduce, also, its structure of domination" (334).
[8] The approach of analyzing games as objects of great relevance for the study of (popular) culture can be thought of as a beneficial alternative to framing gamers as a distinct subculture within larger popular culture. Already in 2010, media scholar Adrienne Shaw has argued against "a pervasive sense of video game culture as separate from a constructed mainstream culture, as something new, different, and more importantly definable" in favor of "a critical cultural study of games, rather than a study of game culture as such" (404).

to three core pillars: the humanities, social sciences, and design research. "[W]hile *game research* is expanding and diversifying," he writes, "*game studies* are increasingly coalescing into a relatively closed community *within* it, composed of humanities and cultural studies scholars with homogenous epistemic cultures" (536-7). Lamenting the disconnect from game studies to the fields of economics, HCI (human-computer-interaction), and communication research, Deterding's diagnosis criticizes the field's lack of "genuine new theory/method couplings, let alone theories that organize research across disciplines and paradigms" (533). Where Deterding, therefore, argues for game research to move further towards "a design orientation" (534), cultural study scholars working with games warn against this complete subjugation to capitalist valuations and defend the politicizing approach of their interdiscipline as a direly needed counter-hegemonic intervention that has nothing but gained in relevance in recent times:

> [C]ritical cultural interventions in games have been so thoroughly excluded from what is considered legitimate to their proper study. Today, the overwhelming priority given to games within the academy has been in technical training, development and innovation. Games have also entered into scholarly discourse during a definitively neoliberal turn in the academy. In the wake of significant backlash against critical studies approaches, such theorization falls outside the increasingly corporatized structure of universities, within which nebulous pursuits with less obvious "measureable [sic] outcomes" begin to fall prey to the institutional chopping block. (Murray, "Work" 12)

Working at the intersection of cultural studies and game studies, Soraya Murray thinks of video games as "powerful invocations of the lived world in playable form, which offer insights into the core fears, fantasies, hopes and anxieties of a given culture in a specific cultural context" (*On Video Games* 2). By pointing to games' capacity to "articulate a struggle within culture" (2), Murray extends some of Hall's core arguments regarding the "ideological effects" (322-34) of media in his essay "Culture, the Media, and the 'Ideological Effect'" to the realm of games. Hall's essay describes the media as a "site of an enormous ideological labor, of ideological work" where "the line [. . .] between preferred and excluded explanations and rationales, between permitted and deviant behaviors, between the 'meaningless' and the 'meaningful,' between the incorporated practices, meanings, and values and the oppositional ones, is ceaselessly drawn and redrawn, defended and negotiated" (328). Engaging in a similar perspective, Dyer-Witheford and de Peuter's 2009 landmark *Games of Empire* posited games as a "paradigmatic media of Empire— planetary, militarized hypercapitalism— and of some of

the forces presently challenging it" (xv). Along similar lines, Cassar's attempt to understand games with Gramsci claimed that "games do their part in establishing and consolidating a general consensus, which is cardinal to the reproduction of the current state of affairs" (338). Murray's more recent characterization of the medium (i.e., 10 years after *Games of Empire*) still holds that "with little exception, mainstream games present a vision of the world that is devoid of postmodern, post-structural, post-colonial, feminist or any other critical cultural intervention" (*On Video Games* 24-5). In light of these critical voices, the mode of questioning put forth by cultural studies must insist on taking seriously the study of culture qua a study of digital games, which, far from a fringe phenomenon of some subculture, are today among the most vital sites of cultural meaning-making. The present account aims to engage with games as cultural artifacts in a particular manner, thus aligning with and responding to two further moments in cultural studies and game studies.

First, it tackles the medium from a decidedly spatial perspective. Beyond the already pointed out prominence of spatial approaches to digital games (to which the upcoming section will return in more detail) and their predominantly visual techniques of spatial presentation, an engagement with spatial theory is particularly promising for a cultural analysis of games because it may assign relationality, power, and materiality center positions for the perspective. Especially where cultural studies have struggled with the reductionisms inherited by Marxism and an overemphasis on the representational character of language, space can be a unifying concept that both ties the discursive perspective back to materiality and contributes a dissecting lens that links the site-specific and particular dynamics of space, as they become observable in play with a given game, to wider processes of socio-cultural spatialization, hence bypassing issues of representationalism.[9]

Second, by combining an interest in games with a matching focus on play, the present work aligns with a recent resurgence of accounts of play in the field of game studies, most notably exemplified by the work of Miguel Sicart and his pioneering book *Play Matters*.

[9] To be more specific, the spatial perspective evoked can contribute to navigating what Hall calls "cultural idealism" (331) in his essay "The Centrality of Culture." Playing the devil's advocate, Hall here raises the question "If 'culture' is in everything and everywhere, where does it begin and end?" (331). According to Hall, a non-reductionist kind of cultural analysis can only begin from the attempt to "radically rethink the centrality of 'the cultural' and the articulation between the material and the cultural or symbolic factors in social analysis" (330). Whereas Soraya Murray's approach, for instance, focuses on the visuality of video games and their politics of representation, the present account sides with the larger but, potentially, also more unifying concept of space (which does not require a division between a world of representation and a world represented). Given that the latter can be conceptualized dynamically and in close contact with both materiality and its cultural mediations, both game studies and cultural studies may benefit not just from becoming attuned to the material and the ideal notions of space but the very processes through which the two co-constitute each other and often become indiscernible.

Gekker's 2021 overview of the field has identified the ontology of games as an ongoing unresolved issue, which could be remedied, as suggested by the author, via a "focus on play instead of games" (79).[10] In this context, Adamowsky has pointed to the benefits of a cultural studies perspective for which "computer games are always and first and foremost games that are played, and as such are neither a substitute nor a vehicle for supposedly more valuable cultural practices" ("[I]n kulturwissenschaftlicher Perspektive sind Computerspiele immer und zuallererst Spiele, die gespielt werden, und als solche weder Ersatz noch Vehikel für vermeintlich wertvollere kulturelle Praktiken"; my trans.; 344). As the research desideratum of the present contribution is with a combined perspective on play and games, however, the practice of play needs to lose its supposed innocence and be questioned both for itself, i.e. as a site of negotiation rather than pure docility, and as a distinct (but not independent or unchallenged) hegemonic formation put forth together with the wider hegemonic productions of digital games (which the vital works by Dyer-Witheford and de Peuter, Cassar, Soraya Murray, and others have related to predominantly), whereas the latter only come to be embodied and meaningful in the first place through the silent achievements of the former that assure play as a consensual (i.e. unquestioned) and seemingly neutral (i.e. depoliticized) area of meaning-making. Coming back to Murray's quote cited above, the "playable form" of games itself needs to come into scrutiny to fully grapple with games' "ideological effects," speaking with Hall.[11]

1.2. Reviewing the Roles of Space and Place in Game Studies

To grasp more fully how the concept of *space* became one of the key buzzwords of various works on digital games and to identify against which background some of the theoretical desiderata of the present work are posited, a thorough literature review is due.

[10] As the wording of Gekker's quote reveals, a contentious issue among scholars has been the question whether to focus primarily on play or on games (without suggesting an immediate need to combine both approaches). Sicart's arguments in making strong a perspective on play sometimes tend to strategically clash the two approaches when he writes "[g]ames don't matter that much. They are a manifestation, a form of and for play, just not the only one." (*Play Matters* 4). Frans Mäyrä's *Introduction to Game Studies* describes this point as an overarching tendency in the field to "oscilliat[e] between work that focuses either only on games, or only on play behaviour" (24).

[11] Indeed, Hall's work on television already raised concerns similar to the present discussion. In "Encoding and Decoding in the Television Discourse," his argument in favor of recognizing the usually neglected moment of "reception" (259) or "decoding" (258) is not without substantial analogy to the present argument. Hall maintains here that before any given broadcasted message "can have an 'effect' (however defined), or satisfy a 'need' or be put to a 'use,' it must first be perceived as a meaningful discourse and meaningfully decoded" (260). The crucial movement here is not merely to notice the act of reception but to regard it as a distinct and yet dependent moment in a wider discursive production of the hegemonic, which necessarily and always includes counter-hegemonic forces.

Hence, an overview of the most influential approaches is given next. Three questions guide it: 1) What do the concepts of *space* and *place* refer to in the works examined? 2) Do authors prioritize one of the terms or differentiate the two? 3) Are the spatial concepts tied back to their production or construction, or, in other words, how processual, dynamic, and critical are the terms allowed to be?

1.2.1. Pioneers of Space in Game Studies

The first paper to approach digital games through an analysis of space was published in 1997 by U.S. film theorist Mark J. P. Wolf. His essay "Inventing Space: Toward a Taxonomy of On- and Off-Screen Space in Video Games" attempts a decidedly structuralist typology of video game space, spanning eleven different types of spaces (from text-based only to three-dimensional space). The concept of space used here is inspired by cinema's "use of on-screen and off-screen space in the creation of a diegetic world" (11). Consequently, though video games are thought to "invent" on-screen space, they still remain "largely representational" (11). Unlike film, Wolf writes, "off-screen space in a video game does not have a pro-filmic referent the way a filmed space often does" (12). While this first approach already includes an awareness of the video game as "an interactive medium" and its manner of "producing" space, which therefore "depend[s] on being programmed and actively created" (12), this clashes with the cinematic idea of a containing real space and the rather passive role of the cinematic audience as viewers, which translates badly to the role of the player. Therefore, space is modeled primarily after a heuristic of camera perspectives in film (producing a series of objective spaces) and a first and influential split between *real space*, which the medium of film allegedly still represents in its various ways, and the representational video game space of the on-screen is installed. Wolf's focus on visuality excludes other elements such as sounds, vibrations from controllers, or the distinct smell of consoles from the mediality of the game.[12] Finally, place is not mentioned at all in the paper.

Further groundwork on the role of space is inextricably tied to Janet H. Murray's *Hamlet on the Holodeck*. With this seminal book, Murray produced one of the core works that were

[12] Note that William Gibson's iconic visions of *cyberspace* were indeed not only visions – the very title of the first short story to use the term, the 1982 "Burning Chrome," evokes smell as much as vision.

later understood as part of a narratological approach to games.[13] Exploring similarities and differences with other forms of narration (like Wolf at the same time), Murray holds that "[l]inear media, such as books and films can portray space either by verbal description or image, but only digital environments can present space that we can move through" (79). Consequently, she conceptualizes the new mediality of digital environments as "procedural, participatory, spatial, and encyclopaedic" (72). For her, the particular narrative agency of digital games then lies in "their power to represent navigable space" (79). Though drawing mainly from readings of 1990s hypertext novels and text-adventure games like *ZORK* (1977), she shifts the focus of how on-screen spaces are produced notably (in comparison to Wolf) by arguing that "[t]he computer's spatial quality is created by the interactive process of navigation" (79). By pointing to procedurality and interactivity in the genesis of space, Murray already paints a different picture than Wolf's fixed typology of spaces. In the end, however, it is narration and not play that is the driving force behind her take on navigable space. Moreover, though Murray uses both terms *space* and *place*, there is no systematic differentiation of the terms.[14] Finally, her take on space is both representational (in that it is tied to fiction as opposed to real space) and heavily inspired by the discourse on cyberspace: quite often, a notion of digital space as "infinite expanses of cyberspace" (82) guides her thinking. Digital space, confined to the realm of the on-screen, again appears as an Other to an alleged non-represented, non-mediated real space.

The mutual influence of narrative and space that Murray linked to navigation and movement was further elaborated by theme park designer Don Carson. In his 2000 essay, he draws from experiences from the theme park industry to describe the way physical spaces are created carry meaning in a particular manner he calls "environmental storytelling." He writes, "one of the trade secrets behind the design of entertaining themed environments is that the story element is infused into the physical space a guest walks or rides through. In many respects, it is the physical space that does much of the work of conveying the story the designers are trying to tell. Color, lighting and even the texture of a place can fill an audience with excitement or dread." Here, the theoretical strand of thinking that moves from a model of physical space to digital space receives a more practice-informed concept of architecture, emphasizing the non-linearity of narration as well as the role of the player as visitor and explorer.

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[13] The *narratological* approach connects games closely to stories and narrative practices and has, in the early and formative phase of game studies, often been (and, as it seems today, unnecessarily) opposed to the *ludological* approach, which emphasizes game mechanics (for an entry into the debate, which also engages in the rather rigid classification of approaches on one of two sides, see Frasca).

[14] It is interesting though to read her argument that "[t]he computer screen is displaying a story that is also a place" (Murray, J. 81) in light of the text-based nature of many of her examples. As her cases do not feature 3D game spaces most of the time, her concept of place seems to be closely tied to the creative powers of the imagination.

An argument on computer games more explicitly focused on conceptualizing space was brought forth by Aarseth in the 2001 essay "Allegories of Space: The Question of Spatiality in Computer Games." In his attempt to overcome both the loaded term *cyberspace* as well as an exclusive conception of games-as-narrative, Aarseth emphasizes how "games celebrate and explore spatial representation as their central motif and raison d'être" (161). His insistence that games demand "active experimentation" (154), which is not reducible to narration, allows him to reject an idea of cyberspace as independent extension: "By being *generated*, cyberplaces are '*regions in space*,' and cannot exist as parallels of real, three-dimensional space" (162). The concept of place Aarseth uses here is fundamentally subordinated to an idea of space that contains it and without which it is powerless: "the fact that they [phenomena of cyberspace including digital games] are not real space but objects and places is the only reason we can perceive them at all" (162). According to Aarseth, computer games represent space via a "reductive operation" (163) and, as allegories of space, "they pretend to portray space in ever more realistic ways, but rely on their deviation from reality in order to make the illusion playable" (169). While this is certainly not true for today's retro games, which often indulge in a kind of nostalgic non-realist style, there is a more fundamental reason to scrutinize Aarseth's idea of representation: it relies on a concept of "real space unmediated" (162), which is once more conceptually separated from the on-screen, which appears as its foil in turn. In view of Carson's idea of a story-telling power of architecture, Aarseth's implicit concept of an innocent and unmediated space cannot be said to have remained unchallenged.

While Aarseth's notion of cyberplaces did not stick, the idea of representational space resonated with the field. Shaun Miklaucic's 2002 reading of *Sim City* (1989) conceptualized the on-screen diegetic space as a cognitive map - a mental space that represents concepts of urbanity in Postmodern culture. Though this reading ignores the lived and potentially subversive aspects of play, the author still makes a critical point when he moves practices of game design, or, in Carson's terms, environmental storytelling, to that of ideology. The latter becomes experimentally verifiable for the player (who appears as a user rather than a player in the analysis), which mystifies it even further, according to Miklaucic's reading.

Henry Jenkin's efforts to combine narrative as well as ludologist ideas further diversified the story-telling dynamic of game space in 2004. By distinguishing evoked (i.e. referring to preexistent stories), embedded (narrative elements of the mise-en-scène), enacted (stories told via pre-determined character action, goals, and conflicts), and emergent narratives (the ways players construct own stories), space and spatial production are shown to emerge from more complicated networks of texts and nodes of agency (123-9). However, the main

focus is still on game designers as "narrative architects" who "design worlds and sculpt spaces" (121). Play (and the player) are not the focus of this approach, which still separates the site for play from the on-screen "representations," which "are not real worlds" (128).

Salen Tekinbaş and Zimmerman's 2004 *Rules of Play: Game Design Fundamentals* explores issues of space from a different angle. Though the focus is still on game design in their approach, space (and not place) is used to describe the situational context produced by play. Drawing from the concept of the *magic circle*, usually known to be drawn by practitioners of ritual magic, they write that a game "takes place in a precisely defined physical and temporal space of play" (95). Contrary to the authors outlined before, play in this approach can appear as productive. However, it is merely thought to produce a space that is "repeatable" and "enclosed and separate from the real world" (95). The space of play, though not confined to the on-screen space of digital games here, is again a limit between the real and its Other. Later turning to digital games in the book, the authors then describe "digital game space" as a product of the "formal system that defines the game" but also its "representation (how the space is displayed to the player), and interaction (how a player navigates through the space)" (394). Though play and the role of the player are mentioned, then, the emphasis on formal rules deprives them of any further productive agency. There is, however, a dormant potential here (to be expanded later in chapter 2), and the magic circle is a highly instructive concept, albeit meta-theoretically, in that it captures well the implicit Othering and marginalization that have repressed play in the game studies discourse. Rather than the inherent limit to the reality-generating power of play, the magic circle could be read as a theoretical space of confinement, the way play was and is displaced (as not real, not serious, not productive, separate, etc.) in thought.

1.2.2. Second-Wave Spatial Theory and the Discovery of *Place*

In discussion with the pioneering conceptualizations of space presented above, further scholars like Fernández-Vara and colleagues, Stockburger, and Nitsche have attempted what could be called a re-differentiation of the previous concept of *on-screen space* and a reconciliation with the agency of the player and her spatial situatedness and setting.[15]

[15] To grasp the intellectual maneuver of this branch of theory, I use the term *second-wave spatial theory*. Of course, intertextual links and critique also strongly resonate among the first group of scholars approached in the prior

Fernández-Vara and colleagues' 2005 contribution presents an alternative to Wolf's initial typology of on-screen spaces. Not unlike Wolf, the authors differentiate between the cardinality of axes (movement is possible along the x-, y-, z-axis, or the combinations amounting to three-dimensional spaces) and the dichotomy between discrete and continuous spaces (i.e. whether a game presents all of its space on one screen or only fragmented parts). However, they further distinguish between the cardinality of gameworld (the way in which the world extends or stops at the edges of the screen), spatial representation (the either two- or three-dimensional presentation of the screen), and cardinality of gameplay (the axes along which the player can move the avatar or other entities), which slightly adds to the role of the player in comparison to previous approaches to space.

In his 2006 dissertation, Axel Stockburger then further attempted to incorporate the player in an account of space as a mix of "the physical space of the player, the space emerging from the narrative, the rules, the audiovisual representation and the kinaesthetic [sic] link between player and game" (5). Therefore, he describes "user space, narrative space, rule space, audiovisual representational space and kinaesthetic [sic] space" all contributing to a "hybrid between physical and imagined spaces" (82). These modes of space are only separated analytically, though, and the author stresses how "different modalities might come to the fore at different times during gameplay in a single game" (85). In his analysis, Stockburger also uses both terms *space* and *place*, but does not differentiate them. Nevertheless, by relating the term *space* not only to the on-screen, gameplay and the space of the player but also their (so to speak) *messy* and interactive genesis, a fundamentally different and richer character of the medium emerges from a new branch of theory.

Michael Nitsche's 2008 *Video Game Space: Image, Play, and Structure in 3D Game Worlds* further segments space into smaller composites. Overall, his book describes how video games create spaces and presence (i.e. the expressive element to games) via narrative architecture while also stressing the corresponding competence of "narrative comprehension" (7) in the player: space is (co)produced by "the active work of the player, through comprehension and interaction" (191). The role of the player in Nitsche's approach is, therefore, one of "both reader (of the computer's output) and producer (via input) of events" (31). Regarding the different levels coming together in this production of space, five planes are distinguished:

subsection; however, I would argue that the explicit attempt of reapproaching issues of space with digital games by finding novel and alternative starting points for such a thinking is what sets this second group of authors apart from the pioneers of space.

1. *rule-based space* as defined by the mathematical rules that set, for example, physics, sounds, AI, and game-level architecture;
2. *mediated space* as defined by the presentation, which is the space of the image plane and the use of this image including the cinematic form of presentation;
3. *fictional space* that lives in the imagination, in other words, the space "imagined" by players from their comprehension of the available images;
4. *play space*, meaning space of the play, which includes the player and the video game hardware; and
5. *social space* defined by interaction with others, meaning the game space of other players affected (e.g., in a multiplayer title). (15-16)

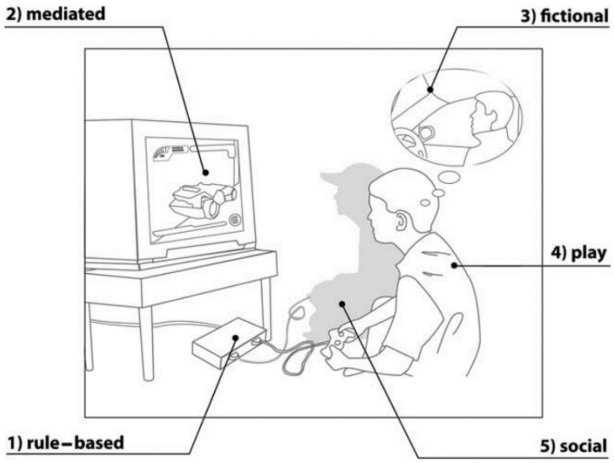


Fig. 1. Five analytical planes of space (Nitsche 15).

Against Nitsche's analytical dissection of space, Wolf's original typology of spaces now appears to have addressed only a single kind, namely that of mediated space (and particularly, visually mediated only). Against a separation of the different levels via the theoretical drawing of a magic circle, Nitsche also engages in the discussion of fictional space, valuing the narratological attention to the story-telling elements of games. Like Stockburger, he also puts emphasis on the situatedness of the player-console complex and the game existing as a set of code beyond the presentation of the on-screen. Furthermore, the social element as a distinct plane of space is an extension of previous accounts. Strikingly, Nitsche's planes of space come with a sketch that adds to the textual remarks but also raises some questions as to how the spaces discussed are visually mapped here (fig. 1). Immediately, the very locations of the levels of space are challenging: the fixation of mediated space to the screen neglects the games' non-visual mediality. Rule-based space is reduced to the inside of the console (instead of, e.g., in the interaction with the player, which only allows the code to move from one state to the next). Is the fictional space, placed in the mind of the player, a mental space? Why is the social element placed solely in the physical presence of others? Is play performed by the player alone, the console and game merely objects? These questions only begin to reveal the complexity of

spatial production that any approach to the phenomena of gaming faces. Moreover, Nitsche labels what Stockburger called "kinaesthetic space" as "play space" without outlining what is meant by play. As becomes apparent once more, the person holding the controller in the image above is conceptualized rather as an operator or reader than a player. Whereas some of these issues do not find satisfactory answers in Nitsche's approach, the valuable contribution at hand is the perspective of a pluralization of spaces, more specifically, that of a layering of various spaces that are interwoven in the process of their genesis, which is considered interactive (though not particularly playful).

Amid these reconfigurations of what *space* refers to, the concept of *place* finally receives its first more thorough introduction. Regarding his differentiation of the two concepts, Nitsche writes:

> Virtual space is a product of human knowledge and depends on logic, software, and hardware development. It lacks geographical, zoological, and most physical dependencies that heavily impact real-world locations. A digital space has no immediate context with other surrounding spaces because it can be developed separately from them, independently from building regulations or limitations in terms of height, depth, or width. It is a world defined by a universe of coordinates. That is why at its core and at the moment of its creation, it is spatial but not a place. (191)

Although highlighting the interactive nature of spatial production with digital games and not reducing space to the on-screen before, Nitsche's account here comes back to the practice of magic-circling the object of study. It is the alleged separateness of the digital that justifies the use of *space* but not of *place* here. Implicitly, space is thought of as coming first. This is later made explicit in his conceptualization of place and "place-ness":

> Placeness is not a quality of a virtual space per se, but one that can be achieved for it through the inhabitants: the game's players. Virtual placeness has to be earned. The indicators presented here showed that virtual places can be traced in the changing character identity, self-motivated goals and actions, and memory recollection of localized game world events. A final caveat: not all games depend or support such a placeness. Few players will experience the labyrinth of Pac-Man as a place with its own genius loci. The original Pac-Man barely supports any of the aforementioned signs of place creation. (199)

Nitsche's concept of *placeness* further defines how a space can be turned into a place via human action: a "genius loci" can be produced by either a) changing character identity, b) self-motivated goals, or c) memory of local events.

A similar argument can be found in Calleja's 2011 work on space and spatial involvement via incorporation. As one level of his involvement model, he describes a "shift toward internalized spatial involvement [that] creates a greater sense of habituation and belonging to the region" (87), very much like Nitsche. In Calleja's reading, such a "sense of attachment and familiarity can be seen as the distinguishing factor between perceiving an environment not only as a space, but also as a place" (87). Accordingly, as with Nitsche's quote above, on-screen space is considered to be transformed in a subjective experience of place via the engagement of the player.

As a third case of this way of thinking about games with the concept of *place*, Martin's 2011 dissertation *Space and Place as Expressive Categories in Video Games* can be mentioned. He applies the categories of *space* and *place* to video games time and time again in an iterative and flexible way. Here, *space* is used to capture the representational aspects of the medium, whereas *place* again refers to it "insofar as it is possible for the player to navigate around it within certain limits" (59).

Following a first wave of discussion of the initial pioneers of space in game studies, a new branch of theory can now be summarized to have (so to speak) first zoomed out by relating *space* to more than the on-screen. Moreover, by multiplying its referents, the perspective on the production of space with digital games appears to have begun to embrace intertwined and interweaving layers of space, which are rather messy than easily separable. Finally, this second wave of research has introduced the concept of *place* to the discussion. Theorists like Nitsche, Calleja, and Martin are the first to make their conceptualizations explicit, and all three relate it to the engagement of the player (though not to play). In addition, place has emerged from the analyses only as the outcome of, rather than an active partner in, player involvement. Ultimately, the concept of *place* thus remains secondary and subjective.

1.2.3. Current Approaches and the State of Literature

The most recent approaches discussing digital games through a lens of space and place have not continued the first attempts of differentiating the two terms. The rich volume *Ludotopia: Spaces, Places and Territories in Computer Games* co-edited by Aarseth and

Günzel is emblematic of the relevance as well as the lack of a common framework of the terms *space*, *place*, and *territory*, which are used to cluster the single contributions. Testifying to the rise of the importance of the phenomenon of space for game studies, the editors describe it as the "sine-qua-non" (7) of video games in their introduction. The term *ludotopia*, the authors go on, is meant to capture the "dialectical entanglement of games and space" (7). However, the key terms are not defined and rather loosely serve the authors to raise their various questions. Domsch's contribution to *Ludotopia*, for example, continues Murray's attention to the narrativization of space (rather than place). He writes, "[a]s we experience spaces, we read them for their meaning and the stories they contain, and as we perform these spaces through movement and interaction, we inscribe our own narrative into them" (104).

Günzel's own contribution tackles one of the key problems outlined by this overview in asking the question "What Do They Represent?" in his essay of the same name.[16] Drawing from Nelson Goodman, Günzel develops a semiotic (rather than ontological) concept of representation as "exemplification" in which "something is used to refer to something that shares the same properties" (20). From this perspective, it is possible to "not only conceive of them [games] as allegories of physical space (or 'metaphors' only), which – as asymmetrical representations in the sense of denotations – do lack the 'real-being' of space, but that are symmetrical representations of theories of space, i.e. *the game exemplifying a spatial concept*" (20). Thus, according to Günzel, who intertextually comments on Aarseth's early 2001 essay on games as allegories of space here, games enact spatial theories, which is beyond an ontological test of their reality first and foremost an "expression of culture" (21).[17]

While Günzel's innovative contribution deals with a crucial issue that has created problems for spatial theory in game studies from the start, some merits of the second-wave theorists of space are in danger of falling to the wayside. First, in attempting to solve issues of representation, Günzel goes back to reducing the space of digital games to the level of the on-screen, which, ironically, was the very dominant conceptualization of the scholars struggling most with issues of ontology. Second, the use of *space* again eclipses the concept of *place*. Third, the focus on exemplification neglects the role of the player (and play) in the ongoing genesis of space with games, which previous accounts at least indirectly included by paying

[16] Note that Günzel published a second and very similar version of the article called "The Lived Space of Computer Games." As the version in *Ludotopia* presents the same arguments with more theoretical depth to them, only the latter version is quoted in the following.

[17] Here, Günzel's perspective needs to be questioned though: from a perspective of games-as-culture, the essay goes on to read contemporary games along the lines of philosophical spatial theory by authors such as Leonhard Euler, Kurt Lewin or Edmund Husserl. The question remains whether this does not tend to (re)introduce a bias of high and low culture in the very attempt of bringing both together.

more attention to the interactivity of the medium. Finally, in only stressing how games exemplify cultural knowledge (of which Western spatial philosophy is only a small, traditionally privileged part), the wider creative-productive character of digital games is downplayed. Exemplification, in the way Günzel uses the concept, neglects difference and the potential for spatial reproduction and reimagination in favor of a concept of repetition. In this way, the spatial agency of digital games, despite being the very focus of the analysis, cannot fully come to the fore of the perspective.

In the field of American cultural studies, the edited volume *Video Games and Spatiality in American Studies* (2022) and Dietmar Meinel's introduction to it have recently moved in exactly this direction. Moving away from games as representation towards a thinking of *production* allows Meinel and his fellow cultural study scholars to take narration seriously, but to take it seriously as only one particular mode of spatial production. In his groundwork on the role of video games for cultural studies (and vice versa), the medium appears as "inherently characterized by its various modes of spatial production" (1). By moving beyond the initial question of the nature of on-screen space, cultural studies can shift the focus towards the how of spatial production, questioning both its modes as well as its biases, its ways of implicit and explicit knowledge-production, and the corresponding issues of positionality and power. In short, "a Cultural-Studies-inspired approach to these digital landscapes explores the *politics* of their representation" (10; my emphasis). Though Meinel does not offer a conceptualization of *place*, he shows a possible passage for future research by putting emphasis on the practice of play in maintaining that "the play of video games takes place in and produces space" (1-2).

At the same time, however, older topological approaches to space, driven by the rigorous Enlightenment impulse for a perfect and final classification of space, have never entirely faded away. Bakkerud's 2022 DiGRA paper, for instance, can be read in terms of a general dissatisfaction with the formalizing tendencies of game studies. In his critique of "labyrinthism," Bakkerud likens the literature on game space to Borges' imaginary classification of animals in "The Analytical Language of John Wilkins." Bakkerud's critique, however, lies not with the rigidity and problematic (i.e., blinding) power of a culture's general taxonomy of the world (which readings of Borges' text might certainly highlight). Rather, his argument is that said "classifications are seemingly developed with little regard for the underlying criteria," which relate to "completely different and nonexclusive domains" (Bakkerud 11). As a solution, he suggests drawing from "formal ontology, in which only 'underlying' mechanical systems are accounted for, that is, where formal categories are defined without ambiguous criteria from other domains" (11). Hence, Bakkerud criticizes typologies of

game space not because they are too reductive, but because they have, according to the author, not been rigorous enough. As already in Wolf's early account, the concept of *space* is tied to an illuminating gaze on the game that is to be subjected as a purely technological object.

In summary, the three questions outlined at the beginning can now be related to three tendencies in the literature on space and place: 1) the tendency to relate the concept of *space* to the on-screen presentation exclusively, giving way to formal typologies on the one hand, and a splitting between the *real* and the *digital*, *cyberspace*, *representation*, *illusions*, etc., on the other.[18] The latter more fruitful fuzzy and complex plurality of space (as captured by the term *spatiality*, which the next chapter will discuss more fully) can be regarded as a reaction to these earlier reductionist tendencies that seclude game space and lose touch with the process of play; 2) the prioritization or hierarchization of space over place, where the latter concept is used at all. Not that a unitary framework is to be preferred across accounts, but other disciplines have successfully engaged in relating the concept of place to games, whereas game studies have not even begun to fully explore it for itself; [19] 3) The tendency to marginalize play and playful elements in the interactive genesis of space/place with digital games. While the interactivity of the medium and its modes of spatial production have been gestured to from the early beginnings of the discipline on, the focus has been primarily with games, and the player has only marginally been paid attention to as a user, a reader, operator, navigator, etc. While the player surely also uses, operates, navigates, and so on, the specific dynamic of play was misplaced – games are neither watched or read, consumed, operated, or abstractly interpreted and commented upon but, first and foremost, played. This is not to say that games cannot be engaged with otherwise but to insist that it is play as a socio-cultural practice that informs, structures, and breathes its strange and mysterious life into all the other modes of engagement and instills an immediate

[18] This splitting, which relies on a previous sedimented division (e.g., of the *digital* from the *real*), entangles the concept of *space* in the search for authenticity, as already in Plato's *Statesman*, in which the statesman as rightful "cowherd" (301) of men and ruler of public space can only emerge from a series of philosophical divisions from other claimants to the qualifying episteme, who in turn appear as false claimants. Thus, the "merchants, farmers, millers and bakers, all of them, and gymnastic trainers too, and doctors" (309) all step forward one by one to be judged in front of the philosopher. If the question for space with digital games is framed in terms of a mimetic rivalry with reality, then the game study scholar is as well bound to repeat Plato's inscription of myth, the claim to a full idea of a true reality, which Deleuze has aptly described as a "narration of foundation" ("Plato" 46).

[19] Other disciplines beyond game studies often paint vastly different pictures of digital games precisely because of different motivations and starting points for asking questions. In pedagogy, for example, there is the notion of games-as-places because of the usefulness of the concept of *place* in the theory of place-based learning in which an idea of the *local* is used as a gathering mechanism to generate relevance of larger topics and emotional involvement on the side of the learner. David A. Hutchinson's book *A Natural History of Place in Education* and his article on "Video Games and the Pedagogy of Place," for instance, may serve as examples. Though the author also thinks of place in terms of human familiarity and identity ("place as space plus character" ["Video Games" 12]), his concept of games-as-places adds to the relational, immersive, and gathering qualities of games, which allows them to be discussed as places by his approach.

sense to them. Hence, an analysis of the spatiality of games will lack substantively if the mediality of play is not assigned a key role.

Regarding the beneficial synergy between game studies and cultural studies, Meinel writes: "As Video Game Studies moves beyond thinking about space as merely representative or representational to understand the production of space also as an act of playing, American Studies may similarly expand its notions of space as a practice or a form of doing" (3). To begin a realization of this potential synergy in the present work, it is indispensable to not just understand the production of space as an act of playing but play itself spatially, i.e., through the concepts of space and place.

1.3. The Aim and Methods of the Present Work

The general aim of the present project is twofold. First, it aims to develop a new practical and epistemic approach to the analysis of spatial phenomena of digital games through a double lens of the concepts of space/place and play. The evolving perspective on the *mediality of digital game play* aims to sketch an open framework to account for a plurality of spatialities and link them to their ongoing emergence in play without presupposing a rigid theoretical mapping via an all-encompassing a priori model. Moreover, to highlight games as vital sites of popular culture and the everyday, i.e., the realm of lived and embodied experience, the early exclusive focus on spatial formalism remains to be expanded.[20] In this regard, the non-objective, messy, and hybrid nature of space, which is not reducible to digitality in game play, calls for a deeper engagement with spatial theory and an exploration into the merits of the concept of *place* in the context of play theories.

This first aim is joined by a second, more explicitly political one, which combines critical game analysis with an examination of *dominant ways of understanding and shaping play*[21], i.e., how games imagine and practice play. The second focus of the work is thus with

[20] Murray's review of game studies and spatiality, too, notices that "[w]ithin the study of video games, the construction of space has largely been theorized from a formal perspective" (*On Video Games* 142).

[21] Hall emphasizes the role of dominant readings and the sedimented, i.e. taken-for-granted way they permeate and circulate through a society: "Any society/culture tends, with varying degrees of closure, to impose its segmentations, its classifications of the social, cultural, and political world, upon its members. There remains a *dominant cultural order*, though it is neither univocal or uncontested. [. . .] [T]he different areas of social life appear to be mapped out into connotative domains of *dominant* or *preferred meanings*. New, problematic, or troubling things and events, which breach our expectations and run counter to our 'commonsense constructs,' to our 'taken for granted' knowledge of social structures, must be assigned to their connotational domains before

the description and analysis of what could be termed *hegemonic play*[22], expressed and put into force via the overarching and intricate relationships of imaginaries of play (including the realm of the academy, particularly the field of play theories) on the one, and architectures of play on the other side, both contributing to dominant spatialities in play (whereas dominant does not mean unchallenged or without alternatives), which can be sited by games as their carriers as they participate in ongoing play. Thus questioning forms of hegemonic play, the practical game analysis investigates two of the most dominant spatialities in games and play: the *ant/agonistic*[23] and the *extractivist* are chosen for two full-scale case studies across various AAA-titles[24], whereas a third step explicitly tackles a counter-hegemonic formation in relation to indie games (responding to a third dominant formation, *psychic* spatiality).[25] In dealing with the cultural work of play and games on three levels of relations, the social, the natural, and the mental, the three cases thus span what Pierre-Félix Guattari has described as the three pillars of an "ecosophic perspective" (264) on the world.

Due to the double aim of the present work, the concept of *play* offered in the following is necessarily double, as well: one is setting values, positioning itself, acting strategically, and, while disclosing its projects, in the process of closing. Another is radically indifferent, as

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they can be said to 'make sense': and the most common way of 'mapping them' is to assign the new within some domain or other of the existing 'maps of problematic social reality.' We say 'dominant,' not 'determined,' because it is always possible to order, classify, assign, and decode an event within more than one 'mapping.' But we say 'dominant' because there exists a pattern of 'preferred readings,' and these mappings both have the institutional/political/ideological order imprinted in them and have themselves become institutionalized" ("Encoding" 269).

[22] In coining the term *hegemonic play*, I draw from Fron and colleagues' sharp but less theoretically grounded critique of a dominant episteme of games and play, but extend it by evoking Williams's use of *the hegemonic* (as opposed to a pre-established *hegemony* of play), which he specified in *Marxism and Literature*: "One way of expressing the necessary distinction between practical and abstract senses within the concept is to speak of 'the hegemonic' rather than the 'hegemony,' and of the 'dominant' rather than simple 'domination.' The reality of any hegemony, in the extended political and cultural sense, is that, while by definition it is always dominant, it is never either total or exclusive. At any time, forms of alternative or directly oppositional politics and culture exist as significant elements in the society" (113). Following Williams, the hegemonic is to be understood as a "hegemonic process" (113) that requires to always pay respect to the counter-hegemonic, not merely for the sake of noticing the struggles and oppositions of the subjugated, which would be an endeavor surely valuable enough, but "as indicative features of what the hegemonic process has in practice had to work to control [. . .] or transform or even incorporate" (113). In this way, the hegemonic points to an "active process," which is not reducible to a totality of dominant features but includes a "more or less adequate organization and interconnection of otherwise separated - and even disparate meanings, values, and practices, which it specifically incorporates in a significant culture and an effective social order" (115). In this sense, hegemonic play points to "living resolutions" (115) rather than a given totality.

[23] The term *ant/agonistic* will be fully introduced in Chapter 2. Where the double meaning is retained in the manner of spelling, it will remind the reader of the ineradicable potential for the gradual transition(s) from *self/Other* distinctions to those of *us/them*, *friend/enemy*, and *human/nonhuman*. Speaking with Guattari, "[n]azism and fascism were not transitory maladies, the accidents of history, thereafter overcome. They constitute potentialities that are always present" (266).

[24] The prefix *AAA* (or *triple-A*) is commonly used for games with a large (often multi-million) budget production and full promotion by a publisher.

[25] Regarding the selection of the specific game titles, see the individual chapters where this matter is discussed as well as the note on siting at the end of Chapter 2.

transparent as possible, spacing and perspectivizing - in short, in the process of opening up. Indeed, the first concept requires and includes the second in that rethinking play and the roles of games therein makes it possible to formulate different questions about play, to question play for itself anew. A strategic spatial rhetoric of play is thus to be developed that is well-equipped to describe and account for play phenomena, but may also leave room (i.e., give space) for making play unfamiliar as hegemonic play.

Regarding the methods applied in pursuing these goals, the primarily theoretical Chapter 2 engages in conceptual work, i.e., the adaptation, development, and recombination of concepts, the groundwork of asking elaborate questions and building critical perspectives. The second case-based half of the remaining four chapters aims at a practical analysis of digital games and their game play with a focus on phenomena of spatiality. As this requires a dynamic perspective to transcend mere formalisms, a specific and eclectic mix of methods is necessary.

On a first level, close readings of game semiotics referring to ideas and meanings that games embody are vital. However, this is immediately linked to formal aspects of digital games (architectures of/in games) in which procedural logics and their communicative roles need to be considered from a micro-perspective.[26] From a macro-perspective, a network of several logics taken together becomes describable in terms of the more familiar term *game mechanics*, signifying a larger meaningful part of a game that suggests a group of activities as intelligible practices of play to the player. More specifically, the present account aims to link what previous scholars have called games' *architectures* to their *architectonics of play*, highlighting their procedurally enacted, i.e., in- and prescribed, imaginaries of play.

Furthermore, as a particular focus of the present work, the entanglements of play, through which relations between meaning and form only come into being, matter and shall be accounted for via postphenomenological writing techniques.[27] For these, the mediated

[26] The term *procedural logics* will emerge from an adaptation of Wardrip-Fruin's operational logics in Chapter 2.
[27] Phenomenology, particularly how Edmund Husserl imagined it, takes phenomena, that which appears in consciousness, as the starting point for an analysis and science of consciousness. My personal use of postphenomenological methods, however, is rather influenced by Merleau-Ponty's work on the body (see *Phenomenology*), Brendan Keogh's postphenomenological writing about games ("Across Worlds"), David Sudnow's early auto-ethnographic work on *Breakout* (1976) for the Atari 2600, and Eden Kinkaid's discussion of feminism and postphenomenology. Instead of an investigation of consciousness for itself, my revived attention to *how* things appear, which is indebted to Merleau-Ponty's work, aims at a particular mode of micro-narrative description (rather than an all-encompassing argument on the foundation of knowledge) that targets the desideratum of the contingent and non-universal bodily perspective, attuned to the everyday lived world, and mediated and positioned through material-technological individuation. In this sense, I do not wish to reinforce the phenomenological subject-object dichotomy and reject the idea of myself as sole, unchanging, self-transparent, and detached author of experience. In contrast to the roots of phenomenology, my engagement with postphenomenological techniques is meant to push towards (rather than away from) relations in play, which means

experience of play and the contingent role of the body are crucial in that they frame, enable, and limit any analysis of meaning and form as situated knowledges.[28] To account for the embodied, affected, and contingent positionality of my perspective and analysis, my writing engages with postphenomenological techniques that offer to tackle (if never to remedy entirely) these possible blind spots.[29] In the present work, postphenomenological methods do not appear as the dominant mode of writing; rather, they are strategically incorporated as a flexible style, which works with reflection, the bracketing out of already established conceptual frames, and a close eye for how things appear in play. At the same time, however, it is bound to turn this experience into a text, narrativize it, and impose structures of language and thought that require an engagement with logics of causality, the distribution of agency, and the construction of intelligibility. This style of writing requires a delicate balance between radical self-reflection, strategic arguing, self-positioning as a researcher, addressing and catering to an imagined reader, and so on. These goals are, of course, impossible to fully realize simultaneously, which is why I ask for a critical reader for the sections in question. In the end, what is gained in potential outweighs the constant possibilities of bias: the chance to add to a necessary focus on formal features snippets of lived and embodied meaning, feelings, affects, and impulses, which are vital, however distorted.

Moreover, to attune the often-lacking socio-cultural perspective of postphenomenological approaches to wider discursive analyses embedded in an American cultural studies perspective, multiple other sources from YouTube videos, game reviews, research articles, social media websites, and other cultural and historical sources will be used

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taking seriously the world of things and transpersonal affects. A crucial and unresolvable issue that requires a critical reader in this regard lies with questions of positionality, as Kinkaid warns against the potential of "the theoretical deconstruction of concepts including experience, location, and identity [to] undermine, if not erase, the problem of positionality" (8) in postphenomenological approaches. Hence, I take my writing to be *a* writing and defy readings of this work that take my position as universal. My embodied experience as a privileged White, male, and able-bodied 32-year-old researcher taking part in a paid PhD program in a Western country certainly must not be separated from this work. On the other side of the delicate act of balance at stake, however, is the structural influence of game design, the conditioned and mediated form of experience that, potentially, makes visible wider hegemonic patterns. The resulting two sides of the same coin tie back into the formative discussion in cultural studies - to refer again to Hall's "Cultural Studies: Two Paradigms," at stake between the "culturalist" and the "structuralist" positions was exactly the trade-off between "consciousness" and "conditions" (see 56-61).

[28] Keogh's phenomenological approach to digital games thinks of the game as an embodied text in this regard: "The videogame text is best understood in this way, existing in the coming together of the player's proprioceptive awareness of both the videogame's material form (controllers, screens, rumble motors, etc.), the audiovisual signs (characters, a projected world, music, menus, etc.), and the various interrelations between all three. To analyse a videogame text is to analyse this entire textual network" ("Across Worlds" 14). For his "textual" rhetoric of the digital game ensemble, "the player-and-game [appear] as the object of study, as one textual machine" (17).

[29] Chapter 2 will describe a *double unconscious* of digital game play, pointing to the body as well as the workings of the code, which often obscure the affective flows and relations of the play ensemble. What sociologists call the *framing* of play, in this regard, complicates but also attracts a critical perspective. As Keogh puts it, "to understand what is actually happening in a moment of videogame play the critic must attend to both what the player is consciously aware of, and what the player is doing their best to ignore" ("Across Worlds" 2).

to contextualize the game analyses. Finally, while the overall character of the present research methodology is thus of qualitative kind, the conceptualization of *farming* in Chapter 6 is inspired by a quantitative impulse, which can be found in the Appendix.[30]

1.4. Outline of Chapters

This introduction has identified three tendencies in the literature on games: the reduction of the concept of *space*, the neglect of *place,* and the marginalization of *play*. Chapter 2 addresses them by developing a new conceptual basis for the analysis of the emergence of spatiality in (digital) game play. Drawing from spatial theory, practice theory, and the spatial turn as well as a discussion of Yoko Ono's *White Chess* (1966), a processual, relational, and practice-oriented approach to spatiality is suggested. Highlighting the complex interplay of medialities in digital game play, the conceptual discussion draws attention to processes of play, the formalizing contributions by games, digital technology, and embodiment. The metaphor *playing place* is introduced to foster a spatial perspective on play, which, through the concept of place, foregrounds relationality and heterogenesis. According to the perspective thus emerging, games take part in the production and negotiation of spatiality in digital game play as enabling play partners in creatively-heterogenetic play ensembles.

The theoretical arguments of Chapter 2 are directly tied to twin sections in Chapter 3 that site them in a series of first practical game analyses. Therefore, the two chapters can be read consecutively or inconsecutively, resulting in a synchronous or asynchronous mode of communication between them. In terms of content, the chapter's microsites deal with the notion of ant/agonistic play (*Undertale* [2015]), the spatial configurations of machinima (*Freeman's Mind* [2007-present] and *Modern Pacifism* [2016-2021]), the relevance of the lived experience in play for the question of spatiality (*Path of Exile* [2013]), the role of the new in the affective dynamic of play (*Hitman: Absolution* [2012]), digitality and sound (*Phasmophobia* [2020]), touch and passivity (*Tappy Tree* [2019]), and meta-spatial game design that explicitly highlights game play as spatial production (*Baba Is You* [2019] and *Superliminal* [2019]).

The case-based Chapters 4 to 6 pursue a systematic exploration of hegemonic play, questioning dominant spatialities and their production/negotiation in play. Whereas a focus on

[30] In this special case, the state of quotable literature in game studies (and other disciplines) did not offer a base stable enough to mount the most promising research questions. Hence, an emic impulse from the field was sought and picked up to arrive at a fuller conceptual starting point

ant/agonistic spatiality already emerges as a key occupation of Chapters 2 and 3, Chapter 4 dedicates itself fully to an analysis of games as carriers of de/racialization practices. Engaging the *Fallout* series (2008- present) as a site of ant/agonistic spatiality via practices of de/*racialization*, the challenging and ambivalent figure of the zombie/ghoul is read across the game titles. Raising the question of the ways the games express wider ant/agonistic and racist imaginaries of space, the analysis finally contextualizes its findings historically with regard to U.S. race relations of the time period in which the games were released.

Chapter 5 moves on to a further dominant spatiality in an exploration of extractivist practices of play. It addresses the phenomenon of farming in an eclectic analysis of extractivist imaginaries and practices of play. While Chapter 4 engages in historical analysis, this chapter adopts a comparative perspective: it questions the similarities and differences between a neoliberal game world, sited by *Animal Crossing: New Horizons* (2020), and the colonialist fantasies of *Conan Exiles* (2017), arriving at an account of the underlying cultural and design-based patterns of the titles.

Before final conclusions can be drawn, Chapter 6 alternates the perspective for the last time to examine the counter-hegemonic interventions of indie games. The chapter starts by unveiling a sedimented accomplishment of visual media: the intelligibilization and consensual naturalization of mind via space and space via mind. The concept of *mindspacing* is developed to make visible the specificity of the contributions of indie games in the context of mental health discourses. The following games are examined as sites: *Actual Sunlight* (2014), *Shrinking Pains* (2018), *Gris* (2018), *The Longest Walk* (2022), and *The Psychotic Bathtub* (2024). Questioning the de/marginalizing strategies of these games to address mental health topics, the final analysis is interested in what the titles say about the traumatic experiences they narrativize but also in how the titles reimagine the mediality of play to tell these different stories.

2. The Emergence of Spatiality in (Digital) Game Play

Answering to the shortcomings in the game studies literature identified in the introduction (a reductive stance towards the concept of *space*, a neglect of *place*, and the marginalization of lived play), this chapter suggests a novel conceptual basis for the analysis of the emergence of spatiality in digital and non-digital play and game play. First, it introduces Yoko Ono's *White Chess* (1966) as its starting point for the discussion and an initial example of ant/agonistic spatiality. Then, a processual, relational, and practice-oriented approach to the concepts *space*, *place*, and *spatiality* is developed, drawing from spatial theory, practice theory, and the spatial turn. As the heart of the conceptual frame, the chapter considers the emergence of spatiality in relation to four medialities, which are addressed consecutively: the medialities of 1) lived play, 2) games-as-play-partners, 3) digital procedurality, and 4) embodiment. Thus, the metaphor *playing place* is introduced to foster a spatial perspective on play, which, through the concept of place, foregrounds non-hierarchical and non-innocent relationality and shared, creative heterogenesis. For the perspective thus emerging, games take part in the production and negotiation of spatiality in digital game play as enabling play partners carrying distinct and yet contingent imaginaries and practices of play.

Keywords: spatiality, play as (more than a) practice, procedurality, processuality, architecture, digitality, embodiment, the tyranny of fun

2.1. Ono's *White Chess Set* (1966) and Ant/agonistic Spatiality

The game of chess[31] is easily among the privileged set of games that scholars have written about the most. As a war game, it presents its play partners with a space distributed across equal black and white squares (arranged on an eight-to-eight grid), which are either coded as empty or occupied by a single piece. As players move their pieces across the board, conquering new positions, the strategic annihilation of the opponent's pieces and defensive lines creates spaces of conquest and conflict. Beyond the board states, however, the traditional position of the embodied players also introduces a face-to-face arrangement to the place of play, positioning the two bodies as opposing counterparts. The temporality, which is pre-organized by a turn-based rule system (and often enforced by including a chess clock as a play partner in competitive chess), likewise serves to construct a rhythm of reactions in a (supposedly) fair rivalry between equal contestants: move for move, an eye for an eye.

As spatial perspectives on games and play have often relied exclusively on form and formal aspects, it is no wonder that scholars examining the game of chess have regarded its spatiality as *ant/agonistic*[32]. Bernard Suits's account of play, for instance, arrives at the conclusion that antagonism and competitiveness are inherent features not just of games but of play in general. In *The Grasshopper*[33], Suits argues that games, though non-telic, always feature a "lusory goal" (see 50-1) – they need to be won. Following his analysis of chess, Suits links play to the "pleasure which arises from each player attempting to defeat the other" (78). For him, "games do not require us to adopt conflicting intentions, but simply to intend conflict" (79). Tying into ongoing biases of current game studies, play is here read as blind rule-

[31] During this example, I am referring to the Western (also called the *International*) version of contemporary chess (as opposed to, for example, the Chinese version, ***象棋*** or *Xiangqi*). For an overview of the development of chess families see Kraaijeveld.

[32] Here and in the following chapters, ant/agonistic spatiality is regarded as one of the most prevalent, dominant, and influential spatialities of games and play. Hence, I use the term to critically question a hegemonic perspective in play/game studies. On the one hand, the term *ant/agonistic* entails *agon*, included by Caillois's famous four-fold typology in *Man, Play, and Games* (see 14-7). On the other, Chantal Mouffe's differentiation of *agonism* and *antagonism* is entailed as a charged relationship and bifurcation whose constant potential of mutual co-constitution cannot be eradicated. The combination of both notions is meant to highlight how a "combat in which equality of chances is artificially created" (Caillois 14) is usually narrated or framed in terms of a demarcation of *us* and *them*, which, if it is turned into a "friend/enemy" (Mouffe 316) relation (which it almost always is in current mainstream games), moves from an agonistic sense to an antagonistic one. Mouffe's differentiation of *the political* and *politics*, in this regard, is promising because it insists on antagonism as an "ever present possibility" (316). Chapters 4 to 6 will explore this dominant imaginary of play further in some of its various current forms.

[33] Suit's *The Grasshopper* seeks to arrive at a conceptual analysis of games and play via a discussion of chess among other games. Explicitly opposing Wittgenstein's *Philosophical Investigations*, the book argues for the possibility of finding an essence common to all games (Wittgenstein's view, in contrast, holds that there is only a series of uncodifiable similarities). Suits's definition concludes that "to play a game is to engage in activity directed towards bringing about a specific state of affairs, using only means permitted by rules, where the rules prohibit more efficient in favour of less efficient means, and where such rules are accepted just because they make possible such activity" (48-9).

following, which is bound to give rise to the kind of ant/agonistic spatiality play is subordinated to.[34] To highlight how the present account aims to shift the perspective of analysis, Yoko Ono's artwork *White Chess Set* (1966) can be regarded as a potential play partner that invites us to consider the contingency of ant/agonistic spatiality in and for play.

The artwork *White Chess Set* takes the conventional design of the game of chess but subtracts a single element: color. With all pieces of the same white color and the usual check pattern of the squares only slightly hinted at through an alternating alteration of level, the game design is bereft of its visual cue of differentiation into an us-vs.-them logic (fig. 2).



Fig. 2. Photograph of *White Chess Set* (1966) by Yoko Ono (Egea).

As conceptual and performance art, however, the piece is to be played with rather than merely looked at, emphasizing the lived dynamics of play as vital site of meaning-making. Having encountered a copy of the original piece in an exhibition in Frankfurt a couple of years ago, I remember entering the curated room together with a stranger.[35] Exchanging a look and a smile, we naturally became play partners and started playing. We moved a couple of pieces and simultaneously began discussing how the game very tellingly loses its conventional meaning, which also led us to stop playing. With the re-design, the traditional rules of chess were still gathered to the shared place of play but instantly lost their authority and seemed arbitrary to us. Other configurations of play partners may, however, lead to different spatialities in play: taking

[34] Suits's account explicitly reveals its ant/agonistic imaginary of play and space in a utopian vision at the end of the book. Here, Suits imagines a utopia in which "all of the instrumental activities of human beings have been eliminated" (149). Strikingly, these telic activities include work, sexuality, and art (see 149-52), so that "there does not appear to be any thing to do in Utopia" (154). This is where play and games attain the monopoly of social practices: "game playing is what makes Utopia intelligible" (154). The ant/agonistic imaginary of play here appears as intricately tied to a techno-futurism devoid of art, sexuality, or other meaningful and intimate interactions. In Suits's worldview, utopia is a static world in which the concept of the new is utterly unthinkable unless tied to the idea of progress. Along these lines of thinking, play becomes a mere substitute of meaningful activity, an existential tourniquet for an episteme that has pushed the Hegelian philosophy of progress and antagonistic dialectics to its telos only to find the world it enabled itself to conceive of all along a post-war wasteland devoid of meaning. The themes of epistemic crisis and the impossibility of going on or imagining a future are mirrored on the diegetic level as the Grasshopper, Suits's title character and mouthpiece, plunges into an anxious dream and is unable to keep the arguments together at the ending of the book.

[35] The exhibition referred to was *Yoko Ono. Half-a-Wind Show. Eine Retrospektive.,* curated by Ingrid Pfeiffer and Max Hollein in collaboration with Jon Hendricks at the Schirn in Frankfurt, Germany (Feb-May 2013).

the missing differentiation as a challenge has led other visitors to continue playing, so that the ideas of ownership, opposition, and ant/agonistic spatiality could prevail after all. An educator working at the Museum of Modern Art in New York that featured the piece describes her experience as follows:

> One day, a visitor approached me, asking to play White Chess Set under one condition: that we not capture each others' pieces. I agreed to this unique request, and as we began moving our respective pieces, we discussed the theme of the work: the dissolution of distinction between sides. We discussed the political connotations of this statement and amended the goal—rather than attempting to capture the opponent's king, we would move our pieces to find the most agreeable arrangement. We were negotiating peace on Ono's White Chess Set. Onlookers curious about how we were playing seemed interested in this act as a performance. Another spectator joined our conversation about Ono's intentions, and the conversation quickly opened up, with each visitor contextualizing their political positions and understandings of the work according to their own respective backgrounds, one growing up in a middle class family in Germany and the other having escaped from the Iranian Revolution. This peaceful game of chess allowed us to open ourselves up to a deep and meaningful discussion about politics, foreign and domestic policy, and war, in spite of our different ages and world views. (Kennedy)

In this account of playing with the piece, a complex of interweaving spatialities emerges, in which the ant/agonistic still plays a key role. However, it is ongoingly negotiated via an intercultural gathering of communicating play partners in the shared encounter. The play partners experience a new responsibility for their counterpart's moves and face the new difficulty of placing their pieces, in which intimacy must be cared for.

Borrowing further from the terminology to be developed in the present chapter, the different ways of playing described above show how the artwork only comes into effect through the lived practice of playing, how the place of play emerging from the encounter ongoingly serves as a site for negotiating the spatio-temporal unfolding of the activity together with a shared consensus of what play is and can be about. Most importantly, practices of play and practices of game design processually mediate each other in ways not reducible to formal qualities of the game. Both serve as vital parts in a constellation of emergence of knots of matter, space, and time, as the very negotiations of play are not independent of Ono's critical preconfiguration of traditional chess. The example shows how ant/agonistic spatiality, beyond

a mere formal feature of a game, poses a hegemonic understanding of play that, at the same time, affectively enables and remains subject to the response-ability of play partners who communicate and co-position each other.[36]

To outline the conceptual background of the perspective at the heart of the previous short reading of Ono's artwork, the remainder of the present chapter aims to explicate the key concepts already gathered by *White Chess*. Briefly, the first section presents a relational, processual, and practice-oriented stance towards spatiality and discusses its perspective on space and place. To account for the emergence of spatiality in game play, the main body of the chapter then conceptually grounds the four medialities of play, games, digitality, and the body. As the following chapter on microsites presents a case-based twin to the present theoretical arguments, a brief note on siting provides the reader with a final transition in lieu of a conclusion (a proper conclusion of the theoretical frame will be given at the end of the next chapter and in recourse to its empirical evidence and insights).

2.2. On *Spatiality*, *Space*, and *Place* in the Context of Three Turns

In thinking with *White Chess*, the perspective established above was marked by a specific stance towards space, which now needs to be made explicit as relational, processual, pluralist, and dynamic as well as oriented towards social practices, power, particularity, complexity, and the everyday world. Questioning the supposedly static, neutral, and natural characteristics of space (which persist in many formalist accounts in game studies), this perspective first aligns with the impetus of the *spatial turn*[37].

[36] Among other reasons, *White Chess* was chosen as an introductory example to keep the present theoretical chapter open for perspectives on non-digital play. For an immediate series of examples from the realm of play with digital games as play partners, consider this chapter's twin project: the game *Undertale*, serving as microsite I in section 3.1.1., further exemplifies how self-aware game design may re-formalize (ant/agonistic) imaginaries of play and thus comment upon them. At the same time, the re-production of how play is prompted is again subject to the processual unfolding of play among play partners, as the analysis shows.

[37] In 1967, Foucault described the 20th century as the age of space, in which the world appears as a "net that links positions together" (*Power* 330). He thus gave voice to a range of discursive positions invested in quite different projects – from the attempt of a fundamental epistemic shift to a mere broad and ongoing (rather than new) interest in space and spatial perspectives. Together with such pioneering thinkers as Cassirer, Heidegger, or Lefebvre, Foucault can today be thought of as one of the later influences for Edward Soja's coining of a *spatial turn* in 1989 (see Soja, *Postmodern Geographies*; Warf and Arias; for a recent critique of the perspectival impetus of the spatial turn, see Günzel's essay "Spatial Turn" [222-4]; for a critique of the different versions of smaller specific spatial turns as they are reflected in diverging terminologies and metaphors of social scientists [particularly those of territory, place, scale, and network], see the work by Jessop and colleagues [390-2]).

Although various positions and projects of the second half of the 20th century are today grouped under this transdisciplinary umbrella term, two features they have in common can be seen in 1) the prioritization of space over time and 2) the problematization of the traditional treatment of space as a "strictly geometrical" entity, a Euclidean "empty area," a mere "container" (1), as Henri Lefebvre put it.[38] In line with the spatial turn, the present perspective emphasizes a Lefebvrian fragmentation of the concept of *Space* with a capital *S*, which unitary frameworks of spatial analysis try to re-systemize. His 1974 *La Production de l'Espace* translated into English in 1991 as *The Production of Space* attempts to embrace the social complexity and genesis of space as an "outcome of a process with many aspects and many contributing currents, signifying and non-signifying, perceived and directly experienced, practical and theoretical" (110). Lefebvre's conceptualization of space is triadic: space concerns the "physical, the mental, and the social" (11) alike. From the perspective of everyday routines, "perceived space" (38) appears as a given, an objective substrate of reproduction; from the perspective of codes, signs, and discourses, however, conceived space seems to relate to "representations of space" (33) highlighting the realm of spatial imaginaries[39], instead. Space-as-perceived and space-as-conceived, Lefebvre argues, are bound to trap the onlooker in a "double illusion" (27), between whose poles one can only oscillate endlessly.[40] Hence, he introduces a third term, space-as-lived, which permeates through the two previous modes: "space as directly lived through its associated images and symbols, and hence the space of

[38] Epistemically, this critique takes up an unresolved tension between two rivaling Western philosophies dating back to the 17th century. Newtonian space, on the one hand, conceived of space as an absolute substance and independent of the things in it; Leibnizian space, on the other, was thought of as relational and thus nothing more (and nothing less) than the order between things. In claiming that space is more than the Newtonian container (which was succeeded by Einstein's concept of relativity even in the discourse of Physics), 20th-century thought took up the project of de-naturalizing space. Spatial critique of this kind is, for instance, employed by Marx, who regards social space as fetishized under capitalist forms of production, which naturalize space through abstractions that are imaginary and real (see 86). Said's work, likewise, frames the "Orient" not as a geographical space but as "a closed field, a theatrical stage affixed to Europe" (63) that occupies a "fictional reality" (54) above anything else. Hence, the two examples of major critical discourses of Modernity reveal a pre-occupation of the 20th century with imagined geographies and geographical imaginations (see Gregory ch. 2, 203-5) rather than the objective space beneath the (mental and collective) map.

[39] Spatial imaginaries, which Said's work has made an effort to visibilize, can be thought of as socially held stories, shared ways of representing and making value judgments about places and spaces. More recently, it has been held that spatial imaginaries do not just go beyond the bounded individual imagination towards socio-culturally shared patterns of imagining spaces, but also beyond linguistic codes, with which Said's work has originally put the emphasis: Josh Watkins, for instance, emphasizes the "performativity of spatial imaginaries" since it "rejects a false binary between discourse and material practice" (516).

[40] The two poles consist of the "illusion of transparency" (see 27-9) and the "realistic illusion" (see 29-30). Both together reproduce Descartes's dichotomy of object and subject in looking at space from either side. The first illusion looks at space as transparent – under the gaze of a "mental eye" (28); social space becomes mental space, supposedly illuminated and totally clear in thought and writing, while the messiness of social practice disappears from view. The realistic illusion lends itself to mechanistic materialism – social space appears here as naturally given. The real side of space is reduced to objects and their directly sensed relations, while the imagined side is unknowable.

'inhabitants' and 'users'" (39). It tends towards "more or less non-verbal symbols and signs" (39) and is the peculiar and complex space of art that does neither objectify nor subjectify space finally and is "sometimes coded, sometimes not" (33). In Edward Soja's reading of the triad, "subjectivity and objectivity, the abstract and the concrete, the real and the imagined, the knowable and the unimaginable, the repetitive and the differential, structure and agency, mind and body, consciousness and the unconscious, the disciplined and the transdisciplinary, everyday life and unending history" (*Thirdspace* 56-7) come together in space-as-lived. To operationalize this Lefebvrian fragmentation of space for its perspective, the present work considers spatiality (rather than space or place) as the core unit of spatial analysis. The use of the term *spatiality*, in this sense, is meant to mark the plurality and open-endedness of ongoing spatial configurations[41] in addition to its own perspectivity and micro-narrativity.

Secondly, the present perspective on spatiality is driven by an explicit focus on social practice. Lefebvre's Marxist emphasis on "(Social) space [as] a (social) product" (30) regards spaces and places as something rooted in shared human activity, allowing his theory of space to easily resonate with the recent turn to practices (see Schatzki et al., *Practice Turn*).[42] Practice theory's answer to the question of the smallest unit of sociality (which Lefebvre highlights in the quote above) refers to social practices rather than the individual as bearer of power.[43] Following Wittgenstein, Bourdieu, and the early Heidegger, practice theory emphasizes the shared, routinized, implicit, and embodied nature of cultural knowledge and social activity. In combination with the meaning-making side of social practices, materiality[44] and mediality are crucial, which is why Lefebvre's concept of *real-and imagined*[45] space needs to be met with an

[41] The notion of *configurations* is key for how West-Pavlov describes poststructuralist concepts of space: "[S]pace persists in a constant re-configuring of already extant configurations. There is no space outside those configurations, disfiguration or re-configurations, and no virginal space before configured space. Space is the agency of configurement [sic], and the fabric of configurations is from the outset spatial. It is in those spatial processes of configuration and re-configuration that human life takes place and unfolds its unceasing dynamic" (25).

[42] Lefebvre thinks of particular spaces or places, such as "a room in an apartment, the corner of a street, a marketplace, a shopping or cultural center, a public place" (16), as being distinguished through their "specific use," and hence, "a spatial practice that they express and constitute" (16).

[43] In the thinking of Reckwitz, a practice is taken to be "a routinized type of behaviour which consists of several elements, interconnected to one other: forms of bodily activities, forms of mental activities, 'things' and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge" ("Toward a Theory" 249).

[44] In Reckwitz, the material is a vital part of practices that can never be subtracted from them; in Schatzki, however, there is a strict division of practices and material arrangements conceptually (see Schatzki, *Site* 244).

[45] Lefebvre answers the question of whether space is real or imagined as follows: "Faced with such an alternative one can only oscillate indefinitely between the choices offered. [. . .] There is thus a sense in which the existence of absolute space is purely a mental, and hence 'imaginary.' ln another sense, however, it also has a social existence, and hence specific and powerful 'reality.' The 'mental' is realized in a chain of 'social' activities because, in the temple, in the city, in monuments and palaces, the imaginary is transformed into the real" (*Production* 251).

equal focus on discursive and non-discursive practices.[46] Thinking of spaces and places as processual and contingent moments rather than essential or natural entities along these lines will start from the immediate link of the de-naturalized noun and the authorless and shared doing, resulting in a perspective of *practicing places/spaces*, which considers spatiality always together with its performative constellation of emergence. Particularly for the context of game studies, in which spatial perspectives have neglected the constant and mutual embeddedness of (digital) games and play, an attempt of understanding "space as a practice or a form of doing" (Meinel 3), or, put differently, play as practicing place, seems exceptionally promising.

Thirdly, the present approach to spatiality seeks to explore the benefits of the concept of *place* where game studies and play theories have been preoccupied with broad theories on space as an abstraction. Many attempts to differentiate the concepts of space and place along the lines of scale, time, or politics have led to reductive stances towards one of the two terms (see Agnew 82-3; for a more comprehensive history of the concepts as rivals, see Casey, *Fate*), whereas place, traditionally, has received far less attention. While phenomenological lines of thought springing from Husserl, Heidegger, and Merleau-Ponty have long established the intimate link between place and thought (see Casey, "How To Get"), the present perspective does not invoke the unmarked position of the phenomenological subject and its inward attention to how phenomena appear (in and as place). Rather, the close engagement with spatiality (the present work's empirical target) through the concept of place (its epistemic frame), and, particularly, through the metaphor *playing place*, which is meant to describe play as practicing place in the following, hopes to benefit from place's impetus towards the particular, the concrete, the situated, the placed, the contextual, complexity and linkage, site- and case-specificity, locality, (embodied) positionality, co-configurationality, and connection as well as spatial multimodality and open-endedness, and the sharedness of influences allowing for change.

In the following exploration of spatiality and its emergence in the context of digital game play, the concept of place (rather than space) will highlight two aspects of spatial configurations, which will be crucial for a perspective on play as practicing place. The first one

[46] In some strands of practice theory, the term *discursive practice* does not assign language and textuality special roles in that discursive practices only form a particular set of practices among others: "Discursive practices embrace different forms in which the world is meaningfully constructed in language or in other sign-systems" (Reckwitz, "Towards a Theory" 254). Other strands of practice theory, however, refer to "doings and sayings" (Schatzki, *Site* 72) and thus stick to a peculiar division of language and action.

is local relationality[47], which is concrete, shared, co-situating, and positioning. Doreen Massey's global sense of place describes places not just as bounded entities but as marked by contact, relation, and communication, in this sense:

> Instead then, of thinking of places as areas with boundaries around, they can be imagined as articulated moments in networks of social relations and understandings, but where a large proportion of those relations, experiences and understandings, are constructed on a far larger scale than we happen to define for that moment as the place itself, whether that be a street, or a region or even a continent. And this in turn allows a sense of place which is extroverted, which includes a consciousness of its links with the wider world, which integrates in a positive way the global and the local. (*Space* 154-155)

Following Massey's perspective, even the most abstract and large-scale phenomena (which are usually described via *space* rather than *place*), such as globalization or urbanization, are expressed through concrete locations and traceable only via following particular sets of relations in contextualized and situated moments. To highlight this eventful and local relationality, Cresswell describes place as assemblages[48]: "a whole made up from parts in which the parts can change while the whole remains. [. . . A] gathering place of things, meanings, and practices. This gathering quality of place necessitates writing in a way that follows the unruly trajectories that pass through it" (6). Following DeLanda's work on assemblage, the relationality in question requires thinking in terms of relations of exteriority, i.e., those depending on mutual actualization under specific conditions rather than the mere static properties of the relata.[49] Tying into the phenomenological insistence on the link between place and knowledge, Haraway's thinking highlights the epistemic relevance of relationality in place:

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[47] To hark back to Lefebvre, "a space is not a thing but rather a set of relations between things" (Lefebvre 83). Note that Lefebvre's original text, like the works of many other French writers (such as the already mentioned Merleau-Ponty or Foucault), does not differentiate between the English concepts *space* and *place* or the German *Ort* and *Raum* since French only offers a single term, *espace* (see Malpas, *Place* 24).

[48] In search of more flexible, fluid, and non-essential starting points for thinking, Deleuze and Guattari first propose the concept of the assemblage in *A Thousand Plateaus* (see 102-3). De Landa expands what he sees as rich "rudiments of a theory" (3) to a "neo-assemblage theory" (4) of the social (and not society) in *A New Philosophy of Society*: *Assemblage Theory and Social Complexity*.

[49] To think of a place as organic would mean to reduce its dynamics to a set of particular functions, graspable through logic, and a type of relations between its parts that could be called *interior*. Assemblages, on the other hand, are "wholes characterized by relations of *exteriority*. These relations imply [. . .] that a component part of an assemblage may be detached from it and plugged into a different assemblage in which its interactions are different" (De Landa 10). De Landa distinguishes between the *properties* and *capacities* of a thing. The capacities can neither be deduced from its properties nor fully known though, as they depend on more factors: "the reason why the properties of a whole cannot be reduced to those of its parts is that they are the result not of an aggregation of the components' own properties but of the actual exercise of their capacities. These capacities do depend on a component's properties but cannot be reduced to them since they involve reference to the properties of other interacting entities" (11).

as alternative model to the Enlightenment idea of detached and scopic knowledge, her Feminist concept of embodied objectivity favors "situated knowledge" ("Situated Knowledges" 581) by emphasizing the role of "positioning" and "location" (588). In line with this, Malpas's arguments on triangulation describe the role of place as an active enabler and gathering point of participants of onto-genetic exchange.[50] Places do not only allow access to reality at a given location, but co-produce exchanges between living bodies and the world as they present and mediate it: "Accounts of a 'real' world do not [. . .] depend on a logic of 'discovery' but on a power-charged relation of 'conversation'" ("Situated Knowledges" 593), as Haraway puts it.

In addition to relationality, the concept of place evokes processes of becoming, fluidity, mutual (even if often unequal) change, and shared constellations of emergence. Where place has often been considered in terms of fixed identities, as conveyed by the terms *home* or *Heimat*, the perspective of practicing place reveals place as site of multiplicity and change. Massey, again, argues for the phenomenon of space "as the sphere of the existence of multiplicity, of the possibility of the existence of difference. Such a space is the sphere in which distinct stories coexist, meet up, affect each other, come into conflict or cooperate. This space is not static, not a cross-section through time; it is disrupted, active and generative. It is not a closed system; it is constantly, as space-time, being made" ("Space-Time" 274). The singularities that make up the world, which Massey here describes as *space*, need to be grasped as concrete and particular, yet non-reducible and rich places, which brim with constantly shifting potentials for change. [51]

In the context of the shortcomings in the game study literature, several benefits of the present spatial approach can be expected.[52] First, an open conceptualization and problematization of *Space* through the terms established above can serve as a counter-impulse to formalist tendencies and topological typologies (such as those initiated by Wolf and, recently,

[50] Triangulation, in Malpas's account, is the process by which self, other, and thing become relational directions that inform each other and together reveal a region: "we gain access to a region only through being at a certain place within it. Our being placed, and place itself, is thus what opens up the region, and other places, to us. Similarly, within the structure of triangulation, we gain access to that to which we are not directly connected through the indirect connections that arise out of the interconnected character of the larger structure" ("Self" 114). Within this kind of topographical epistemology, Malpas insists on an "ontological account—one in which the possibility of knowledge of self, other and thing is inseparable from the mode of being of self, other and thing" (112).

[51] Though the present account emphasizes the role of human practices for places, Don Ihde's example of a place pays tribute to the rejection of the (Newtonian) primacy of *Space* which the present account aims to foster: he points to the egg as a biological place (see 54-6), which embodies multiplicity and the lived relations of locality in that the shell is not merely a container of the fetus (fish, reptiles, birds, etc.), but an active mediator that establishes connections with the surroundings.

[52] To repeat, the three tendencies in the literature were: 1) the mimetic doubling in the construction of exclusive authenticity of space or the reduction of the latter phenomenon to formal issues, 2) the prioritization or hierarchization of *space* over *place*, and 3) the marginalization of play's mediality and its role for spatialization with digital games.

more rigorously called for by Bakkerud). While formal questions and concerns remain vital, the exclusive focus on them is in danger of perpetuating the hegemonic tendencies implicit (and often explicit) in the form.[53] Cultural studies, in this regard, benefit as much from spatial theory as game studies from the former's concerns with power relations and their denaturalization. Moreover, through a turn to place and the immediate shift of attention towards locality, site-specificity, context, and constellations of emergence, game studies are well-advised to widen the sets of relations eligible for the accountability of the interdiscipline.[54] The project of re-emplacing games in the larger ecologies of play, as convincingly argued for by Sicart in *Play Matters* (see 43), could thus be linked to the unwavering attention to the spatiality of games. Following up on a rather diverse line of appropriations of Lefebvrian perspectives to the realm of games (see Günzel, "What"), the present account disagrees with some of the ways spatial theory was allowed to be informative for game study epistemics. Whereas earlier accounts have often used Lefebvre to objectively map his three levels onto rigid models,[55] the messy and fuzzy dynamics of spatialization need to be upheld rather than reduced. The spatialities of game play cannot be dealt with exhaustively by referring to a single mode of space or its production. Adding to the previous point, any other discipline engaged in spatial theory, in turn, is asked to take the wider roles of games, gaming, and play seriously in the context of socio-cultural spatialization. In this regard, the way game studies have secluded and demarcated their field has also led to the isolation and methodological impoverishment of the transdiscipline.

2.3. Four Medialities of Digital Game Play

Thinking with the practice-oriented, relational, and processual stance on spatiality established thus far, four medialities require particular attention in the spatial[56] analysis of

[53] Though the present dissertation will strategically indulge in differentiating games according to logics of genre, formal accounts of genre types are generally a problematic example of the dangers of formalist approaches to the medium in that they potentially naturalize game genres as supposedly typical or ahistorical forms of play (see Apperley; Clarke et al.; Coavoux et al.).

[54] In this respect, the larger neglect of the concept of *place* in game studies can be read among greater lingering tendencies of the field to de-contextualize and de-historicize its object of study (see Apperley and Jayemane).

[55] The first of these models was suggested by Espen Aarseth's 2001 essay "Allegories of Space: The Question of Spatiality in Computer Games." The accounts by Nitsche and Stockburger discussed in the introduction could serve as further examples, whereas the former's model vividly shows the objective kind of mapping that splits up the unitary and yet fruitfully problematizing concept by Lefebvre thus reverting some of its immediate merits in favor of a classificatory schema.

[56] While the figure presented here is meant to also highlight the entanglement of spatialities and temporalities, the temporal side of the unfolding will not be the explicit focus of the present approach. Many of the core terms introduced, however, will continue to mark temporal perspectives (*processuality*, *unfolding*, *practice*, *change*, etc.).

digital game play and will be discussed in the following sections (fig. 3). First, the specific dynamic and shape of play are crucial. In the opening example of antagonistic spatiality and Ono's *White Chess*, play was regarded as more than blind rule-following (even though for some, it could take that form); its spatial unfolding is better grasped as intuitive communicative action, shared meaning and mattering spatialization, and explorative negotiation of boundaries and potentials. With the dynamic of play becoming more central to the analysis, games, secondly, need to be examined for the way they take part in play, for how they enable, disable, and position their partners. Only in this way can the artwork, as a game, take part in playful spatial negotiation. Thirdly, digital game play involves digital procedures, which give particular technically mediated shapes to the processuality of play (while digitality does not directly take part in the example of Ono's artwork, the turn-based rules of chess still highlight the procedurality of play). Finally, embodiment links and enables the previous elements to come together in an affective and culturally mediated process in which the body affirms, submits, and explores.

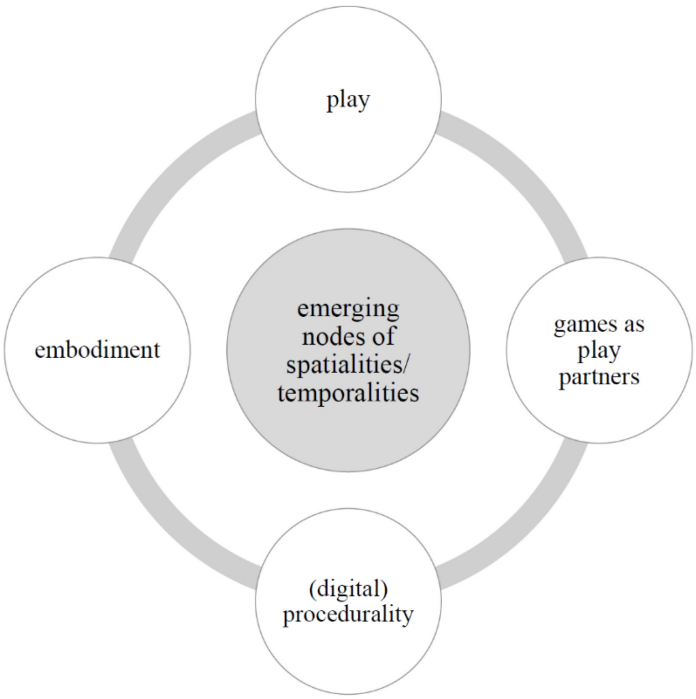


Fig. 3. Four interrelated medialities involved in the emergence of spatiality in digital game play.

In the following, these four medialities will be theoretically grounded before the present chapter's empirical twin can put the theoretical frame to practice. At the end of the next chapter, the present figure can make a reappearance as the approach is discussed conclusively.

2.3.1. Play

Previous perspectives on play, particularly those explicitly positioning themselves as theories of play, have neglected the phenomenon's spatially-creative side and reduced its distinct spatializing dynamics. In part, the difficulty of seeing play as a spatializing force is tied to the impulse of turning it into a symptom, sign, or symbol of something else thus reducing play in an epistemic model of depth[57].[58] Traditionally, many accounts by play theorists from Schiller to Huizinga and beyond, spanning the fields of anthropology, biology, education, philosophy, psychology, sociology, and others, have read play in this way as being fundamentally about a) a surplus of energy of the playing person or animal,[59] b) recreation or

[57] Frederic Jameson reads what he approaches as a postmodern incredulity towards meta-narratives (such as Marxism and Freudianism) as a wariness of "the depth model" (24). Without aiming to get into the theoretical modern/postmodern distinction, play theory is well-advised to adopt a flat or surface-oriented perspective if play is to be questioned for itself.

[58] At the beginning of *Play Matters*, which is one of the most essential and rich sources of influence for the current project, Miguel Sicart makes a similar point by writing that "[l]ike in the old fable, we are the fools looking at the finger when someone points at the moon. Games are the finger; play is the moon" (2). This argument for a disastrous bias in scholarly (and public) attention, however, also points to a fundamental problem in the academic use of games in scientific practice. The point can be reformulated with sociologist Monika Krause who distinguishes between "material research objects" and "epistemic research objects" (2). She writes that "the material research object is the material, concrete object accessed through particular traces, produced by specific tools and instruments. It is distinguished from a formal or epistemic research object—the target of inquiry as presented by the researcher, which is necessarily a conceptual entity and depends on specific intellectual and disciplinary traditions" (14). Sicart's point could be split up into the claim that, on the one hand, games have served as privileged material research objects to look at play (which has severely limited scholars' imaginaries of play in that it could not be questioned more fully for itself). On the other, the argument could be made that play (not necessarily in opposition to games and yet more as a phenomenon for itself) should be considered as an epistemic target (or epistemic research object, speaking with Krause).

[59] The surplus theory of play can be traced back to Schiller's Kant-inspired and dualistic account of human freedom and balance made possible by play as a mediator between reason and the sensual, form and idea, matter and meaning. Schiller here engages a dualism of work/play to describe a surplus of energy as the driving force behind play: "The animal works when a lack is the mainspring of its activity, and it plays when the abundance of power is this mainspring, when the superfluous life spurs itself to activity" ("Das Thier arbeitet, wenn ein Mangel die Triebfeder seiner Tätigkeit ist, und es spielt, wenn der Reichtum der Kraft diese Triebfeder ist, wenn das überflüssige Leben sich selbst zur Tätigkeit stachelt"; my trans.; 116). Although this part of Schiller's play theory is only a small fragment of the overall work, it was picked up by later authors, most notably by Spencer (627-9) and, to a smaller extent, Groos (*Play of Animals* 12-17).

relaxation (in opposition to work),[60] c) evolutionary or social preparation,[61] or d) mental catharsis[62]. Spatial perspectives on play have been scarce.

In the widely quoted and highly influential accounts of play given by Johan Huizinga's 1944 *Homo Ludens* and Roger Caillois' 1961 *Man, Play, and Games*, the concept of *space* is part of the definitions of play itself. Here, the space of play is thought of primarily as the separate and limited site of play as the focus is on the cultural forms play takes in games and game play.[63] In thinking of its space as a separate stage outside of ordinary life, "temporary worlds" for an "act apart" (10) in Huizinga, and "the game's domain [as] a restricted, closed, protected universe: a pure space" (7) in Caillois, play remains unreal and unproductive.

In Fink's essay of the same name, play is thought of in spatial terms as an "Oasis of Happiness." Fink's account is particularly convincing where it emphasizes play's close tie to materiality and its collective nature without reducing it to the form of games.[64] His concept of the "playworld," "a realm, an enigmatic field" (25), that is gained in play, points into a fundamentally new direction – space in play is here much more than a mere secluded setting as in Huizinga and Caillois. However, Fink's playworld is inherently linked to a problematic

[60] The recreational theory of play, as advocated by Schaller and Lazarus, puts emphasis on the recreational aspects of play, again opposing it to the concept of work. Schaller, e.g., writes "play [. . .] is an activity, an occupation of man, in which it is not a matter of satisfying purely natural needs, but which forms the contrast to work and the practical seriousness of life, and thereby has the purpose of recreation" ("Das Spiel [. . .] ist eine Thätigkeit, eine Beschäftigung des Menschen, in welcher es sich nicht handelt um die Befriedigung rein natürlicher Bedürfnisse, welche aber den Gegensatz bildet zu der Arbeit und dem praktischen Ernst des Lebens und dabei den Zweck der Erholung hat"; my trans.; 12). His account of play amounts to a narcissistic, individualist, and gendered utopia of the private as opposed to the world of work, family, religion, and science where the individual experiences constant external determination (see 55).

[61] The preparatory theory of play relates play primarily to the developmental tasks of the player and the process of growing up. In his critique of Schiller and Spencer, Groos (*Play of Animals* and *Play of Man*) develops a telic account of play in which "the play of young animals especially has a clearly defined biological end – namely, the preparation of the animal for its particular life activities" (*Play of Animals* 22). Likewise, in Freud's earlier comments on play, the child's wish to become an adult is the true and hidden motivation to play (see "Dichter" 216)

[62] The cathartic theory of play, as most notably found in Freud's later comments on play in *Jenseits des Lustprinzips*, interprets play as being about unresolved past experiences of the player. Here, Freud reads the repetitive elements of play (its "Wiederholungszwang" [21]) as symptoms of neuroticism, drawing play closely to coping ("Bewältigung" [35]) and thus positing the player as patient.

[63] See Huizinga's description of the "limitation [. . .] to space" as a "playground marked off beforehand either materially or ideally": "The arena, the card-table, the magic circle, the temple, the stage, the screen, the tennis court, [. . .] are all in form and function play-grounds, i.e. forbidden spots, isolated, hedged round, hallowed, within which special rules obtain. All are temporary worlds within the ordinary world, dedicated to the performance of an act apart" (10). Caillois, too, includes the idea of a secluded space as an integral part of his definition of play as "a separate occupation" (6) with "precise limits of time and place" (6). As he reduces play to game play, however, space is a merely *formal* characteristic or necessity: "There is place for play: as needs dictate, the space for hopscotch, the board for checkers or chess, the stadium, the racetrack, the list, the ring, the stage, the arena, etc. Nothing that takes place outside this ideal frontier is relevant" (6).

[64] For instance, Fink maintains that "[f]amiliarity with play is more than merely individual; it is a collective, public familiarity. Play is a well-known and common fact of the social world. [. . .] Every kind of play, even the stubborn play of the loneliest child, has an interpersonal horizon" (15).

emphasis on subjectivity and the subjective mind, which equips the player-subject with an exclusive entitlement to agency and individual genius.

Psychologists such as Lewin, Apter, and Kerr have further described play via the mind of the player-subject. Lewin's approach to play via a dynamic theory of personality attempts to map the space of play as psychic space, which he calls the "play field" (106), by describing it in terms of measurable and concrete forces. The space mapped here is dynamic but also opposed to reality and hinges on the power of the player-subject "to go out of reality into unreality" (106). Apter and Kerr, both structural phenomenologists, share with Lewin the fruitful insight into the dynamic nature of space in play.[65] Apter, like Lewin, sketches a schematic topography of play that remains subject-centered but is also aware of (non-objective) relations of proximity (see Apter 23). At the heart of the structural phenomenologist account, however, remains the idea of play as "a state of mind" (Apter 13).

Psychoanalyst Winnicott, who diagnoses his discipline[66] with a "lack of a useful statement on the subject of play" (47), struggles greatly to resist mentalism by claiming that "playing has a place and a time. It is not inside by any use of the word" (49). Hence, he postulates a "potential space" (49) that is not entirely on the inside. However, taking as starting point the same dichotomy of mental and objective space, he also opposes play to "actual, or external, reality" (49) and relies on the sole power of the child to "gather [. . .] objects or

[65] Their phenomenological approach is known as *reversal theory*, which is meant to capture the way that some activity can dynamically reverse back and forth between different ways of experiencing with differing qualities of meaning, structures of feeling, etc. Apter calls these "metamotivational states" (16), among which he refers to the telic and the para-telic states as key concepts for the experience of play (see 15-16). Furthermore, Apter and Kerr label their approach *structural* phenomenology, pointing to the temporal structure of such reversals of frames of mind. They thus arrive at a take on play beyond Huizingian influence on form in which "[t]here is no type of behaviour into which play cannot enter" (Apter and Kerr 163).

[66] Since its beginnings, psychoanalysis has gradually tended to treat the mind as an inner space or place and then grappled with the consequences of isolating the mental as an inner world. Whereas Freud's work used spatial metaphors and was already topological in this sense, it was with Melanie Klein's work on processes of *projection* and *introjection* (the latter refers to the inward installation of object-fantasies, see "Notes") that the mind became more clearly thought of in terms of space. Notably, Bion's contributions engage in the concept of the "container" (112-8): he holds that when patients find it difficult to perceive and accept violent affects and feelings as parts of themselves, they need a counterpart who can do this for them. The therapist or analyst fulfills this function of a container through their analytical attitude. Concerning the spatial nature of the metaphor, Bion describes the flawed character of the concept used in a footnote on containing: "I accept the implied model of a container in this and other passages in which it is necessary to use terms such as 'internal' or 'external' objects. The model is one I employ with reluctance as I think it is more appropriate to immature than mature scientific thinking. Yet the nature of this work and the lack of a language adequate for a scientific approach to it compels the employment of models sometimes known and more often suspected to be inappropriate, but unavoidable because there is none better" (47). Against this background, Winnicott's work considers play as part of "transitional phenomena" (7). Of transitional objects (like blankets, the thumb, or toys the child sucks on to pacify themselves), Winnicott writes the following: "It is not the object, of course, which is transitional. The object represents the infant's transition from a state of being merged with the mother to a state of being in relation to the mother as something outside and separate" (20). Though he attempts to accept play for itself (i.e., outside of a theory of depth), Winnicott's motivations for writing about play still lead him to consider it primarily in the context of developmental accomplishments.

phenomena from external reality" (60). Though trying to criticize the mentalism of his discipline, Winnicott is still bound to play its game and relates play to an in-between, an interspace created by the subject.

More recent attempts of bridging the gap between the mentalist space of psychologists and the space of play, strikingly, often share the same problems: Larsen puts forward a formal definition of play as "a uniform situational spatial dyad" (184). In his approach, play and make-believe unite two distinct layers of space, one of physical locality and one of meaningful content assigned to it (see 183). While Larsen thus enables his definition of play to account for the intricate spatial configuration including situatedness and a formative element, it also relies on the fragile distinction between a (supposedly) real physical space (which is implied to be primary) and a mental space separate from it (which emerges from play). Larsen, like Winnicott, repeats a splitting of the world in two, akin to Lefebvre's space-as-perceived and space-as-conceived, which are not easily folded back into the fabric of the lived.

In summary, while the concept of *space* does surface in some of the classical Western works on play, four distinct but interrelated shortcomings of previous perspectives stand out:

1. *Subjectivity* has long been at the core of most Western play theories.[67] Accounts of play have thought of it primarily from the subject, detached from the world, equipped with the genius of monadic individual imagination. Schiller, for example, started his conceptual work on play with a theory of the subject only halfway on the Earth, part reason, part sensual being, inherently split between eternal divinity and processual matter (see 45). Play is, for Schiller, thus the mediator between the senses and form, the play of a God-like subject who puts her will into the world as creation, solidifying the idea into matter, being into becoming.[68] Likening the creative genius of the player to that of the artist, Groos tellingly named this sentiment the "stamp of ipse feci," the self-satisfied consciousness of "I made it" (*Play of Animals* 315).[69] Consequently, the thing

[67] For some of the most telling examples, see the works by Apter and Kerr (164-5), Csíkszentmihályi (190), Fink (24-6), Freud ("Dichter" 214), Groos (*Play of Animals* 290-316), Lewin (106), Schaller (55), Schiller (44-5), Suits (54-5), Sully (44-8), Vygotsky (93).

[68] Schiller distinguishes between two drives, "two fundamental laws of sensual-reasonable nature" ("zwey Fundamentalgesetze der sinnlich-vernünftigen Natur"; my trans.; 46), the sensual drive and the form drive: "the first demands absolute reality: he is to make everything into the world that is merely form, and to bring all his dispositions to appearance: the second demands absolute formality: he is to annihilate everything in himself that is merely world, and to bring conformity into all his changes; in other words, he is to externalize everything internal and to form everything external" ("das erste dringt auf absolute Realität: er soll alles zur Welt machen, was bloß Form ist, und alle seine Anlagen zur Erscheinung bringen: das zweyte dringt auf absolute Formalität: er soll alles in sich vertilgen, was bloß Welt ist, und Uebereinstimmung in alle seine Veränderungen bringen; mit anderen Worten: er soll alles innere veräußern und alles äussere formen"; my trans.; 46). Play is introduced as the mediating drive between the two: "The play instinct would therefore be directed to suspend time in time, to reconcile becoming with absolute being, change with identity" ("Der Spieltrieb also würde dahin gerichtet seyn, die Zeit in der Zeit aufzuheben, Werden mit absolutem Seyn, Veränderung mit Identität zu vereinbaren"; my trans.; 57).

[69] *Ipse fecit* (literally: Latin for *she/he did it her or himself*) or *i.f.* can be found together with the signature of the artist on many pieces of art as testimony of authorship.

and its agency have been absent for the larger part of accounts of play, which is why Sicart's materialism is direly needed today. At the same time, the imaginary of play relying on the colonial impulse to dominate and control has to be tied to the widespread but limiting expectation that play is primarily, necessarily, and always a *fun* activity. This division of the realm of feelings and affects regarding their legitimacy may seriously mutilate the player's body together with its suitable surroundings in play (both in thought and practice). What could be labeled the *tyranny of fun*, may disable the body to play by imposing rather tight-lipped limits on the potential meanings of play. As Sicart maintains, "play is not necessarily fun. It is pleasurable, but the pleasures it creates are not always submissive to enjoyment, happiness, or positive traits. Play can be pleasurable when it hurts, offends, challenges us and teases us, and even when we are not playing" (*Play Matters* 3). Winnicott's perspective neatly ties into my concept of hegemonic play and the way this concept changes the role of games when suggesting that "playing is always liable to become frightening. Games and their organization must be looked at as part of an attempt to forestall the frightening aspect of playing" (59). Hence, if we pose the question of what play is to games exclusively, we are bound to reproduce the hegemonic patterns they seek to uphold.

2. *Mentalist* accounts of play have turned not only to the subject but particularly to the subject's mind to explain and describe play.[70] To place play in the individual imagination and thus the mind (severed from the socio-cultural) fundamentally problematizes its observability and casts doubt on its culturally shared character. Play, conceptualized before anything as *a state of mind*, thus becomes a utopia of individualism (as in Schaller's work) and the vital elements of play (that I will reapproach as *play partners* in the following) are entirely sought in the isolated mind itself (as in Freudian psychoanalysis or structural phenomenology).[71] With play thus reduced to a mental state of the subject, it is bound to forfeit its ontological status as well.
3. Ironically, play has been cast aside as an improper applicant to the status of truth and reality in most of the very theories that tried to appreciate it as an integral part of (human) phenomena.[72] This *ontological* denial of the status of real being is even part of Huizinga's definition of play in *Homo Ludens* in which it is not to be part of "real life" (8). In Freud, the opposition of play and seriousness is turned into that between play and reality ("Dichter" 214); in Lewin, play is described as a space of "unreality" (106). Subjugating play to a hegemonic concept of the "real world", it is turned into a representation, imitation or substitution of the real.[73] In Fink's ambitious account, which

[70] For examples of mentalist accounts of play see, for instance the works by Apter (13), Apter and Kerr (182), Bateson (144), Freud ("Jenseits des Lustprinzips" 21), Groos (*Play of Animals* 316), Huizinga (3), Lewin (105-6), Sully (41-4), Winnicott (47-60) - despite his efforts to surpass it, and Vygotsky (93-4).

[71] In Schaller, play is primarily "an inner mental process, a peculiar state of mind" ("ein innerer geistiger Prozeß, ein eigenthümlicher Gemüthszustand"; my trans.; 9). In Freud, the child's impetus for play is related to the repetition compulsion (see "Jenseits des Lustprinzips" 21). Apter, thinking of play as "a state of mind," holds that "it is impossible to define play from the outside" (13).

[72] For ontologically marginalizing accounts of play, refer to the accounts by Bateson (141), Fink (26), Freud ("Dichter" 214), Huizinga (8, 13, 203), Lewin (106), Schiller (61), Spencer (630), Wundt (358).

[73] In Spencer, play is about "simulated actions in place of real actions" (630) and in Wundt it is "merely an imitation of the actions of everyday life" (358).

succumbs to its metaphysical interpretations, play even becomes a secondary and not fully real site of essences in which existence interprets itself.[74]

4. With play thus tied to the subject, placed on the inside, and consequently, not granted the status of the real, play is deprived of any qualities or capacities to form, generate, or create: it is described as *non-productive*. Caillois's very definition of play, for instance, argues that play is "unproductive" and creates no "new elements of any kind"(10). Here the modern capitalist distinction that has understood play in opposition to *work* has been fundamentally detrimental to scholarly perspectives on the creatively formative side of play. Contrary to work, which is framed as permeating society's growth and wealth in narratives of progress and linear history, play is, speaking with Caillois again, "an occasion of pure waste: waste of time, energy, ingenuity, skill, and often of money for the purchase of gambling equipment or eventually to pay for the establishment" (5-6). Whereas other scholars have emphasized creativity as being crucial for play,[75] this power has been understood mostly as a subjective faculty alone.[76]

To reapproach play from a perspective that decenters it from subjectivity, mentalism, its ontological subordination, and non-productivity, recent strands of practice theory[77] offer an opening for novel ways of thinking. In opposition to mentalism, textualism, and inter-subjectivism, the cultural theory[78] of praxeology locates the social in practices.[79] Reckwitz gives the following definition of *practice*: "a routinized type of behaviour which consists of several elements, interconnected to one other: forms of bodily activities, forms of mental activities, 'things' and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge" ("Towards a Theory" 249).[80] To look at play, then, is to look at bodily as well as mental activities, materiality and its role, and their ties

[74] He describes it as the "elevated site where the essentiality of all things in general is invoked and brought to presence" (Fink 30).

[75] Groos's work on "building" (*Play of Animals* 291), Freud's on "creating" ("Erschaffen"; my trans.; "Dichter" 214) but also Sicart's emphasis that "[p]lay is creative when it is taking over, or occupying, a context" (71) can be referred to here.

[76] This becomes most obvious in Fink's close tie between the creation of a playworld and its imaginary character, which amounts to thinking of creation in play as a mere *projection* onto the real: "In the projection of a playworld the one who plays conceals himself as the creator of this 'world'" (26).

[77] In the following, I will mostly refer to Reckwitz's take on an "ideal type of practice theory" ("Towards a Theory" 244) to chart promising intellectual lines of travel (for a more comprehensive overview of the development of practice theory, which is beyond the scope of the present work, see Shove et al. 1-20; for a more extensive reading of what has been labeled the *practice turn*, see the collected volume by Schatzki et al.).

[78] Cultural theories (as differentiated by Reckwitz into mentalism, textualism, inter-subjectivism, and practice theory) consider social order to be "embedded in collective cognitive and symbolic structures, in a 'shared knowledge' which enables a socially shared way of ascribing meaning to the world" (Reckwitz, "Towards a Theory" 246). They thus recognize an "implicit, tacit or unconscious layer of knowledge" (246).

[79] Reckwitz positions practice theory in opposition to mentalism's theory of "mind as an ontological realm of the 'inner' which is distinct from outward behaviour and is at the same time its cause" (252).

[80] A second influential definition of practices is given by Schatzki who conceptualizes practices as "organized nexuses of actions" or "doings and sayings [. . .] linked through (1) practical understandings, (2) rules, (3) a teleoaffective structure, and (4) general understandings" (*Site* 77; see also 77-87). Besides the tendency to oppose language to other "doings" (77), Schatzki's take risks to re-center the perspective around the human subject as it neglects materiality in the very definition of practices.

to wider understandings of what it is to play, the know-how of play (as e.g. the practical knowledge how to operate a toy, another player's body or a gaming controller) and emotional-motivational aspects of play (e.g. the range of accepted emotions and their bodily realization and differentiation, which the previous critique of the *tyranny of fun* ties into).[81] What is particularly promising is practice theory's invitation to think of the player not as an independent genius but a mere "'carrier' (Träger) of a practice" in that "she or he is not only a carrier of patterns of bodily behaviour, but also of certain routinized ways of understanding, knowing how and desiring" (250). This shift can be described as one of moving from a thinking of the subject and its play to play and its subjects. In addition to subjectivity, mentalism, too, can be avoided with practice theory, while the mental side of practice needs not be disregarded.[82] In my attempt to account for play as a fully real and generative phenomenon, however, practice theory has its limits precisely where it is, maybe necessarily, too hesitant to discuss matters of ontology in addition to epistemology.

On the one hand, re-thinking the player with practice theory is problematic in so far as the latter displays a strong focus on human actions.[83] Many theorists of play have, however, looked at animal play and described this side of the phenomenon not merely as a secondary matter.[84] Gadamer's account of play allows to think of play far beyond human exceptionalism: "It is obviously not correct to say that animals *too* play. [. . .] Rather, on the contrary, we can say that *man* too plays" (105). Sicart's comments on the "plaything" ("Playthings" 143) extend play as an ontological mode of being further beyond (more than) human players to the realm of things.

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[81] Hall's observations on the relationship between social practices and culture in the essay "The Centrality of Culture" and his argument that all social practices relate to a cultural horizon of meaning link well to practice theory's reconsideration of the smallest unit of social analysis. Hall argues that "every social practice depends on and relates to meaning; consequently, that culture is one of the constitutive conditions of existence of that practice, that every social practice has a cultural dimension. Not that there is nothing but discourse, but that every social practice *has a discursive character*" (331). "[E]very social practice," he emphasizes, "*has cultural or discursive conditions of existence*. Social practices, in so far as they depend on meaning for their operation and effects, take place 'within discourse,' are 'discursive'" (332).

[82] Reckwitz thinks of practices as routinized bodily performances that are always "at the same time sets of mental activities" ("Towards a Theory" 251). The mental aspects of play contribute immensely but should, in this regard, not be defined as a kind of inner space in the following. The final case study of this work ponders this very question (i.e., for the relation of space and mind) and turns it back to the realms of games and play.

[83] Schatzki explicitly mentions that "the activities concerned are ones of humans" although he "do[es]not deny the existence of nonhuman agency" (*Site* 71).

[84] For a rich overview, refer to Bekoff's contribution. From the literature of play theorists, the works by Schiller (on animal play and the play of trees: 115-6), Groos (his entire volume on animal play, the *Play of Animals*), Gadamer (105), and Bateson (whose entire account draws from a trip to the zoo), present or include accounts of animal play. My use of the term *body* rather than *subject* in the following may be read as providing an element of inclusivity for the open range of various corporeal and living beings at play, which these authors draw from.

Furthermore, practice theory's emphasis on the orderliness of the social is relevant where the danger of submitting play to particular play forms (such as games) and their imaginaries of play lingers. Here, Vygotsky's opinion that "there is no such thing as play without rules" (94) should not be accepted too quickly. If play can only be thought of as a routinized behavior, then the less ordered and chaotically unique notions of play are in danger of falling short. Caillois, himself a strong advocate of orderly play, points to this crucial element in his differentiation of *paidia* and *ludus*.[85] Felkers and colleagues link the term *paidia* back to a Greek notion of child play beyond fixed conventions, in which play often remains without a name (see 160). This nameless (and, indeed, unnamable) play beyond conventions such as games and across various practices (practices of play and others) needs to be considered theoretically. Hence, there is a need to transcend practice theory's emphasis on patterned order, routine, and the orderliness of the social without ignoring that play can also be framed as a discursive practice, positioning it among socio-cultural and natural phenomena at the same time.

In light of these considerations, a spatial rhetoric of play[86] is needed that retains and questions both notions of play (as a practice and something to practice) by simultaneously placing it on two axes. The first one's poles consider play either as a socio-cultural set of practices, (i.e., a plurality of specific forms of play as socio-cultural, site-specific, and historic accomplishments) or as a relational mode of being with and towards the world, which escapes formalization (at least temporarily and residually), and constitutes a fundamental force of change in various heterogeneous entanglements running through various (human and non-human) activities and places of life. For a perspective of play as *(more than) a practice*, play never finally ceases to carry the potential for change in each of its moments; not necessarily and actually, but inerasably and potentially, a chaotic counterforce against hegemonic formalization.

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[85] Caillois sees on the one side of a continuum of play something "common to diversion, turbulence, free improvisation, and carefree gaiety," an "uncontrolled fantasy," a "frolicsome and impulsive exuberance" both "anarchic and capricious" (13). Its other side imposes "arbitrary, imperative, and purposely tedious conventions," which require a "greater amount of effort, patience, skill, or ingenuity." The first "primary power of improvisation and joy" he calls *paidia*, the second, a "taste for gratuitous difficulty" he calls *ludus* (see 27).

[86] Brian Sutton-Smit, a meta-theoretician of play theories, describes play as fundamentally ambiguous and discusses "the ideological underpinnings of play theories" (3). In his account, play theories are described as rhetorics, i.e., "implicit narrative[s]" (8), reflecting the discursive position of the theorist and her project. He argues for seven different rhetorics: play as progress, fate, power, identity, imaginary, self, and frivolous (see 215). In opposition to a theory of play, a rhetoric of play remains in productive tension as well as complementary communication with other rhetorics, which are not necessarily competitors to it. Whereas a theory of play attempts a full explication of the phenomena of play (and thus, usually imposes arbitrary limits), a rhetoric of play strives for a new perspective and mode of description.

The second axis concerns the critical use of the term and involves the analytical level of determination: first, a strategically closing conceptualization of play, which engages in the metaphor *playing place* will be developed in the upcoming two sections. Besides the already established influence of spatial theory, cultural studies, game studies, and practice theory, the account will be enriched by current strands of feminist theory and epistemics (Donna Haraway, Maria Lugones) as well as affect theory and process philosophy (Spinoza, Deleuze, Barad) to think beyond some of play theories' intractable and ingrained lines of thought.[87] Overall, in describing play spatially from a relational account, I hope to open novel perspectives on play and (digital) games that situate these very phenomena in a critical relationship to neoliberal, capitalist, (neo)colonial, racist, patriarchal, heterosexist, agist, and otherwise homo- or transphobic structures and their hegemonic imaginaries of play. At the same time, the analysis requires a radically open concept to question how play is imagined as and in cultural forms. In this second open sense of play to emerge from the first, play is, first and foremost, a phenomenon to be defamiliarized, historicized, contingent, close, and yet allowed to appear alien and strange. On both axes and their respective poles, the present account specifically goes beyond a reduction of play to proper game play alone. Most importantly, play is thus thought of as both a socio-cultural set of practices, frameable in various manners by its practitioners, and as a relational ontic force of change running through these, but also other, and maybe *all other* practices.

To rethink play with locality and multiplicity, the concept of *playing place* will be discussed in the following two sections. Drawing from its double meaning (as the English language ambiguates and animates the syntactical meaning of the term), it points both to play as a flat and local gathering of things, bodies, and ideas as play partners who co-enable each other regarding a new type of pre-individual and affective relation I will call *playfulness* and the hitherto neglected power of play ensembles to co-create: play as heterogenesis revealing the place-making potential of play that challenges us to give in to the non-transparent and diffuse pull of the new.

[87] Regarding my personal and structural positionality in reading Lugones and Haraway in the context of play in the following, I would like to point out the constant danger of succumbing to another instance of appropriating feminist ideas from a White, male, Western, and thus fundamentally privileged and partial perspective. To express sympathy for their projects in writing, I think, begins by not attempting to separate their ideas from their onto-epistemic struggles. In this sense, I neither claim any superior position from which to explain their work nor that their works are about play in the sense of the present project at all. However, given the rich accounts of positionality in their works, the two writers are deeply inspiring partners in conversation for thinking about play in a spatio-relational way. I would suggest reading Haraway, in particular, as a *grammatographist* of play, who not only offers new terms and concepts but, on a more fundamental level, new *grammars* for thinking about play (particularly ones that go beyond the traditional Western subject-verb-object-patterns).

2.3.1.1. Playing Place as Relational Configuration: A Perspective of Play Partners

As a recent attempt to revisit the specific dynamic mediality of play, Sicart's *Play Matters* is a strong ally for decentering perspectives on play via a materialist approach. The book's idea of an "ecology of play" (*Play Matters* 43) argues for the relevance of context[88] and offers a dormant spatial perspective on the way play occupies and takes over contextual elements. As he points out, "play is appropriative in that it takes over the context in which it exists and cannot be totally predetermined by such context" (11). With Sicart, it is possible to conceive of play (in opposition to docile rule-bound game play) as a distinct spatial dynamic that is situated as well as situating, placed as well as placing, building on design but also appropriative and rebellious.

However, the emphasis on materiality rather than relationality risks locating the driving force of play again within the player. Whereas Sicart attempts to highlight the distinct mediality of play (rather than game play), for example, in his differentiation of "play space" and "game space" (51), he unfortunately tends to regard space as a passive resource or objecting site.[89] The "[t]he relationship between space and play," he writes, is "marked by the tension between appropriation and resistance" (52). The question for design and appropriation is certainly vital for a critique of docile play, but a possible romanticization of play as a political faculty of the subject may be equally problematic.[90] To move beyond space as a resisting object or containing site, Gadamer's argument that play has "no substrate" (103) is particularly promising.

Gadamer's *Truth and Method* has arrived at valuable insights regarding play as a spatial dynamic. In his radical post-subjective reading of play as "the mode of being of the work of art itself" (101), Gadamer reverses the subject/object dichotomy to put play itself on the throne of agency. With the player put in the backseat of the show, her body, rather than a game, appears

[88] In Sicart's book, context is a strong but uncomfortably vast concept defined as "the network of things, people, and places needed for play to take place" (*Play Matters* 7). It helps to link play back to its situatedness in the world (Sicart himself acknowledges the dangerous notions of context and ties the concept to situatedness and practices; see his footnote on page 106). However, how context comes to be relevant and why it remains conceptually separated from play itself remain open questions. Thinking of play as a practice and a spatial phenomenon itself may further integrate some of the metaphysical notions of context back into the practice of play without likening it to a text. If materiality is part of play from the beginning, it cannot be context. Particularly in *Play Matters* (rather than his essay on the plaything), things are not yet fully part of play in so far as it is the "users, who are in charge of making them meaningful" (31).

[89] To move beyond the widespread fixation on form and games, he differentiates between "game space" and "play space": "A play space is a location specifically created to accommodate play but does not impose any particular type of play, set of activities, purpose, or goal or reward structure. Playgrounds are the most typical play spaces, though the presence of toys in, for example, a doctor's waiting room is an invitation for the child (and the parents) to appropriate that space through play, to turn it into a play space. A game space is a space specifically designed for a game activity. The size, measure, props, and even location are all created with the purpose of staging games" (51).

[90] Here, the limits design imposes on play cannot be understated in light of Sicart's insistence that "play can *always* overrule design and make a carefully designed space something totally different" (52; my emphasis).

as medium in play: "The players are not the subjects of play; instead play merely reaches presentation [Darstellung] through the players" (103). At the core of play, Gadamer grasps a "to-and-fro movement that is not tied to any goal that would bring it to an end," which he also likens to dance and describes as "Spielraum[91]" (103). Without subjects, one could read Gadamer, it is space itself that is at play.[92]

It is precisely in this line of argument that the concept of playing place can offer a new mode of description for play as a spatially relational configuration. In contrast to a mere context, site, or designed place *for* play, the place *of* play designates space as an active category. The place of play is not the isolated and self-contained subject but a processual ensemble of bodies, things, and ideas as a local and affective gathering of *play partners* who co-become in play. Play is impossible in isolation. All play is play with something – connections abound in it. This is how one should read Fink's observation that "[p]laying is maintained and constituted by something binding" (23). Play's unfolding produces and negotiates spatial relationships between flat and mutually co-enabling play ensembles. The emergence and negotiation of antagonistic spatiality in the aforementioned example of Ono's *White Chess* is enabled by the ongoing communication and exchange between several (at least two) bodies, the materiality of the game (its pieces, their color, the many potential moves they allow and afford, etc.), the assembled rules of traditional chess, ideas and concepts (such as those pertaining to the nature of a game, game play, art, antagonism, politeness, activism, etc.), and the unique way they blend and resonate in every moment of lived and meaningful play. Crucially, the emergence of spatiality in play is not reducible to the intentionality of design or the playing body, though both remain relevant parts of play. Playful encounters are non-innocent[93] in that power relations (as those Sicart describes in terms of appropriation and design) are continuously distributed and worked out among play ensembles, but the shape of relations in play is not reducible to logics of resource-extraction, non-mutual pleasure, domination, etc. (although these may be outcomes

[91] Literally, the German term *Spielraum* means *play space* or *leeway*.

[92] Unfortunately, Gadamer's discussion is more interested in art than play and aims to describe art via play rather than play via space. Hence, his account remains vague enough to consider all phenomena of nature as play: "[i]nasmuch as nature is without purpose and intention, just as it is without exertion, it is a constantly self-renewing play" (105). Although Gadamer's post-subjective reversal of perspective is unparalleled, his concept of play is cosmic in that it lacks a lived (more than human) body as a key part of play (which would not extend to the play of the wind, for instance). Nevertheless, observations such as "*man* too plays" (105) can only emerge from the kind of decentering of the perspective that Gadamer prepares.

[93] The notion of non-innocence needs to be emphasized in play processes particularly where play has been conceived of exclusively as accepted, normative, or hegemonic play. In Stenros's account of play, for example, the defying of norms is an integral part of play; the latter, therefore, includes instances of one-sided social play, dangerous and violent play, parapathic play (that which transgresses against the tyranny of fun), context-insensitive play, player-inappropriate play (where some characteristic of the player is deemed as inappropriate, i.e. age, sex/gender, class, ethnicity, profession, religion, etc.), taboo play, and instrumentalized play (in service of external goals), among others (see Stenros, "Guided" 17-25; Pötzsch).

of non-innocent playful negotiations) from the start – it is much more an outcome, a particular and contingent accomplishment of play partners.

The specific kind of pre-individual and affective relationality play reveals could be described as *playfulness*.[94] Elsewhere, I have argued to reconsider the concept's ties to subjectivity and what is described as the inner mind in Western metaphysics ("Rethinking Playfulness").[95] Thinking with María Lugones's essay "Playfulness, 'World'-Travelling, and Loving Perception," playfulness can be linked to *world-travelling* as a loving practice of meeting another person in their world by relating to them differently, i.e. in an attempt to see with their eyes, in their place, to understand their position by travelling to their world and allow this loving identification to enhance the traveler's plurality of selves.[96] Though strategically engaging in the language of subjectivity, Lugones's emphasis on position, intersectionality, and relationality immediately pushes playfulness beyond the subject: "[w]e are fully dependent on each other for the possibility of being understood" (8), she writes, and considers the very possibility for world travelling as a mutual "enabl[ing] [. . .] to be" (8). Here, playfulness is regarded as a shared relation and a mutually enabled being, making it primary in that it can turn

[94] Sicart's *Play Matters* conceptualizes playfulness as "a way of engaging with particular contexts and objects that is similar to play but respects the purposes and goals of that object or context" (21). As such, it is "derived from our capacity to play but lacking some of the characteristics of play" (22). Though "lacking" in this way, playfulness for Sicart "glues together an ecology of playthings, situations, behaviors, and people, extending play toward an attitude for being in the world" (25). Despite the effort to think of play on an ontic level and from an ecological perspective, rather than centering it around the player-subject, playfulness is conceived of as an *attitude*. Attitudes, as they appear in *Play Matters*, are "projected on the world" (22) by the appropriating subject. To be playful is to "add ambiguity to the world and play with that ambiguity" (28). In short, playfulness still carries the stamp of the *ipse feci*. Other authors in game studies have argued along similar lines of thinking: Salen Tekinbaş and Zimmerman link playfulness to "being in a playful state of mind" (303). Heljakka describes it as "an attitude and a state of mind" (212). Stenros frames it as a "subjective experience for the player" (*Playfulness* 64).

[95] This kind of essentializing involves not just fixation of processual flows and their internalization into the subject but also a complete neglect of the agency of materiality. The structural phenomenologists, for example, speak of the "dominance" of meta-motivational states (such as play) within individuals "if the individual is predisposed to spend longer periods in this state than in the other member of the pair which they constitute. It implies that there is an innate bias in the individual in favor of one state rather than its opposite, although this may be obscured by environmental influences" (Apter and Kerr 182). While the idea of a capacity to play is certainly not unproductive itself, the quote already shows the severe danger of reading the environment as merely obscuring the inner bias as the supposedly true origin of play. This tendency is still present in current strands of empirical psychology and biology, where play is taken to be the primary activity and playfulness its respective personality trait (see Brauer et al.; Proyer, "Multidisciplinary Perspective" and "New Structural Mode

[96] Her starting point for the concept of *travel* is rooted in the experience of outsiders to the dominant culture(s) in a society who are always already in a position in which it is necessary to acquire flexibility for navigating different worlds. Her concept of a *world* relates to actual societies (including their imagined parts) from either a culturally dominant description, non-dominant, or even idiosyncratic constructions of it (see 9-10; crucially, from a perspective interested in games and game-worlds, there cannot be an appropriation of this term to mean anything like digital game worlds. Here, the reading of Lugones in the present context has definite limits and should not abandon the core of her argument). As an account of world-travel, the essay conceptualizes a failure to love (arrogant perception) closely to a "failure to identify" (7) with another person (from a different world), which is again tied to the inability for or lack of playfulness and loving perception. The latter, Lugones argues, can be fostered by turning world-travel into a willfully sought-out experience with the Other in their world. As the self can be thought of as a "plurality" (14), her concept of travel is tied to an ontological "shift" (12).

an activity into play.[97] Combining Lugones's rich perspective with strands of affect theory[98] may further grasp playfulness as a pre-individual spatializing and affective relation at the heart of play. From a Spinozist perspective, bodies (a category to which also things and ideas belong; see 458) experience increases or decreases in their capacity to act in shared encounters or entanglements in which there is an equal but asymmetrical change (in the sense that one body leaves more of an imprint on the other whereas it is always both that change). Playfulness as an affective relation can thus be thought of as the sum of specific connections constituting a shared and pre-individual field of relations, which ongoingly distributes agency in processual non-innocent encounters.

The term *play partners* can be used to characterize the de-centered roles that things, bodies, and ideas share from this perspective: any play partner receives a potential (i.e., yet to be acted out) portion of agency in any movement of the ensemble continuously relating them to shared constellations of emergence. A play partner's dis/ability to play can thus only be approached by tracing its enabling and disabling encounters in a microcosm of power relations within which its own abilities to relate (relate-abilities) emerge. Speaking with Haraway, play is a form of "becoming-with," which describes "how partners are [. . .] rendered capable" (*Staying* 12).[99] Gadamer's insistence that "all playing is a being-played" (106) and needs to always be placed "in between" (109) can appear in a new light.[100] Where Schiller has given rise to a human-centered thinking of play in writing that Man "is only fully a human being where

[97] Note the emphasis on the first person plural in her description of a very much placed, situated, and shared scene of (non-formal) play: "We are by the river bank. The river is very, very low. Almost dry. Bits of water here and there. Little pools with a few trout hiding under the rocks. But mostly is wet stones, grey on the outside. We walk on the stones for awhile. You pick up a stone and crash it onto the others. As it breaks, it is quite wet inside and it is very colorful, very pretty. I pick up a stone and break it and run toward the pieces to see the colors. They are beautiful. I laugh and bring the pieces back to you and you are doing the same with your pieces. We keep on crashing stones for hours, anxious to see the beautiful new colors. We are playing. The playfulness of our activity does not presuppose that there is something like 'crashing stones' that is a particular form of play with its own rules. Rather *the attitude that carries us through the activity, a playful attitude, turns the activity into play*" (Lugones 16).

[98] Affect theory is generally linked to two strands: a) Spinozist theory of affect via later interpreters such as Bergson and Deleuze and b) affect theory tied to psychologist Tomkins and later developed by Sedgwick Kosofsky. The present work mostly draws from the first branch of theory (see Slaby and Mühlhoff; for a general historical overview of affect theory see Wehrs; for the more recent affective turn see Tricineto Clough and Halley).

[99] Her *Staying with the Trouble* can be read as an attempt of a novel grammar for a re-thinking of the troubled world we live in without withdrawing from it. Play appears here briefly as one of the nodes for this new thinking: "Perhaps it is precisely in the realm of play, outside the dictates of teleology, settled categories, and function, that serious worldliness and recuperation become possible" (23-4).

[100] Here, thinking of play from a relational ontology opens up the possibility of rewriting one of the dominant play theories that has tied play to *a surplus of energy*. If said surplus of energy is understood as a part of an equal but asymmetric encounter of play partners, Spencer's "overflowing energies" (629), Schiller's "abundant power" ("üppige Kraft"; my trans.; 115), and Groos' "sense of comfort" (*Play of Animals* 9) are indeed vital aspects for the initiation and the processual nature of play.

he is at play" ("er ist nur da ganz Mensch, wo er spielt"; my trans.; 62-3), an emphatic counter-idiom could be: Man is only enabled to play by play partners.[101]

What does it mean to be a play partner? Following Lugones, the notion of *travel* entails undergoing a change in the sense of shifting from one way of being to another. To become a play partner is to embark on a journey with others, to open up for an unknown change, to accept that one does not know the stakes at hand, and yet, to hope for something shared in allowing the process to unfold.[102] In this sense, being a play partner means to travel hopefully. Hopeful travel does not follow an enlightening or illuminating sun to designate the world as a perfectly reduced object of knowledge but embraces the mutually shared darkness as an epistemic condition of difference. None of the play partners precede the encounter: the thing, the idea, and the body are themselves outcomes of play, they emerge as they are gathered. In this sense, play can be thought of as "intra-action" (Barad 139) rather than inter-action.[103] Intra-action does not rely on pre-made entities going into an encounter. The relationship of play partners is mutually co-constitutive, i.e., it is impossible not to be part of each other's shared geneses. In *Cyborgs to Companion Species*, Haraway describes this kind of relating as "co-constitutive relationships in which none of the partners pre-exist the relating" (300). Play requires a thinking of intra-action and the "situated co-constitution" (316) of companion species. If Freud tied the experience of play to the subject's catharsis alone, he isolated and solidified a richer process. An identity may be part and effect of the assemblage we call a body, but it does not define it because the body is constantly in excess over it. Play, even where one can describe it as healing and therapeutic, is never a purifying return; it is a travel towards and with the new in which play partners co-become in mutual excess. In (the dark but warming) light of play as a co-

[101] Here, my rhetoric embraces Haraway's three distinct boundary breakdowns at the heart of her cyborg myth (human and animal, animal-human and machine, physical and non-physical), which urge various theoretical fields to explore world-views beyond anthropocentrism (see "Cyborg Manifesto" 105-6). For the discursive context of play theories, my concept of *play partners* thus strives to connect all-too-often separated parts: the body, the thing, and the idea, previously only appearing as the player-subject, an inert kind of materiality thought of as objectivity, and the mental-social-cultural side under constant threat of slipping away from the thing completely.

[102] Lugones describes this uncertainty with play as follows: "The playfulness that gives meaning to our activity includes uncertainty, but in this case the uncertainty is an openness to surprise" (16). It also includes an "openness to being a fool" (17).

[103] *Intra-action* is a key concept in Karen Barad's "Agential Realist Ontology" (see: 137-141), which is a strong possible ally for the present rhetoric of play due to its distrust in separate entities as a valid starting point for science and philosophy. Drawing from Bohr's implicit epistemology, Barad advocates "*a relationality between specific material (re)configurings of the world through which boundaries, properties, and meanings are differentially enacted* (i.e., discursive practices, in my posthumanist sense) *and specific material phenomena* (i.e., differentiating patterns of mattering)" (139). Here, "[t]he notion of intra-action (in contrast to the usual 'interaction,' which presumes the prior existence of independent entities or relata) represents a profound conceptual shift. It is through specific agential intra-actions that the boundaries and properties of the components of phenomena become determinate and that particular concepts (that is, particular material articulations of the world) become meaningful" (139).

becoming of play partners, the onto-epistemic roles of things, bodies, and ideas at play now can be reconsidered one by one:

1. Considering things as play partners highlights the relevance of materiality, which has been neglected in subject-centered and mentalist notions of play.[104] In his recent essay "Playthings," Sicart adopts a "materialistic approach" (141) to argue that the terms *game*, *toy*, and *video game* relate to epistemic categories (cultural categories or frames), whereas the *plaything* relates to an ontic category. Forwarding it as new umbrella term for objects to study, Sicart describes the plaything as "an assemblage of materials and agencies as a result of the practice of play" (142).[105] While the present approach has reversed the causal relationship of the practice of play and the role of materiality in its insistence on playfulness as a primary affective relation, it is, nevertheless, crucial that the thing also "plays with me" (148), i.e., its role is beyond objecting resistance. In pretend play, for instance, a stick is more likely to act as a sword or magic wand than a shield or a book, which is due to its unique materiality (weight, shape, smell, texture, intensity, etc.) and its excessive potential for meaning rather than the monadic imagination of the player. Materiality in play is not a resource but an equal actor – Haraway describes the world as a "witty agent" referring to the figure of the "Coyote or Trickster, as embodied in Southwest native American accounts" ("Situated Knowledges" 593). In this way of thinking about materiality and the world, both remain "generative" like the "coding trickster with whom we must learn to converse" (596). The thing in play appears as a source of the new brimming with an intense series of possible futures; it reveals hopeful travel as a constant movement-with and play as a "vital experiment" (24), as Fink put it.
2. In play as a lived phenomenon, the (more-than-human) body as a play partner (in distinction from the anthropocentric player-subject) appears as a medium or carrier of play as Gadamer's view of the player as the "played" or "possessed" (see 106) entails. Following Merleau-Ponty, the body can be thought of as an impersonal node of flesh and meaning. In the *Phenomenology of Perception*, the body carries "an aspect of generality and an impersonal being" (85) in that we always already find ourselves positioned in relation to the world and engaged in particular projects that escape conscious reflection. In this sense, the body occupies a pre-personal layer of originary

[104] Trying to recognize the *Spielzeug* or *plaything*, Fink's account, for instance, argues that "[p]laying is always in contact with playthings" (24) but submits it fundamentally to the projections of the player: it appears to him merely as a "proxy for all things in general" or "the epitome of resistant beings in general" (24). Thus objectified, the only agency it attains is to object to the subject.

[105] Though Sicart himself does not draw from practice theory in his description of play as a practice, both share the project of untying play from subjectivity. Practice theory, however, is an evolving field that requires further theoretical work. In his emblematic description of a model type of practice theory, Reckwitz includes materiality in his thinking of practices, but his example of football struggles to think of materiality in play as more than a resource for human practitioners (he argues that "in order to play football we need a ball and goals as indispensable 'resources'" ["Towards a Theory" 252]). In another essay dedicated explicitly to materiality in practice theory, he holds that not just bodies but also "artefacts are sites of understanding, in the form of materialized understanding" ("Status" 212). From this more fruitful angle, toys and games can be said to offer materialized understandings of play. However, the agency of the thing in play is still lacking. Still, Reckwitz goes further than Schatzki, who fails to include materiality into his definition of practices (Schatzki, *Social Practices* 89). In his writings on art and art practices, Schatzki, therefore, tries to bypass his own definition by speaking of "bundle[s] of practices and material arrangements" ("Art Bundles" 18).

experience as "non-thetic[106], pre-objective, and preconscious" (252). The body acts as a "mediator of a world" (146) through a spatial power Merleau-Ponty calls the "body schema[107]," which relates to its capacity to affect and be affected.[108] Lived play with human bodies is inherently socio-cultural in the sense of them being skilled and yet unconscious bodily "carrier[s]" (Reckwitz, "Towards a Theory" 250) of collective practices of play. However, Merleau-Ponty's insistence on a "double moment of sedimentation and spontaneity" (130) is crucial for the body as a play partner in that its relate-abilities are, potentially, multiplied in playful negotiations: the body at play affirms and explores[109] its partners. For the present spatial rhetoric, playful embodiment is not to be equated with a logic of projection, domination, or extractivism.[110] Haraway's notion of "going visiting" entails "to venture off the beaten path to meet the unexpected [. . .], and to strike up conversations, to pose and respond to interesting questions, to propose together something unanticipated, to take up the unasked-for obligations of having met" – this is what she calls "cultivating response-ability" (*Staying* 130). Along these lines, mutually shared affirmation and intimate exploration of play partners are vital for cultivating playfulness as an embodied form of response-abilit*y*.

3. Together with (rather than opposed to) materiality, ideas, too become play partners in playful entanglements. Recent revivals of materiality in the work on play (Sicart) and games (Apperley and Jayemane), however, have made it difficult to speak of ideas.[111] To account for daydreaming, pretend play, role-playing, and many widely shared concepts (such as *fair play*, *nature*, *empathy*, the *nation*, *evil*, the *exotic,* or the *child*) that approach us in games, we need to consider ideas play partners. Non-dualistic onto-

[106] Merleau-Ponty draws from Sartre's terminology here. The *pre-thetic* (also *non-positional*) consciousness in Sartre is the type of self-consciousness that only grounds any possibility of referring to *I* as a subject (see Longuenesse 44-70).

[107] Merleau-Ponty takes the term *body schema* from psychology but reconceptualizes it. It can be thought of as a "global awareness of my posture in the inter-sensory world" (102), designating the non-objective way we hold the body "as an indivisible possession" (100). It is tied to a dynamic and situational spatiality of the body through which it appears "as a posture toward a certain task, actual or possible" (102). When we reach for the point of a mosquito bite, for example, we do not need to look for it; rather, a "lived relation" (103) between a phenomenal hand and the spot on a phenomenal body is immediately established. The body schema thus serves as a primordial condition of perception and spatiality – it exemplifies how we, through our bodies, are not merely in but "in and toward the world" (102-3).

[108] Though Merleau-Ponty does not use the term *affect*, he draws perception closely to a yet-to-realize tendency to action in his insistence on the primacy of the "I can" before the "I think that" (139). This does not entail the body as object, as "mosaic of given sensations" (260), but as an "agent" (260), a "virtual body" (261) anticipating unknowable future encounters that is key for the coupling of body and world.

[109] Regarding the notion of *exploration*, Alenda Chang warns against the concept's role in colonialist rhetorics: "[A]s histories of settler colonialism might remind us, exploration is not just a driving reason for play, but also a frequent euphemism for imperialistic expansion" (*Playing* 135).

[110] Where these logics territorialize play, it needs to be described and questioned as a specific *hegemonic* accomplishment of play partners. It is crucial though, that bodily play is not implicitly equated with and reduced to hegemonic play. Sidney Fels, for example, links embodiment to "submission and belonging" (14). The latter can be measured in "intimacy" (14), which is not complicit with the dominating and obscuring gaze of the colonial subject. Groos described embodied play as an "experimentation" tied to "sympathy with the object" (*Play of Man* 322), although these ideas were only allowed minimal influence within his theory of play.

[111] Both play and game studies have undergone a recent materialist turn in the sense of Apperley and Jayemane's argument in their article "Games Studies' Materialist Turn." The authors argue for a recent re-imagining of digital games in their material contexts, which includes reconceptualizations of the machine, the body and the situations of play.

epistemologies of ideas have been crucial – ideas are in the world, rather than inside.[112] As the Greek term ἰδέα entails, ideas point to both *patterns of thinking* but also of *seeing*, i.e., they are vital parts of socially shared practices and relations. Ideas attain agency and mediate its distribution among human and non-human actors; they act and affect. Play as relational configuration reveals the shared and yet open character of ideas as play partners: Sully's writings on the "play idea" (47) contain the example of two sisters who, maybe not having lived up to their relation as siblings, decide to "play being sisters" (48). Here, it might be that the social concept of *what it is to be a sister* is gathered into the playful becoming-sisters and indeed allows a non-innocent and new relation between the two children to emerge. At the same time, the concept of *sisterhood* itself is bound to change in the lived uniqueness of the play constellation, whose elements always change together in shared excess. Or take the aforementioned example of play with the play partner *White Chess Set*, in which the concept of antagonism is explored and subject to be negotiated – the examples reveal play to be always a material and a discursive practice, ideas as open and in excess over themselves at play.[113]

2.3.1.2. Playing Place as Heterogenesis: A Perspective of Shared Constellations of Emergence

Whereas the previous section has approached a liberation of play from subjectivity and mentalism drawing from notions of relationality, play's alleged non-productivity and

[112] Most notably, Castoriadis's philosophy of cultural imaginaries developed in *The Imaginary Institution of Society* has moved from the concept of the *imagination* as a faculty of the individual subject to the *imaginary* as a socio-cultural network of meanings and significations (for the intricacies of reuniting both concepts in a single framework, see Bottici, "Imagination" 1-4 and *Imaginal Politics*). A reappraisal of ideas in play theory may find further allies in spatial theory, eco-philosophy, and practice theory. Spatial theorist Lefebvre offers one of the strongest critiques of mentalist concepts of space (*Production* 3-7), which have proliferated in play theory. His differentiation of space as perceived, conceived, and lived leads him to acknowledge space as always already mediated, thus fundamentally beyond a distinction of *nature/culture*, and *real/imagined* (Lefebvre 83-4). Space is always *real-and-imagined* but the specific and complex mediations that abound in it matter, which is why ideas matter (see 251). According to Lefebvre, any account of space needs to be immediately tied back to the situated position of a body in relation, and thus to a "place imaginary and real" (251). Another non-dualist ally is psychoanalyst Guattari, who advocates a "new conjunction of environmental ecology, social ecology, and mental ecology" (263). The philosophical (or rather ecosophic) project at hand is precisely the search for new ways to link the environment, the social, and the mind, which includes a rethinking of individuality and the body as the previous section sketched it. Finally, practice theory positions itself explicitly against mentalism's theory of "mind as an ontological realm of the 'inner' which is distinct from outward behaviour and is at the same time its cause" (Reckwitz, "Towards a Theory" 252). The mental, the idea, and the imagined are considered necessary components of social practices as the latter are "sets of routinized bodily performances, but they are at the same time sets of *mental* activities" (251; my emphasis). Ideas are collective parts of "ways of understanding, knowing how, ways of wanting and of feeling that are linked to each other within a practice" (253). Crucially, ideas are not a mere sum of the contents of individual minds, "their 'corresponding' forms of understanding must be 'collective' right from the beginning, they are necessary components of a practice as a non-subjective pattern" (254).

[113] Deleuze conceptualizes ideas as *problematic* in that they come to be as solutions to specific problems along similar lines. Note that Deleuze differentiates further between "idea" and "concept" (*Difference* 168-70), which I do not in this section. Via a general approach to the terms, one would be able to say that the concept relates one to a particular logic of thinking and generalizes the momentary role an idea plays in the understanding (as an existential fit of a body and its real-and-imagined place in life) without having to abandon the idea that both are socio-cultural in nature (against the dominant concept of monadic genius in early play theories).

ontological subordination can now be discussed by drawing from the concept of multiplicity. From the perspective of play partners, how can play's spatially creative and formative side be understood without recourse to the player-centric ipse-feci?

Many classical accounts of play have described a paradoxical element as a core characteristic of play: the notion of paradox is raised by such authors as Bateson, Fink, Groos, Salen Tekinbaş and Zimmerman, or Schiller.[114] The latter tellingly held that the real "becomes small" ("klein wird"; my trans.; 61) in play. Notably, Schiller's formulation does not consider play as something secondary (subordinated to the real, work, truth, adult life, survival, the material world, etc.) in order to reinstall a monolithic concept of reality through hierarchical comparison. However, even where this is the case, the notion of paradox only emerges from the (at least implicit) acknowledgement of play as a spatially formative force (which is then contrasted with an argument for it being a mere imitation of real life, a temporary activity of idlers and children, etc.). The difficulty of seeing play simultaneously as a spatially-formative and an ontologically full phenomenon is maybe best exemplified by Eugen Fink's account of play.

Fink's spatial theory of play notes a peculiar "double existence" of players and things that "belongs to the essence of playing" (24-5). His concept of the *playworld*, which addresses the formative-creative side of play, also raises the problem of the genesis of the new:

> All the structural aspects touched on until now come together in the fundamental concept of the playworld. Every sort of playing is the magical production of a playworld. In it lie the role of the one playing, the changing roles of the community of play, the binding nature of the rules of play, and the significance of the plaything. The playworld is an imaginary dimension, whose ontological sense poses an obscure and difficult

[114] The concept of *paradox* has hereby been applied to various different elements of play: Groos speaks of a "division of our consciousness" (*Play of Animals* 304), Fink notices a type of "schizophrenia," a "splitting of the human being" (24), and Salen Tekinbaş and Zimmerman describe the space of play as "both limited and limitless" (95). For Bateson, play is paradoxical due to its meta-communicative achievement between self-deceiving and yet socially competent players (his observation relate to on animal play in a zoo) who base play on the implicit statement of "These actions, in which we now engage, do not denote what would be de-noted by those actions which these actions denote" (139). Drawing from Korzybski's characterization of language through the analogy of the inequality of the territory and the map (Bateson 58) and Freud's distinction of primary and secondary processes (Freud implies that *primary process* is a kind of proto-language tied to the wish, while *secondary process* refers to the language of reflective thought and is tied to repression; see Freud, *Interpretation* 593-605), Bateson argues that "[i]n primary process, map and territory are equated; in secondary process, they can be discriminated. In play, they are both equated and discriminated" (Bateson 143). Some of the problems revolving around Bateson's line of argument here stem from his equation of Korzybski's *map/territory* opposition with the opposition *true/false* (see Engler and Gardiner, who describe this problem as a "conflation of meta-representation and truthfulness" [8]). Despite these problems from a perspective on play, Bateson's contribution to what later turned into sociological frame analysis needs to be acknowledged (see Goffman).

> problem. We play in the so-called actual world but we thereby attain [erspielen] a realm, an enigmatic field, that is not nothing and yet is nothing actual. (25)

Fink's intuition that this enigmatic realm of play is neither nothing nor actual poses the delicate question for the real and the possible, the present state of affairs and its relation to the new. Gradually, Fink's arguments on the playworld move from the idea of subjective "projection" (25) to "a realm beyond the human one" (27). While he thus achieves a description of play as "creative bringing forth" and spatial "production" (28), he also holds that the playworld is "never a real thing among real things" (25). Ultimately, Fink regards play as a symbol of existence interpreting itself and postulates the problematic notion of an "ontic appearance" (28), which appears in the medium of reality but is truly from "the strange land of the non-actual [,] the elevated site where the essentiality of all things in general is invoked and brought to presence" (30). How can Fink's problem of the non-actual be reformulated (without recourse to metaphysics) to see play as a "constant self-renewal" (105), as Gadamer put it?

So far, the present approach has described play partners in terms of their *excessiveness* and mutually shared *potential*[115] – these notions can now be explicated in a perspective of playing place that foregrounds multiplicity and heterogenesis drawing from the philosophy of the virtual. Merleau-Ponty wrote about the thing that each of its fragments "satisfies an infinite number of conditions, and it belongs to the real to contract an infinity of relations into each of its moments" (*Phenomenology* 338). The body, the thing, and the idea can, in this sense, be thought of as irreducible and processual multiplicities with non-actual sides, which are, nevertheless, part of the real (this second part is denied by Fink). In *Difference and Repetition*[116], Deleuze describes a world of constant change and teeming differences, in which

[115] In my use of the terms *potential* and *excess*, I have put emphasis on their sharedness or described them as a mutual relation. In doing so, the present spatial-relational rhetoric of play opposes accounts that isolate, internalize, and detach these concepts from the world and undo vital relations to other en/disabling play partners. Sutton-Smith, for example, having described play theories on a meta-level as rhetorics of play, develops his own account of play as "a model of evolutionary selection" (229). Placing the potential of play not in the mind (in the manner of mentalist accounts) but the brain, he argued that "play potential is analogous to neural potential" (229). At the end of his book, he has to acknowledge that "despite my extensive criticisms of the rhetoric of progress, I have now invented yet another form of it" (231).

[116] Deleuze's philosophy of difference in *Difference and Repetition* attempts to go beneath what he calls the thinking of representation, in which difference, subjugated to the "primacy of identity" (xix), can only appear as a negative deviation. Seeking to establish difference as an own concept, he writes: "That identity not be first, that it exist as a principle but as a second principle, as a principle become; that it revolve around the Different: such would be the nature of a Copernican revolution which opens up the possibility of difference having its own concept, rather than being maintained under the domination of a concept in general already understood as identical" (Deleuze, *Difference* 40-41). His anti-thesis to the thinking of representation is that "[a]ll identities are only simulated, produced as an optical 'effect' by the more profound game of difference and repetition" (xix). In this Deleuzian ontology of processually-becoming differences, in which "all the forms are dissolved" (28), the "complicated, properly chaotic world without identity" is that of a "chaosmos" (57) in which the only thing that returns (in the Nietzschean sense) is the game of difference and repetition.

essential beings only exist as simulacra (i.e., they are real as effects). Beyond the (re)discovery of archetypes or eternal ideas, he ties creation to the concept of multiplicity. The elements of a multiplicity are, he writes, not "actually existent, but inseparable from a potential or a virtuality" (183). In this sense they "imply no prior identity" and "their indetermination renders possible the manifestation of difference freed from all subordination" (183). The concept of *virtuality* is difficult to grasp because, to the human observer, it is never given but "always covered over by its forms of actualization" (186). However, in contrast to the possible, which the human mind can conceive of (in a post-hoc manner), virtuality as a key feature of multiplicities is part of the real:

> The virtual is opposed not to the real but to the actual. The virtual is fully real in so far as it is virtual. Exactly what Proust said of states of resonance must be said of the virtual: 'Real without being actual, ideal without being abstract'; and symbolic without being fictional. Indeed, the virtual must be defined as strictly a part of the real object - as though the object had one part of itself in the virtual into which it plunged as though into an objective dimension. (208-9)

While the possible can only be "realized" and is thus outside of existence, the virtual "possesses a full reality by itself" and "[t]he process it undergoes is that of actualization" (211). In the example of playing with Ono's *White Chess Set*, the emergence of the new is not reducible to the player coming up with (i.e., inventing) a move. Rather, a play ensemble might hold a wide virtual range of dynamics and outcomes for its negotiation of antagonism, but only a specific set of its virtuality can be actualized in each new moment (which again, changes its virtual side, too). The sharedness of the virtual conditions satisfied for the mutual enabling of a move cannot be understated: the virtuality of a body to move in a particular way, of a pawn to occupy a position on a board, of the ideas of antagonism or intimacy to be gathered to the place of play…

Play is often described as non-telic. Gadamer wrote that "[t]he movement of playing has no goal that brings it to an end; rather, it renews itself in constant repetition" (103). With Deleuze, the repetition in question can be understood as a shared performative enactment of differences by differences (which the present account has grouped under the identities of thing, idea, and body). The playing place, along these lines, acts as a fully real spatio-relational constellation of emergence[117] for shared heterogenesis, the movement from actualization to

[117] A place of emergence in this sense is closer to Foucault's reading of a Nietzschean preference for a thinking of *Herkunft* (*descent*) rather than *Ursprung* (*origin*) in the essay "Nietzsche, Genealogy, History." The benefit of this shift in approaching history is to circumvent the subject as author as well as to enable critical perspectives on play that are able to make it implausible and re-imagine it differently.

actualization, multiplicity to multiplicity. The creation that happens in play, the creation that is play, is not the creation by a player but one of play partners who do not preexist their relating as essential beings. Following M. Beth Dempster, Haraway describes the collective creation of systems without pre-established borders and entities not as auto-poiesis but "sympoiesis" and points to its capacity for "surprising change" (*Staying* 61). Play produces sympoietically – at its core, there is neither competition nor wish-fulfilment but an "openness to surprise, openness to being a fool, openness to self-construction or reconstruction and to construction or reconstruction of the 'worlds' we inhabit" (Lugones 17).

Constellations of emergence in play are not transparent: in play, one never knows for sure what will happen. Yet, one is driven by what might be, by what can affect fantastic imagination. Play displays the force of that which transcends what was believed to be possible, the *more-than-possible*, which is already part of any present constellation of partners. The affective dynamic of play entails experimentation, mutual affirmation, and empathic exploration. There is not a clear vision of what is produced, as already Schiller noted. The play drive is always part of a mediation (or "Vermittlung" [see Schiller 55-58]). Yet, there is, at any rate, an impulsive dynamic at play, a mode of touch both promising and surprising. The play partners move together with the intuition of a world in the making, an experimentation with ontic (rather than conceptual) hypotheses that postulate them. It is a constant starting over in which one gains by letting go (letting go not as withdrawing from the material world, but as allowing other possibilities and potentials to come to the fore), a flow not of mind but of intuitive matter in which encounter after encounter is explored only to find the world over again an inexhaustible repetition in which nothing is repeated without a difference. Play is, above all, driven by *intensity*[118], that which can only be felt by becoming a part of it. The virtuality of place cannot be known or represented, there is no deeper insight into a realm of essences as Fink holds. There is, however, an infinite and intimate encounter with the world as shapeshifter and trickster, who poses a constant playful differential challenge to what we take for granted. Felt-virtual-intensity is present not as an object, not as actualized in a state of affairs but as a *nomadic attractor*, an implicit horizon to all things that breathes life and meaning into the playful unfolding. It attracts the play partners' forces by winning them over in the course of micro-movements, pulling them in exciting directions affectively through their intuition. Ever-

[118] For the Deleuzian ontology, intensity needs to be distinguished from extensity (the expansion in space up until a boundary) in addition to the pair actual-virtual. Intensity, as one can observe it in boiling water, for Deleuze describes difference itself, which only appears as extension and quality in things: "Everything which happens and everything which appears is correlated with orders of differences: differences of level, temperature, pressure, tension, potential, difference of *intensity.* [. . .] Intensity is the form of difference in so far as this is the reason of the sensible. Every intensity is differential, by itself a difference" (*Difference* 222).

shifting, it moves nomadically, with every processual actualization of an ensemble renewed, a mountain that breaks open with each turn of its pebbles.

2.3.2. Games as Play Partners: From Form to Productive/Negotiative Preconfiguration

With the perspective on the mediality of play foregrounding relationality and heterogenesis explicated, the role of games needs to be regarded next. [119] Hence, games are discussed in discourses of form and formalization (linking the present approach to perspectives from game studies and American literary studies) to grasp their specific doings in the emergence of spatiality in game play as preconfiguration in the following.

In the field of game studies, play-centered perspectives have recently resulted in a renewed criticism of formalist approaches: In his article "Against Procedurality," Sicart argues that proceduralism, a dominant but reductive strand of game formalism, "often disregards the importance of play and players as activities that have creative, performative properties." Procedurality, which can be linked to influential works on both games (e.g., Janet H. Murray or Ian Bogost) and game design (e.g., Mary Flanagan), is criticized by Sicart for its often implicit epistemic assumptions on how meaning arises in game play.[120] Bogost's *Persuasive*

[119] To date, the prioritization of play over games has been reversed within the field of game studies. Mäyrä's introduction to game studies, for instance, does not mention play as an epistemic target for itself (in opposition to games, players, and the contexts linking the two; see Mäyrä 2). Freyermuth's introductory volume, on the other hand, refers to the "steady interdependence between (1) audiovisual systems that are created by game designers – where worldviews, as well as intentions and expectations of how these worlds should be used, unfold – and (2) the actual realization of the potential actions by the players (individuals as well as groups)" (175). Curiously, this interdependence is not discussed primarily as play but only in regard to the question of authorship in game design.

[120] The concept of procedurality can be traced back to Murray's 1997 *Hamlet on the Holodeck*, in which it initially appeared as a key element of digital game environments and texts. Murray describes "the new digital medium" as "intrinsically procedural" pointing to the "procedural power of the computer" understood as "its defining ability to execute a series of results" (73). The concept gained further prominence through Ian Bogost's work, most notably the 2006 *Unit Operations: An Approach to Videogame Criticism* and the 2007 *Persuasive Games: The Expressive Power of Video Games.* Already in *Unit Operations*, Bogost coins the term *simulation fever* (rather than emphasizing the appropriative or non-telic notions of play) as the bridging link between player and gaming system: "Working through simulation fever means learning how to express what simulations choose to embed and to exclude" (109). In the latter book, Bogost claims that video games offer "a new domain for persuasion, thanks to their core representational mode, procedurality" (Ix). The role of the player in Bogost's writing is hence close to a passive consumer, somebody who is, above all, persuaded. In addition to game critics, game design scholars have picked up procedural thinking. Mary Flanagan, for example, despite focusing on the notion of critical play/design, tends to equate "what those games are designed to be, what one does in them, and how play is *constructed* within them" (253; my emphasis). Hunicke and colleagues' MDA framework can serve as a further example: the authors hold that the "[d]esigner creates the game" while the player "consumes it" (1). In their model, designers and players are both linked in the same mirrored relationship through mechanics, dynamics, aesthetics (for the designer: MDA, for the player: ADM), which implies that play is merely the reverse foil of design. The

Games, for instance, engages the term *procedural rhetoric* to describe the way games mount arguments through "the art of persuasion through rule-based representations and interactions rather than the spoken word, writing, images, or moving pictures" (Ix). In Sicart's reading, proceduralism "argues that it is in the formal properties of the rules where the meaning of a game can be found. And what players do is actively complete the meaning suggested and guided by the rules. For proceduralists [. . .] the game *is* the rules" ("Against Proceduralism"). The resulting critique is thus with the way proceduralism reduces play to a type of conditioned, normative, or "instrumental play, as the process of playing for other means, as play subordinated to the goals and rules and systems of the game."

The way games themselves (rather than just the implicit assumptions of researchers) favor specific types of interactions, however, remains crucial for the mediality of digital game play. This could be further highlighted through a second critical impulse to revise the concept of form, this time from the discourse of new formalism in literary studies. Against the background of new historicism[121], Marjorie Levinson has described new formalism as a movement in the 2000s revolving around the conception and role of form.[122] Caroline Levine is one of the voices calling for a renewed and activist interest in form. Her book *Forms: Whole, Rhythm, Hierarchy, Network* broadens the use of the term *form* to encompass any patterns of sociocultural experience: form entails an "arrangement of elements – an ordering, patterning, or shaping," it relates to "all shapes and configurations, all ordering principles, all patterns of repetition and difference" (3). Whereas forms have been traditionally thought of as containing, plural, overlapping, portable, and situated, Levine argues to link them to the concept of "affordance" and thus "potential uses or actions latent in materials and designs" (6).

To come back to Sicart's critique of game studies' proceduralist bias, Levine's emphasis on affordance allows to think of the distorted perspective on play as an outcome of socio-cultural processes of formalization carried by games (she thinks of social hierarchies and networks as types of form, along these lines). The fault of proceduralism is, from this

MDA process is tied to the sequence "rules, system, fun" (2) reducing play to the correct application of rules and submitting it to both the vision of the designer and the tyranny of fun.

[121] In response to new criticism and (later) poststructuralism, new historicism, generally, favors perspectives of socio-cultural intertextuality and open conceptions of literature. Putting the text in historical context to regard history, too, as textual, the movement advocates a literary study practice not in isolation but invested in and positioned among wider political, social, and cultural histories.

[122] Levinson distinguishes between an ongoing commitment to form, which she describes as "activist," and a second type of "normative formalism" advocating a "sharp demarcation between history and art" (559). For the latter formalism, form determines the literary status and can be regarded as an integral property of the work itself. Activist formalism, on the other hand, holds that form matters – in relation to literary works but also wider discourses – because it constitutes what may count as real in the first place.

perspective, not merely a reductive reading of play (which could be discarded in favor of another, more accurate reading) but the sedimentation of contingent types of play, which makes hegemonic forms of play unquestionable. Thus, Sicart's anti-proceduralist critique of essentializing definitions of the form of games can be linked to a wider interest in how games take part in (re)formalizations of play as accomplishments of their mediality as play partners. Finally, the relevance of questioning games for their role in formalization (rather than their form) is further highlighted by the danger of play-centered (or ludological) biases that overemphasize the player as an independent, critical and yet detached, political, and creative subject, which mirrors and links to ongoing tendencies in play theory, as the previous sections have shown.[123]

Fundamentally linking (but not subordinating) games to a perspective on play, games are thought of as play partners in the following. Rather than formal or mimetic containers of space, their role in the dynamic of spatial emergence requires examining how they produce and negotiate spatiality. Whereas game studies have been obsessed with the question of what a game is, the focus is thus on the (formalizing) doings and effects (of the particular forms) of games.[124] The more processual perspectives on games have, in this light, thought of games as "facilitators that structure player behavior" (Aarseth, "I Fought" 130), which are necessarily "always partial or incomplete" (Aarseth and Calleja 6) when regarded in isolation. While games have been

[123] Aubrey Anable has recently raised this very point: "At the center of proceduralism is a formalist approach that ascribes the essential meaning of a video game to how effectively and creatively its designers harness code to simulate a systemic relationship between the world of the game and larger philosophical issues. Yet the player as a feeling and active subject goes missing from strict proceduralist accounts, or is there only as the thing that pushes the buttons to activate the code. Theorists of play have justly criticized proceduralist approaches on this count. Yet play-centered approaches to video games have their own blind spots. They inherited the ludologists' overestimation of interactivity and the power of players to invest video games with whatever meanings they choose. Such approaches also tend to overlook the specificity of particular video games as cultural documents and artistic expressions" (xiv). Drawing from the previous reading of play theory, at risk is the reinstallation of Schaller's notion of play as a utopia of individualism or the disproportionately strong and independent subjectivity of many of the earlier accounts of play.

[124] The question for the definition of the object of study is, of course, inherently tied to the power-charged question of disciplinarity: "game studies academics are themselves variably interested in what constitutes a real game as a way to legitimate the field and define an area of study. What gets left out of structuralist arguments is the value judgment going into labels such as game or not game" (Consalvo and Paul xxv). Stenros' recent article "The Game Definition Game: A Review" revisits more than 63 different definitions of games. It points to two that have been of particular importance for the field. The first is by Salen Tekinbaş and Zimmermann, who define a game as "a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome" (80). The second by Juul whose definition refers to "a rule-based system with a variable and quantifiable outcome, where different outcomes are assigned different values, the player exerts effort in order to influence the outcome, the player feels emotionally attached to the outcome, and the consequences of the activity are negotiable" (*Half-Real* 36). Notably, both approaches put emphasis on rules and thus formal features (beyond the already touched upon focus on competitiveness and the ant/agonistic). However, non-formal attempts of defining what a game is have been made: Aarseth and Calleja, for instance, give a "dynamic" (6) definition of cybermedia, arguing to "accept Wittgenstein's doctrine and acknowledge that the phenomenon of games is not a formally definable set but a historically constructed notion" (2).

thought of as playable media, Levinson's interest in form urges not to read them merely as resources or orienting structures for play.[125]

In contrast to other play partners, such as sticks or leaves, games are designed technologies for play, inherently making them socio-cultural carriers of practices and imaginaries of play.[126] Madeline Akrich's notion of *inscription* points to the (not necessarily intentional or explicit) process of scripting potential uses, users, and scenarios of use in design.[127] Specifically, games carry scripts of the place for play, the players, and what it is to play. Tying into the present spatial rhetoric and its insistence on the more-than-possible as nomadic attractor in play, Malaby discusses games as ongoing processes that need to be "capable of generating new, emergent effects that then inform the following instances of the game" (103).[128] According to him, games "are distinctive in their achievement of a generative balance between the open-endedness of contingencies and the reproducibility of conditions for action" (106).[129] Games-as-play-partners, in this regard, aim to foster the ongoing and

[125] Noah Wardrip-Fruin's concept of playable media attempts to shift the "thinking from a question [. . .] only temporarily useful ('Is this a game?') to one [that] rewards sustained attention ('How is this played?')" ("Playable Media"). He advocates discussing games in terms of "playability - in terms of the potential of, and structures for, play." However, the way games do not just structure but afford specific types of play in enabling and disabling encounters of play partners evades the approach's conceptualization of "playability."

[126] The specificity and the socio-cultural affordance of technologies for play, it could be argued with Bernard Stiegler, lies in the way they embody exteriorized collective memory traces, which take part in play and add to the unfolding of specific spatio-temporal constellations of matter and meaning. Arguing for a fundamental inseparability of the human and technicity through the term "epiphylogenesis" (135) (i.e., the pursuit of the evolution of the living by other means than life), Stiegler links technicality to time via what he calls "the inorganic organization of memory" (174). As organized but inorganic matter, technical objects relate the body to a sedimented and impersonalized knowledge or memory he calls "tertiary memory" (246). In being affected by tertiary memory, the individual meets with a past they have not lived through themselves. In becoming play partners with games as technologies for play, the player then embodies sedimented and impersonal socio-cultural knowledges that make the worlds of games fundamentally (but never completely) human. In so far as play is play with games-as-play-partners, Huizinga's argument that "human civilization has added no essential feature to the general idea of play" (1) has to be opposed together with his equation of play and games.

[127] Akrich argues that designers of technology make hypotheses about the users of their technologies and the worlds within which the latter play a role: "Designers thus define actors with specific tastes, competences, motives, aspirations, political prejudices, and the rest, and they assume that morality, technology, science, and economy will evolve in particular ways. A large part of the work of innovators is that of 'inscribing' this vision of (or prediction about) the world in the technical content of the new object. I will call the end product of this work a "script" or a "scenario" (208).

[128] Strategies to produce virtual potential for play, or as Malaby labels it, contingency, can be stochastic (as in the throwing of dice or the drawing of cards), social (referring to the unpredictability of another's point of view), performative (drawing from the possibility to fail or improve, as key to athletics, for example), and semiotic (referring to the unpredictability of meaning) in kind (see 107-9).

[129] Jesper Juul has further divided games into two categories via their respective strategies for presenting what I have read as real-and-imagined nomadic attractors (the more-than-possible): games of emergence tend to combine elements to produce variation whereas games of progression use serially organized elements such as challenges or narrative sequences to engage the player (see "Open"). Despite engaging in an inherently ant/agonistic language of "challenges" (324), Juul uses the categories of the open and the closed to describe the mechanisms for the generation of contingencies that Malaby points to. Emergence is framed by Juul as the "primordial game structure, where a game is specified as a small number of rules that combine and yield large numbers of game variations, which the players then design strategies for dealing with" (324). In opposition, games of progression make up the

meaningful hetero-generative mediality of play by creating virtualities that may serve as real-and-imagined nomadic attractors for play. The contingencies that games foster are closely tied to their capacity to make them meaningful in processes of narration and framing, potentially speaking to all senses of the body.[130]

Of particular importance in relation to Levine's notion of affordance is the way games imagine, script, address and thus position their embodied play partners in enabling and disabling encounters. Game design practices address what Aarseth has labeled the "implied player," the "role made for the player by the game, a set of expectations the player must fulfill for the game to 'exercise its effect'" ("I Fought" 132).[131] However, the player's positionality (concerning her embodied agency, practical mindset, range of possible emotions, conscious and unconscious goals, affective relate-abilities, etc.) is both an outcome of a game's effects and a prerequisite of their processual negotiation in play. Implicit assumptions and valuations of socio-cultural conceptualizations of age, class, gender, sexuality, race, religion, bodily ability/disability, and game-specific performative categories such as gaming literacy and gaming capital[132], as they are expressed and become effective in forms of address and interactional affordances (the assigned player-character, quest objectives, game mechanics, etc.), are simultaneously the condition and the object of excessive entanglements of play partners. The key questions the present approach thus raises are what kind of play partner a game is, how it imagines play, and which playing body it imagines, affords, relies on, and is negotiated by.

For the question of spatiality and game play, it is crucial to link the mediality of games as play partners to the mediality of game play. Two conceptual terms can be used to highlight this interrelationship: inspired by spatial theory and a discussion of the agentive nature of digitality (which the next section will come back to), game studies have linked games formalizing tendencies to the *production* of spatiality (see Meinel 3), which the present account

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"historically newer structure" in which "the player has to perform a predefined set of actions in order to complete the game" (324).

[130] Microsite V's discussion of the indexical spatiality of *Hitman: Absolution* (2012) in section 3.1.4. tackles one specific attempt of a game to strategically communicate or conceal its virtual potential, the intense force of the more-than-possible, to the player.

[131] Aarseth further differentiates the implied player from the "interface addressee" and the "avatar," all in opposition to the "real, historical player" ("I Fought" 132).

[132] Via the concept of *gaming capital*, Mia Consalvo argues against framing the totality of players as a gaming subculture: "A subculture, to be identified as such, must share common symbols, through such things as fashion, music, or aesthetics. Although individual games or genres may spawn such subcultures, games as a whole are too varied to paint their players with such a broad brush. And to trace an adequate history of gameplay, we must confront differences between players—in genre preferences, play styles, and many other areas. For those reasons, the concept of the subculture cannot work satisfactorily to explain gamers and gameplay. I believe instead that gaming capital captures the dynamism of gameplay as well as the evolving game and paratextual industry. [. . .] [Gaming capital] suggests a currency that is by necessity dynamic—changing over time, and across types of players or games" (3-4].

aims to extend with an emphasis on the element of a post-subjective and pre-individual *negotiation* in play.[133] Neither of the two terms are reducible to aspects of form and its activation or manipulation as production includes the formalization of play as much as play problematizes the insistence on pre-made form-meaning relations.[134] As Sicart argues, "[o]ne cannot understand the playing of games without the rules of the game, but both are in constant motion toward and against each other; they are constantly redefined, negotiated, adapted, and denied by the other" (*Play Matters* 89). In *Ludopolitics*, Mitchell likewise points to the constant possibility of "trifling" with games, "ignoring the game's objective in order to explore its possibility space" (53). Yet, game design, too, he notices, "can inculcate a critical or ethical attitude, working against the controlling, systematizing tendencies inherent in the form. Both the play and design of games are capable of mounting immanent critiques of the systems in which they are embedded because they index the non-systemic, non-totalizable nature of all structures" (54). Along these lines, the present emphasis on playful negotiation is meant to draw attention to the place of play through which meaning/form relations only come into being.

The specific doings of games in this context can be described as *p/re/con/figurations*[135] of spatiality. A game's contribution to the emergence of spatiality simultaneously needs to be regarded as productive/negotiative in that the two moments of production and negotiation are inseparable moments. The two terms do not maintain a dualistic relation, such as the one of artifact and activity, which game studies have applied to games (see Stenros, "Game" 504-5);

[133] This approach creates a perspective according to which space is not (only) a formal given of digital games but emerges from the particular playful (i.e., affective) entanglements with embodied living beings. Spatiality arises from the medium as a lived phenomenon in this sense, as could be argued with microsite IV in section 3.1.4., where postphenomenological insights can add substantively to formal analysis.

[134] Here, the case of machinima, which combine both practices of play and practices of (re)formalization can give insight into the entanglement and inseparability of processes of production and negotiation of spatiality (see microsites II and III in 3.1.2.). Indeed, it could be said that machinima that use footage of deterritorializing play-throughs of games subject the negotiation of play, which is a negotiation of a spatial production of games, again to their own series of productions wand that this influences the very form of negotiation happening in the play-through.

[135] While Akrich spoke of *predetermination* referring to technology in general, the present spatial-relational account uses the prefix *con* to emphasize the interdependence of play partners for their shared geneses in play. The second prefix *re* is meant to account for the embeddedness of games in wider processes of the re/production of space, highlighting their interrelated commercial and ideological aspects as well as their role as carriers of game design practices, themselves permeated by discursive negotiations of what is and can(not) become thinkable with games. The latter also retains the potential of games to be understood as "activist games" (Flanagan 26) and thus the way they practice intertextuality in patterns of repetition and difference between technological innovation, supply and demand, references, commentaries, homages, deterritorializing attacks, and reimaginations. Finally, the prefix *pre* refers to the way technologies effect a specific enactment of time in which the priority of game design creates a particular structure for the communication between designer and user and is, therefore and nevertheless, subject to a negotiation yet to come. Gualeni describes this temporal primacy of design in terms of an imbalance of power: "the creators of any kinds of virtual worlds can be recognized as holding a position of power in relation to their audience, as the former largely configure the 'possibility space' of 'play' for the latter" (155). However, from the perspective of play partners, which challenges techno-determinism, player and game both mediate each other, and their agencies are never separable. In Keogh's words, the "actor active in videogame play is in fact a hybrid of both player and game" ("Across Worlds" 14-15).

rather, they form two interrelated moments as games are produced and producing products of design practices but also participate in the processual unfolding of play, to which they vitally contribute through specific affordances in enabling/disabling entanglements with their play partners. Speaking with Hannah Arendt, games need to be regarded as participants of both capitalist *labor* and everyday *work*, "Herstellen" and "Arbeit" (14), *poiesis* and *practice*.[136] Production and negotiation form what Stuart Hall calls "differentiated moments" that are "not [. . .] identical, but [. . .] related" ("Encoding" 259) in his work on the production and reception of television messages. If regarded as play partners, games transcend formalist analyses of space or the idea that a player appropriates the spaces they present; the doing of games lies with their preconfigurations of space and play, the ways they present, narrate, and afford configurations of space and enable and take part in their very negotiation with the player(s). To come back to the introductory example, *White Chess* exemplifies the productive preconfiguration of spatiality through its role as a carrier of Ono's critical redesign, which both repeats the major elements of chess and intertextually differs from and comments on them. The way different moments of play vary with their play partners and unique processual patterns of

[136] In *Vita Activa*, Arendt asks the question "what we actually do when we are active" ("was wir eigentlich tun, wenn wir tätig sind"; my trans.; 12) and distinguishes between the activities "work," "labor," and "action" ("Arbeit," "Herstellen," "Handeln"; my trans., 14). In her theory, play (which she does not explicitly thematize) cannot easily be sorted into either of these categories and, as would be my reading, permeates through all three of them. However, her criticism of the emphasis on productive "labor," as the creation and formalization into concrete and commodified things, relates to how game studies tend to view games as finished products rather than as parts of an everyday work or practice. As her reading of Marx reveals, the realm of practice or work draws attention to its *vital* and *excessive* elements, the everyday aspects of being, which are too often thought of as residual and mere waste due to the capitalist fetishization of production: "Of even greater importance, however, is what Classical Economics already sensed and Marx then actually discovered and conceptually formulated, namely that, purely objectively and quite independently of historical circumstances, work does indeed have its own 'productivity' despite the fleeting nature of its 'products', and that this productivity of work prevails in both the private and public sphere. But this 'productivity' is not based on the respective results of labor itself, but rather on the power of the human body, whose capacity is not exhausted when it has produced its own food, but is capable of producing a 'surplus', i.e. more than is necessary for the 'reproduction' of its own power and labor. Hence the introduction of the concept of 'Arbeits*kraft*', as Engels already remarked, is in fact Marx's most essential contribution to the theory of work; it is the surplus power of the human body, and not work itself, in which that which is actually 'productive' in labor consists" ("Von noch größerer Bedeutung aber ist, was schon die klassische Nationalökonomie gespürt und Marx dann eigentlich entdeckt und begrifflich formuliert hat, daß nämlich rein sachlich und ganz unabhängig von historischen Umständen dem Arbeiten in der Tat eine nur ihm eigene 'Produktivität' zukommt trotz der Flüchtigkeit seiner 'Produkte', und daß diese Arbeitsproduktivität sich sowohl im privaten wie im öffentlichen Bereich durchsetzt. Nur beruht diese 'Produktivität' nicht in den jeweiligen Ergebnissen der Arbeit selbst, sondern vielmehr in der Kraft des menschlichen Körpers, dessen Leistungsfähigkeit nicht erschöpft ist, wenn er die eigenen Lebensmittel hervorgebracht hat, sondern imstande ist, einen 'Überschuß' zu produzieren, d. h. mehr als zur 'Reproduktion' der eigenen Kraft und Arbeitskraft notwendig ist. Daher ist die Einführung des Begriffs der 'Arbeits*kraft*', wie schon Engels bemerkte, in der Tat Marx' wesentlichster Beitrag zur Theorie der Arbeit; es ist der Kraftüberschuß des menschlichen Körpers, und nicht Arbeit selbst, worin das eigentlich 'Produktive' des Arbeitens besteht"; my trans. 81-2). Though the creative-formative aspects of play, if read as an everyday practice, thus need not be the opposite of productivity understood qua labor (captured in the problematic opposition of work and play, which Arendt denaturalizes; see 116-7), they certainly demand to regard games, at least partially, as active participants in the realm of the everyday.

unfolding, however, emphasizes the place of play as a site of negotiation and, thus, the negotiative preconfiguration of games as play partners.

2.3.3. Procedural Logics and Digitality

To grasp the specific mediality of digital games, the two upcoming sections need to conceptualize digitality within a processual perspective on play. First, digitality will be regarded within the discourse of procedurality to avoid lingering notions of cyberspace. Then, scholarly perspectives on digital games, the machinic, and architecture will be discussed to arrive at a perspective on digital games as play partners.

2.3.3.1. Digitality – Procedure and Process

Spatial accounts of the digitality of games have suffered from lingering notions of the alienating concept of *cyberspace*. On the one hand, what van den Boomen and colleagues call "digital mysticism" (8) has propagated the notion of cyberspace as an *immaterial* realm.[137] Digital environments may, according to the authors, "defy immediate physical contact, yet [be] incorporated in materiality rather than floating as a metaphysical substance in virtual space" (9). In this sense, digital technologies (including game worlds) are "in-material" as "material assemblages of hardware, software, and wetware" (9) rather than in digital space. On the other hand, the concept of cyberspace (and its alleged non-materiality) thus reveals an online/offline dichotomy, which has been detrimental to asking more specific questions about the roles of digital technologies in our media practices.[138] In this context, Pink and colleagues propose

[137] The notion of *immateriality*, despite its importance as an effect of many digital media, has prevailed as a lingering shadow of earlier discursive ways of framing the digital: van den Boomen and colleagues describe it in terms of an ongoing "digital mysticism," "a special brand of technological determinism in which digitality and software are considered to be ontologically immaterial determinants of new media. New media and their effects were thus framed as being 'hyper', 'virtual', and 'cyber'–that is, outside of the known materiality, existing independently of the usual material constraints and determinants, such as material bodies, politics, and the economy" (8). Holischka's 2016 dissertation on cyberplaces, for instance, successfully argues against the notion of the digital as a secondary and separate realm, and, yet, views digitality as fundamentally "immaterial" (see 144) and in need of what he calls "Rückverortung" (144), a kind of placement back into the material world through hardware. In part, his reading of Deleuze, which does not differentiate the notions of the *digital* and the *virtual*, relies on the idea of an unmediated reality prior to any sort of technical mediation or embodiment, which clashes with Stiegler's account of primordial technicity.

[138] Chaudhary's 2020 phenomenological analysis of spatiality, for instance, relies on "a clear line of separation between virtual spaces and the spaces of everyday life" (235). Having developed a rich phenomenological account

paying more attention to the "relationship between the digital and material," which starts by understanding "digital materiality as a process, and as emergent, not as an end product or finished object" (10). To arrive at a more processual and messy account of hybrid materiality in which digitality is considered as part of a particular type of techno-media practices, one of the core notions of game study formalism must be reconsidered: procedurality.[139]

The present approach's perspective on play is marked by the notion of a world of flows rather than entities, messy and overlapping entanglements rather than smoothly separable organisms or systems. According to this worldview, matter, time, and space unfold together in relational co-becomings, ongoingly shifting and changing together. To human beings, the world often appears under the cloak of identities and fixed structures, and it is only in sudden bursts with what we take to be our realities (their rhythms, breaks, and speeds), as in injury and death, that the radically processual and chaotic nature of difference and change can no longer go unnoticed. Such an account of the world and its being could be described through the term *processuality*. Processuality points to the temporality of all borders, the multiplicity of shared places and the plurality of spatialities among beings in relations; it points to entropy as the ungraspable movement of all forces, the radical openness of each and every system of power, the futility and wonder, the courage of life. Procedurality, on the other hand, arises from socio-cultural practices (including discursive ones) as specific form given to processes either explicitly or implicitly.[140] It involves (in part narrative) structuration of processes in time and

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of space/place in the first half of his dissertation, Chaudhary goes on to ask the question "do these features of place apply to spaces accessed through augmented reality?" (261) in the second part. In doing so, he explicitly "take[s] the former as the reference point for the experience of space and place, that is, the 'reality' of a space" (262). This epistemic framing of the digital, then, applies a normative account of real space (from which the digital is subtracted, first of all) as an ontological point of reference for digital or VR (virtual reality; and in Chaudary's discussion, augmented reality) space thus understood in opposition to said space. Through this original-copy logic, it does not seem surprising that the account arrives at a fork in the road in which the digital is either "a significantly deficient kind of place, and therefore not deserving the designation of place" or "a new kind of place" (283-4).

[139] More specifically, at issue is the re-grounding of procedurality in and as processuality to address two problems: first, the gap between digitality and the real-and-imagined situatedness and placedness of any moment of lived embodied game play; second, the formal procedurality of games as objects (depending on and producing binarily coded states) and the processual-relational nature of play as a practice (beyond binaries and states) whose virtuality is always more than digital. The present conceptualization is an attempt to rethink Bogost's notion of procedurality in the context of game studies. Bogost does not differentiate between process and procedure (see *Persuasive Games* 2-3). He, therefore, runs the risk of making primarily formalistic assumptions about games and their meanings because of a lack of the processual vocabulary play requires. Moreover, the problematic separation and comparisons of processes in computers from processes in the material world (see, e.g.: "Computers run processes that invoke interpretations of processes in the material world" [5]) could be omitted by grounding both in processuality but differentiating them through procedurality, the specific structuration at the core of digital technology that Bogost is interested in.

[140] Practices, it could be argued beyond this, always combine processuality and procedurality in that practices are much more than rigid procedures processes are broken up into. Take the case of the practice of songwriting. A self-taught or trained composer might think of the wild process of writing something substantial as a series of X different procedures involving Y steps each (e.g., one starting from improvisation, another from the lyrics or a

in space (as specific framings of space-time) into sequences of steps differentiable through the ascription of qualities to entities in subject-object relations and the construction of causality. Procedures are at work during such everyday activities as cooking a meal, boarding a plane, attending divine service, writing a letter, booting a PC, making coffee, or changing the tires on a car. Moreover, they are, speaking with Akrich, enscripted into technological objects such as combination locks, polaroid cameras or pregnancy tests. The error rate associated with the result of a medical test, however, already indicates the constant possibility of procedurality failing, to clashing with processuality, and being submersed by it.

In the sense outlined above, digitality could be described as a particular form of procedurality, which is a part of processuality rather than outside of it or part of a second immaterial world. Procedurality is territorial[141] in that it forms an organized state of matter always subject to be deterritorialized by processuality, e.g., by forces including human counteractions (like cyberattacks, scams etc.) but also non-human forces such as animals (e.g., birds causing blackouts or the original *bugs* in the system, which were literal, i.e., physical, bugs in the machine) and non-living forces such as decay, aging, corrosion, entropy. Digital technologies such as computers combine technological components (which are often differentiated into software and hardware) that form material things designed to both function according to binary states (in that information is organized in strings of so-called binary digits or bits, each coded numerically as either zero or one) but also, and this is often omitted, constantly reproduce this very functionality.[142] Computers are dependent on material and processual flows – from air and water for cooling their systems to human operators and the electrical currents they are utterly useless without. By stressing that the digital (as a specific kind of technology) is always to be tied to both its functionality and the reproduction of the latter, technology is understood not as a given but as a phenomenon "of which there is genesis"

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feeling, the target audience, a mix of several factors, etc.). The practice of writing, however, would also include the knowledge of how to differentiate between them, how to recognize or combine them, how to deal with difficulties in progression, the embodied know-how, the emotions, the telic or para-telic nature of a series of steps and so on. In short, practices would always deal with processuality via procedurality but also expect, require, and conceptualize corresponding levels of structure and chaos as part of their explicit and implicit projects.

[141] My use of the term *territorial* (which also applies to processuality) is meant to describe territorialization as a dynamic and temporary kind of structuration. In adopting a language of "movements of deterritorialization and processes of reterritorialization" which are "relative, always connected, caught up in one another" (*Thousand Plateaus* 10), Deleuze and Guattari de-naturalize power structures as always in need to be recursively performed and spaces to be claimed rather than just being owned. Territoriality is thus performatively brought forth by (counterable and reversible) movements, a doing rather than a having or being.

[142] Although bits are usually thought of as binary states, it is important to recall that a simple logic gate, which can be used to produce two meta-stable configurations, attempts to direct an electrical current, a flow of charged particles, via the manipulation of a point of bifurcation. Whether to signify a binary concept of gender, the difference between a friend and a foe, life and death, or a win and a loss, the artificial functionality of binary states relies on organizing and managing a processual world far more complex.

(26), as Gilbert Simondon put it.[143] Digital technology, then, could be said to rely on "an equilibrium of metastability," which is, and this is crucial, never equivalent with "a destruction of potentials" (177). Never finally given or submitted, the digital is part of processual materiality and the latter's virtuality is reconfigured, maybe enriched, by it, but not reduced to its binary states.

Games have always been processual and procedural. As playful media and technologies, games have long attempted to distribute playfulness, offer occasions and contents for play, and take part in it. Play requires a processual thinking in which non-innocent play partners share each other's geneses and find surprising potentials for generating the new. Games as designed play partners have long engaged procedural strategies to p/re/configure and formalize play. Rules have long divided spatial configurations according to player ownership or temporal configurations in turn-based competitive logics. Rules are part of procedurality, whose games play may agree to. Play, however, reveals games to be territorial and thus up for negotiation and deterritorialization. Games add procedurality to play. Play may find processuality at the heart of games.[144]

Like other games, digital games preconfigure meaning, space, time, and embodiment as part of their coming into being as play partners. The virtuality of the digital, while already pre-coded in terms of its procedural states, offers a specifically designed realm of real-and-imagined nomadic attractors for play: entire game worlds are to be explored as play partners. However, contrary to other playful media, the means of access through embodiment and the virtuality of its digital code are also pre-structured, or territorialized, to a much higher extent. While the procedurality of a board game can be submitted to the processual negotiating among play partners who decide to ditch a rule or play a different game with the pieces at hand, the same cannot as easily be done with digital games as play partners.[145] With a digital version of the

[143] Gilbert Simondon, too, conceptualized technology from a decidedly processual perspective: "The technical object is that which is not anterior to its coming-into-being, but is present at each stage of its coming-into-being; the technical object in its oneness is a unit of coming-into-being" (26).

[144] Malaby's concept of games as processes is full of insight in this regard. He writes that games always "contain the potential for generating new practices and new meanings, possibly refiguring the game itself" (102). Moreover, his account stresses that, from a processual perspective, games are "not reducible to their rules" (103).

[145] A popular figure rebelling against the territoriality of digital games is James Rolfe, also known as *The Angry Video Game Nerd*, whose YouTube show has thematized the fictive revenge of disappointed (and, frankly, angry) gamers frustrated with bad game design in excessive outbursts of swearing and violence for over a decade (see Rolfe). The episodes of the show often include the very destruction of physical game cartridges and thus the final opposition to preconfigured places for play laying bare the affective potential for play that cannot be accommodated by the show's series of what are described as "bad" or "shitty" games. In addition to a negative gaming history of failed design, *The Angry Video Game Nerd* thus also writes a history of ultimate deterritorializations and reappropriations of rejected play partners. As testimony to an emic theory of media, *The Angry Video Game Nerd* is also a vivid and playful homage to the territorial procedurality of digital (retro) games.

previously discussed *White Chess Set*, a game designer would have to decide from the start which possible moves would be preconfigured by the virtuality of the code.[146] As a built-in condition of their coming into being, digital games require their partners to adopt specific forms of interaction and embodiment.

2.3.3.2. Digital Games, Architecture, and Play

In addition to the interactive and embodied affordance of digital games, the various technological possibilities of how they mediate the emergence of spatiality in game play have been underlined by many researchers. Specifically, their heightened world-building potential has been discussed as digital architectural practice. Inspired by a tradition that frames them as "totally constructed environments" (Jenkins and Squire 65), game scholars still today are primarily interested in "video game environments as designed spaces" (Whistance-Smith 4). Such a conceptualization of game design as "narrative architecture," according to which game designers "design worlds and sculpt spaces" (Jenkins 121), has been very influential for perspectives in cultural studies, which primarily explore the "digital landscapes" to question the "politics of their representation" (Meinel 10). Soraya Murray, for instance, explicitly takes on "landscapes as ideology" (*On Videogames* 142). For her visual culture approach, video games "always make a set of claims about land, space and place" (146). Beyond any realist ambitions of digital games, she thinks of them as "*at least* second order representational formulations. [. . .] [G]ames are quite literally culture – that is to say, [. . .] they are *necessarily formulated cultural constructions*" (169).[147]

While indeed every digital game confronts a spatial perspective with both (more than visual) images and imaginaries of space, the representational paradigm of this perspective has been lamented. Dietmar Meinel writes in this context: "As Video Game Studies moves beyond thinking about space as merely representative or representational to understand the production of space also as an act of playing, American Studies may similarly expand its notions of space

[146] Microsite VIII in section 3.1.7.1. delves deeper into the role of procedurality and procedural architecture through an analysis of *Baba Is You* (2019), a puzzle game whose architectonics of play reflects on the constitutive element of procedural logics.

[147] Despite her representational perspective, Soraya Murray is aware that games have a "practised dimension" (169). However, in focusing on the ideological and "persuasive" (181) aspects of games, she sometimes misses out on highlighting the way games engage form in their conceptualizations of play. Here, more emphasis could be put on the form-meaning relations, which only arise in and through play (preconfigured by the game and performed with the game as play partner), in addition to her rich perspective on the environment itself.

as a practice or a form of doing" (3). Attempts have been made to move beyond this focus on representation and toward what could be described as the *machinic* (going beyond Meinel).[148] On the one hand, video game space has been reframed by Stockburger as a "hybrid between physical and imagined" (81-2) and thus fundamentally "heterogeneous" (85). As such it was tied back to varying modes of spatial production and not reduced to on-screen spatiality alone. On the other hand, scholars like Galloway, Jenkins, and Günzel have put more emphasis on the active character of digital games and their doings. Galloway argues for the digital game as "an active medium [whose] very materiality moves and restructures itself - pixels turning on and off, bits shifting in hardware registers, disks spinning up and spinning down" (3).[149] Going beyond his own focus on narrative architecture, Jenkins describes game consoles and computers along similar lines as "machines for generating compelling spaces" (122). Finally, in Günzel's attempt to move beyond representationalism via a Lefebvrian perspective, games "enact" ("What" 13) spatial concepts. Such approaches add to a framing of digital games as "a medium inherently characterized by its various modes of spatial production" (Meinel 1). Foregrounding the question of spatialities, these perspectives stress the machinic side of games, their role as producers of spatiality and temporality or, put differently, as space-machines (and, what is less emphasized in the literature, time machines).

Noah Wardrip-Fruin's book *How Pac-Man Eats* gives an insightful account of how games engage in the production of spatiality/temporality. Though focusing primarily on the formal aspects of digital games, the book discusses the algorithmic doings or actions together

[148] The *machinic* runs through Deleuze and Guattari's *Anti-Oedipus* as a metaphor that links any part of the materiality of the world to any other part, as connected machines producing each other (for organized matter describable as machines the authors return to classic psychoanalytic examples such as the mouth, the stomach, the anus, etc.). In their critique of the representational discourse of psychoanalysis, the authors do not start from the assumption that something (e.g., the unconscious) is represented, but "[s]omething is produced: the effects of a machine" (*Anti-Oedipus* 2). Reconnecting what representational discourses tend to separate (into content and form, signifier and signified, manifest and latent, etc.), the rhetoric of the machinic emphasizes processual materiality (and, one could read the book, spatialization) and its dynamics of flows and breaks: "every machine functions as a break in the flow in relation to the machine to which it is connected, but at the same time, is also a flow itself, or the production of a flow, in relation to the machine connected to it" (36). For an account of games that explicitly draws from the concept of the machinic, consider Dyer-Witheford and de Peuter's *Games of Empire* (70-71).

[149] In addition to the distinction between diegetic and non-diegetic space, Galloway's approach focuses on machine actions and operator actions. Galloway thus argues for a rather smooth discernibility of actions and their respective authorships in play: "machine actions are acts performed by the software and hardware of the game computer, while operator actions are acts performed by players. So, winning *Metroid Prime* is the operator's act, but losing it is the machine's. Locating a power-up in *Super Mario Bros.* is an operator act, but the power-up actually boosting the player character's health is a machine act" (5).

with their "communicative roles" (13).[150] Its key concepts are *operational logics* and *playable models*:

> Operational logics as foundational combinations of abstract processes with their communicative roles in the game, connected through an ongoing game state presentation and supporting a gameplay experience. Operational logics are essential building blocks for the construction of playable models, through which games represent everything from physical space to economic systems, social relations, character development, and combat. (*How* 13)

Logics, as they are conceptualized here, are not merely ways of thinking about and with games but also quite literally the ways games work and, as Wardrip-Fruin puts it, "do cultural work" (9).[151] Taken together, several logics (as fundamental building blocks) construct "playable models" (xiv), which Wardrip-Fruin describes as "procedural representations of domains - ranging from city planning to playing football - that are activated and understood through play" (14).[152] The following families of operational (or as I adopt the term in my analyses, *procedural*) logics can be grouped as analytic tools (51-7):

1. *Camera logics* "present a projection of the world space in a portion of the player's screen space" (51).
2. *Chance logics* refer to the (often implicit) implementation of randomness in games and their communication to the player (e.g. dice).
3. *Collision logics* (also detection/handling logics) communicate to players how game objects occupy space or can touch each other (the example the book draws its title from is how Pac-Man eats). "The abstract process declares the intersection when the boundaries of two objects intersect potentially triggering a reaction, as long as they are of types that should collide" (52).

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[150] Wardrip-Fruin's concept of the mediality of games combines an interest in communication with another in what he calls "processes," which, for the present account, are best relabeled as *procedures*: "Every emerging media form has elements that set it apart. [. . .] [V]ideo games are set apart by the ways they communicate using automatic computation - the enactment of processes by digital computers" (*How* 12).

[151] Contrary to the more widespread use of the term *game mechanics*, logics describe the algorithmic structures as fundamental building blocks of a game. The term *game mechanics* often blurs what the player is able to do and how the game implements the playable models needed for this. A crafting mechanic, for example, can be implemented using various procedural (or in Wardrip-Fruin's own terms, operational) logics such as progression logics, resource logics, recombinatory logics, and selection logics. However, some of these can also be combined to form other playable models. The use of the broader term *mechanic*, if used not as an alternative to but in conjunction with *procedural logics*, nevertheless, captures well the player's perspective on the practical and experiential merging of what she is able to do and how a game procedurally combines logics to enable her to do it.

[152] One of the weakest points of the formalist perspective on games employed by the book is the lack of explicit conceptualization of or investigation into what the term *playable* in "playable models" (xiv) amounts to. Despite the author's efforts to link games to play in his rhetoric, "playable models" could easily be labeled "operational models" as well. At the end of the present section, this point will be taken up again in moving from game architecture to game architectonics. By not separating how and what a game communicates, however, Wardrip-Fruin contributes a vital perspective to the field.

4. *Control logics* map control events such as button presses, AI intentions, or the data packages from other players in online games onto the available actions of the appropriate game entities.
5. *Entity-state logics* become apparent when switching from walking to running or jumping. “The abstract process governs a limited, differentiated set of states for each entity, altering the game state presentation and operations of other logics when a new state is entered” (52).
6. *Game mode logics* implement and communicate the way a game can change how it operates.
7. *Linking logics* communicate how things are connected to each other (from travelling via in-game portals and using links in the game menu to the way games communicate different logics to be linked, as in features being locked behind resource logics).
8. *Pattern matching logics* implement and communicate how particular patterns (e.g. in the combination of objects) have effects and may trigger events (e.g. hands in poker or special moves in fighting games).
9. *Persistence logics* communicate which things (do not) stick around (a raided chest will remain empty while the treasure will remain in the player’s inventory). “The abstract process preserves, resets, or disposes of game state data, based on changes at various context scopes” (54).
10. *(Movement) Physics logics* “update physical properties (position, velocity) based on the laws governing physics for that entity” (55) as in the scripted movement of a platform or competing gravitational fields.
11. *Progression logics* communicate how action can move the state of the game forward as in the unlocking of areas, a character’s skill progression or quest lines. For this, the abstract process tracks and checks measures of progress “potentially parameterizing the operations of other logics in the model” (55-6).
12. *Recombinatory logics* employ abstract processes to “build a structured object from a fixed set of elements, following a set of rules and constraints” (56). They communicate that a new dungeon has emerged or that a speech act is a product by an intelligent character.
13. *Resource logics* relate the player to such elements as hit points (HP), gold, mana, and experience points (EP). “The abstract process creates, destroys, and moves discrete quantities of tangible or intangible resources [. . .] between concrete or abstract locations, on demand or over time” (56).
14. *Selection logics* are at work when the player selects or targets a unit or character, an item or a location “with highlighting, icon placement, and sound effects being common communication strategies.” The abstract process “tracks sets of selectable and selected objects, updating them based on other logics and making them available to others” (57).

Concerning “playable models of space” (120), Wardrip-Fruin points to three key graphical logics: the logics of collision detection, movement physics, and navigation (the last being another name for control logics, when used in spatial models). These (and all others in general) only become effective when the player learns how to embody them: “Learning to perform navigation, both directly and indirectly, begins with players identifying what represents ‘them’

in the game state presentation, then experimenting with interface controls to learn how the navigation mechanics operate" (128). From this initial experimentation, logics and models quickly become part of a bodily knowledge which can be described as an "[e]mbodied literacy" (Keogh, *Play* 14) of gaming.

When digital games are considered not only as space machines but also as play partners, Wardrip-Fruin's concept of playable models has to face Sicart's criticism of proceduralism.[153] The very way playable models offer themselves as playful needs to come into question and, in this regard, the greatest achievement of *How Pacman Eats* is precisely not to "make a division between what a game purports to communicate (its skin or theme or fiction) and how it operates and *enables play* (its rules or mechanics or models)" (222; my emphasis). As play partners enabling the player to play and being enabled by her in turn, digital games open up for the mediality of play, which negotiates their very being and agency in an evolving place of play. However, as designed technologies for play and through their procedural doings (procedural logics relying on the territoriality of the digital code and player embodiment), they also practice play in particular ways, as Wardrip-Fruin and others successfully argue. Digital games "prescribe concrete interactions" (Meinel 21) and those "[p]ossibilities of engagement are directly built into the spatial structure" (Nitsche 188).

Beyond Wardrip-Fruin, however, the ways digital games offer themselves as play partners utterly depend on how games conceptualize and imagine play, how they afford, exclude, or align with particular ideas of play inscribed into and enacted by them or brought to the place for play by other (potential) play partners, a phenomenon sometimes addressed as meta-play (which, however, somewhat exoticizes this kind of play and normalizes docile play). In this regard, games are more than merely *architectural space machines* (combining the two previous notions of games' representational architecture and their machinic mediality in Meinel) that produce spaces, which can then be read as detailing what the experience of play and the meaning of a game amount to by a scholar. Rather, digital games preconfigure and

[153] See, for example, the explicitly instrumental take on play Wardrip-Fruin's writings sometimes express: "When I say a game is 'about something through play,' I mean that the understanding built through engagement with the logics and models (in both their procedural and communicative aspects) is an appropriate match with the way we are meant to interpret our play activity" (*How* 234). Here, play is conceptualized as the kind of docile enactment of the messages of a game by the player, which Sicart labels "instrumental play" ("Against Procedurality"). Wardrip-Fruin and colleagues' essay "Agency Reconsidered" makes this even more apparent: here, the authors view "agency as a phenomenon, involving both the game and the player, that occurs when the actions players desire are among those they can take as supported by an underlying computational model" (7). The very ways games also produce and preconfigure desire and affect in and for play is curiously absent in this model of agency together with the way the game can only come into being by constantly affecting the player and being embodied by her.

practice game play in a way that requires a perspective on both architecture and *architectonics.*[154]

The first term relates to both the architecture *of* and *in* games, the intricate and diffuse way game worlds present architectural structures and rely on coded architectures themselves (which do not always remain on the unconscious level as bugs, glitches, and overall janky design reveal often enough).[155] The latter term is best tied to the way games strive to become play partners. Architectonics of play, in this sense, highlight that it is not just an architectural structure or prop that is offered for the play of an independent player-author but that an argument of play is mounted and a set of particular experiences of play is fostered in and through a spatial production. Crucially, the accomplishments of a digital game's architectural arguments (relating to its imaginaries of space) depend on its architectonic accomplishments (relating to its imaginaries of play), which is why an exclusively formal spatial analysis cannot reach the nexus of relations from which ideological spatialities actually emerge. The latter draws from the aforementioned processes of embodiment, heterogenetic play, the enabling and structuring doings of the procedural code, and the now-introduced strategic and intertwined architectural/architectonic contributions of digital games as play partners.

Furthermore, an exclusively formal analysis neglects the (enabled and afforded) agency of the player (and other play partners) of negotiating ideological arguments about and in play in that the two moments of production and negotiation mutually render each other possible in the first place. Both production and negotiation are inseparably and intricately tied together and linked by the processual distribution of agency in the affective unfolding of play. Drawing from

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[154] Gerber describes the spaces of *DOOM* and *Quake* by likening them to *gardens* rather than buildings: "Even better would be a hybrid of the two, such as the Villa Giulia in Rome, created for Pope Julius III (1487-1555) by several architects, primarily Jacopo Barozzi da Vignola (1507-1573). Here, architecture is in the service of experiencing the garden. [. . .] When moving through the garden of the Villa Giulia, one constantly questions the nature of architecture and its relationship to the gardens, and that's why, one has no specific goal but movement itself. Translated back into game spaces, these ideas are architectonic rather than architectural; its spaces are clearly connected to the order of landscape gardens, rather than to the order of buildings" (141). Though Gerber abandons this thought here, the idea of an *architectonics* is fruitful for the present account. Though it has been applied to the study of game architectures, too (in the sense of a scientific meta-level; see Bonner), the hitherto neglected link to the realm of play is more promising. Architectonics of play, it could be argued, refer to the suggested use of (digital) game architectures as already inscribed, afforded, or preconfigured by said game and as it becomes effective in ongoing play. This can include explicit enouncements, such as tutorial sections or meta-narrative and self-referential elements, but also the way procedural logics frame and communicate game mechanics implicitly. Microsites VIII and IX in section 3.1.7. present two games that create a self-aware relation between the levels of architectures and architectonics.

[155] Bonner, similarly, relates the term architecture to games (though not to play) in a double sense: "(1) architecture *in* game worlds in the sense of its media-specific spatialisation, structural topoi, architectural layouts, and the (ambient) role of architecture, as well as (2) the architecture *of* computer games themselves in the sense of systematics, structures, and media-specific logics as well as logistics between multiple algorithms, databases, and their audiovisual staging of game worlds to be performed on the screen" (2).

the metaphor of the machinic, it is only through the shared flows of perception, affection, and action in embodied play that digital games can take part in wider processes of sociocultural spatialization.[156] Only by becoming play partners can games merge their digital procedurality and their territorial logics with the excessive processuality of play. Anable has convincingly described digital games as "affective archives" (134), which requires "resisting locating properties like texture, tone, and feelings in a purely subjective experience of reception or as the exclusive property of a text, and instead locating them in the slippery and intellectually fraught place in between" (Xiv). Beyond subjective interpretation and formal machinic production of spatiality, digital games take part in the relational becoming of play as play partners only insofar as the on-screen visual images and the sonic images produced by most digital games come into being exclusively through the affective and embodied entanglement of player(s) and game.

2.3.4. Embodiment

Together with the processual unfolding of play, the body has been neglected in favor of (digital) games as texts.[157] Whereas the section on play has already examined the body as a playing body – an exploring, affirming, and intuitive medium of play, its link to digitality remains to be discussed in the present final section. One particularly crucial issue in the work on digital games and embodiment revolves around the notion of a *gap* between the digital and the non-digital. The propagation and conceptualization of such a gap has consequential effects on how both digitality and embodiment are thought about together; in this regard, it has been a site of ongoing discursive framings of digitality, digital worlds that games present, and their embodiment by players. In the following, different conceptualizations of the gap are briefly be juxtaposed to question the role of the body as a mediator in digital play.

[156] The crucial role of perception for the mediality of digital games and their spatial productions, for instance, is reflected in the meta-spatial architectonics of the puzzle game *Superliminal* (2019), as microsite IX reveals in section 3.1.7.2.

[157] In the context of digital games, the focus on games as texts and their interpretations has tended to obscure the bodily dimension: Schmalzer recently lamented that "the centrality (and necessity!) of circuits of communication between player, hardware, and software have always had the unfortunate side effect of erasing the body from videogame play." Here, one of the crucial tasks of game studies is to rediscover the place of play, the very relational entanglement of digital games and embodied play partners. Though sticking to the concept of textuality, Keogh, along these lines, argues for an understanding of video game experiences as "embodied textuality" in which "the synthesized embodied experience of audiovisual design, videogame hardware, and the player's physical body constitute the site of meaningful engagement with the videogame" ("Across Worlds" 21).

In Calleja's approach to embodiment, the concept of *incorporation* is used to counter previous approaches focusing on presence or immersion. Arguing against the metaphor of "a unidirectional plunge into a virtual world" (68), Calleja sees virtual worlds as "deeply interwoven with our sense of reality" (168). However, in conceptualizing incorporation as a double relation between the player's consciousness and the virtual environment, he implicitly thinks of the gap between the digital and the body in terms of a chiasm of mental and spatial representation.[158] David Sudnow's early auto-ethnography of how the body easily incorporates the knob and paddle used to steer the digital paddle in Atari's *Breakout* explicitly thwarts such emphasis on the conscious level of the body. Rather than stressing the voluntary or mental aspects of embodiment, he writes about "a natural correspondence of scale between the body's motions, the equipment, and the environs preserved in the interface. There's that world space over there, this one over here, and we traverse the wired gap with motions that make us nonetheless feel in a balanced extending touch with things" (29). Sudnow describes the way the body traverses this "gap" as "uncanny" (98), pointing to "body and not mind knowledge" (98) and "skills actually accrued quite independent of our conscious selves" (51):

> [W]hen you've got the paddle properly in hand it's a different kind of thing, not really a thing at all, but an extension of your fingers. You bring the so-called 'second section' of the paddle beneath the ball in the same way you can move the back of your hand toward a cup in front of you so the knuckle of your index finger touches it. You don't have to look at that knuckle. [. . .] When a paddle or a bat is incorporated by the body, becoming a continuation of ourselves into and through which we realize an aim in a certain direction, such implements lose all existence as things in the world with the sorts of dimensions you measure on rulers. They become incorporated within a system of bodily spaces that can never be spoken of in the objective terms with which we speak of objects outside of ourselves. (Sudnow 83-4)

The unconscious aspects of the body, in the ways they enable play and the habitual embodiment of play partners (like controllers, computer mice, keyboards, headsets, gaming glasses, sound

[158] Consider the privileged roles assigned to concepts of *mind* and, particularly, *consciousness* in the following quote: "I therefore propose the metaphor of incorporation to account for the sense of virtual environment habitation on two, simultaneous levels. On the first level, the virtual environment is incorporated into the player's *mind* as part of her immediate surroundings, within which she can navigate and interact. Second, the player is incorporated (in the sense of embodiment) in a single, systemically upheld location in the virtual environment at any single point in time. Incorporation thus operates on a double axis: the player incorporates (in the sense of internalizing or assimilating) the game environment into *consciousness* while simultaneously being incorporated through the avatar into that environment. The simultaneous occurrence of these two processes is a necessary condition for the experience of incorporation. Put in another way, incorporation occurs when the game world is present to the player while the player is simultaneously present, via her avatar, to the virtual environment" (Calleja 169; my emphasis).

systems, and screens) are further met by the territorial states of the code that remain impalpable for the player.[159] Sudnow's early account thus points to the links between the two sides of the gap via a regime of a double unconsciousness characteristic of digital embodiment in general.

Following Sudnow, Boellstorff conceptualizes avatars (from the paddle in *Breakout* to the characters populating *Second Life*) not as representations but "forms of embodiment, centered on constitutive emplacement within a world" (223). He describes the realm of the digital not as a place but place-making or "chora" in that "for the first time techne works not on the actual world, but upon a virtual world that is already the product of techne" (230).[160] A crucial part of Boellstorff's argumentation is the propagation of "a clear and ontologically foundational gap between an avatar and an actual-world person, and between any virtual world and the actual world" (233):

> [T]he very real existence of a gap between virtual and actual does not mean they are sealed off from one another and should not inaugurate an asymptotic analysis where they end up "blurring." The ethnographic evidence indicates that the theoretical framework needed is not teleological but indexical. For virtual embodiment, but for all aspects of virtual culture as well, the gap between virtual and actual is constitutive of bidirectional meaning-making, value production, subjectivation, and social praxis. (228)

On the basis of this gap, he rejects the notion of the *cyborg* in favor of the "cypherg," the virtual body made possible by "a participation through techne that makes possible the conditions for emplaced being itself" (235). The cypherg is not a figure of symbolic representation but of indexical-relational positionality and emplacement. Ultimately, Boellstorff argues for a pluralization of being-in-the-world through this figure. Nevertheless, his notion of a world unmediated by technics in the first place could be criticized along with the ontological implications of his postulation of a gap that requires a rethinking of embodiment like no other form of techne before.

In *Bodies in Code*, Hansen sketches how the discourse on virtual reality and the digital has moved from an initial "model of VR as a disembodied hyperspace free of all material

[159] Nitsche spells out this second dimension of an unconscious in the interaction with digital technology and its relation to a game's narrative processes as follows: "A game world does not ask interactors to understand the internal computer processes and the mathematical logic of the code. Players do not have to translate the metaphors and the 3D game spaces back into their technical generation, but instead are asked to connect them to a consistent fictional world" (233).

[160] Note that Boellstorff does not explicitly differentiate between the *digital* and the *virtual* in this essay.

constraints" (4) to a "mixed reality paradigm" in which the digital is merely "one more realm among others" and "emphasis falls less on the content of the virtual than on the means of access to it" (5). Drawing from Merleau-Ponty's postulation of a radical indifference between body and world, Hansen argues that "all reality is mixed reality" (5), which, from the perspective of an originary technicality of the human body, "appears from the moment that tools first delocalized and distributed human sensation, notably touch and vision" (9). What is, therefore, truly novel and promising about digital technologies, as offered by games, "is not the possibility they open for creating ever more immersive illusory spaces, but rather the expanded scope they accord embodied human agency" (3). The specific form of digital embodiment Boellstorff called the "cypherg" Hansen broadens to the general phenomenon of the *body-in-code*, which is a technical mediation of the body schema (drawn from Merleau-Ponty) resulting in "a body submitted to *and constituted by* an unavoidable and empowering technical deterritorialization - a body whose embodiment is realized, *and can only be realized*, in conjunction with technics" (20). The compelling contribution of Hansen's approach for the present work lies in its rethinking of the gap in digital embodiment, positing it not as a divide between two worlds, the digital one and the non-digital one. Drawing from Bick and Anzieu's work on the skin, Hansen reinterprets Merleau-Ponty's notion of the sensory "écart" as a pre-subjective and pre-spatial "primordial differentiation of the skin," which is "essentially technical" (60), and understands it as the "sensible–transcendental ground for exteriorization as such" (61).[161]

In the context of game studies, Hansen's media philosophy approach offers three contributions that can enrich the previously outlined perspectives on digital embodiment:

> 1. An emphasis on reality as mixed, messy, heretic, and relational considering the phenomena of digitality as one source of virtuality among others.[162] Keogh, in his analysis of the mobile game *Fruit Ninja*, for example, has stressed the omnipresence of moments of "co-attentiveness, " in which "the player is fully aware of the hybrid

[161] "[T]he most fundamental form of the *écart* constitutive of the being of the sensible: 'the skin [= introjected containing object] is experienced concretely as skin.' In the mode of primary passivity, the infant thus experiences the skin from the 'inside' (the feeling of having 'a space within the self') *and* from the 'outside' (though via the introjection of the skin as boundary), as 'agent' *and* as 'patient.' This happens without support from—and thus prior to—the series of differentiations (self–other, inside–outside, psychic space–objective space, etc.) that such experience would seem to require but will in effect performatively produce" (Hansen 60; square brackets in original). As this primordial fission (arguing from an ontogenetic developmental perspective) appears before any further differentiations such as object/subject, inside/outside, and self/other, it occupies a point of indifferentiation at which the biological cannot be separated from the psychic, which would make any following differentiations of the psyche, as one could read Hansen, inherently technical phenomena subordinate to the originary sensory ego of the skin.

[162] Miller and Horst, outlining their program of a digital Anthropology, have, similarly, maintained that "humanity is not one iota more mediated by the rise of the digital" while also insisting on the "materiality of digital worlds, which are neither more nor less material than the worlds that preceded them" (3-4).

assemblage across actual/virtual worlds and bodies that all video games demand" (*Play* 73) and that mobile games make observable in a heightened way.

2. The possible reading of the gap of embodiment, if such a notion is to be upheld, as part of the originary technicity of the body schema itself rather than a fission of the digital that splits the world into two distinct parts. The present work has given an account of digitality as an inherently processual and material phenomenon of shared places in this sense.

3. The dethroning of visuality as the dominant or only modality of sensibility to bring forth bodies-in-code with digital games.[163] In the context of gaming, digital code enables an empowering expansion of the body schema whereas the body wears the space-on-screen, the emerging soundscape, the particles of controllers touching the body and those entering the nose, as much as the medium, understood as a processual assemblage of electricity, hardware, and software, comes into being as a game by translating and redistributing the affective responses of particular and historical bodies, which are deterritorialized in turn.

Games depend on embodiment in that the body, through its originary power for virtual action, forges a set of relations and analogies where none preexist. Games modify the body schema by affording specific forms of embodiment, potentially speaking to all senses. In allowing specific sets of interactions according to the prescriptions of their digital codes, digital games primarily speak to vision, hearing, and touch in (often synesthetic) combinations that can rarely be differentiated on a conscious level: Reflecting on his experience of playing *Breakout*, Sudnow speaks of hands and eyes in "a two-way partnership" being able to sustain a "pulse to organize the simultaneous work of visually and tactilely grasping the ball" (32). Hence it is because they enable the body to relate to them, rather than dissolve it, that digital games come into being as partners – entangled in mutually co-constitutive relationships that become possible and meaningful in play's unfolding.

2.4. In Lieu of a Conclusion: A Brief Note on Siting

The present chapter has argued to tie the emergence of spatiality in digital game play to the meditalities of play, games, (digital) procedural logics, and the body. A final conclusion of the present approach is due but can only be given in recourse to the achievements of the

[163] This is the very reason why the present approach prefers the term *digital game* over *video game*. In close engagement with a mobile game, *Tappy Tree* (2019), and a sonic multiplayer game, *Phasmophobia* (2020), microsites VI and VII attempt to account for the specific modes of spatial embodiment the phenomena of sound and touch constitute in gaming (in sections 3.1.5. and 3.1.6.).

upcoming chapter. Chapter 3, the present chapter's empirical twin, engages in a series of case studies that site the theoretical arguments gathered up to this point. As the term *site* implies, games can be understood as spatial phenomena that form and shape our cultural landscape of places for play. To speak with Sicart, games are part of an "ecology of play" (*Play Matters* 43), which they make observable, but they also practice hegemonic forms of play and allow researchers to account for dominant spatialities and imaginaries of play. However, as was argued above, through preconfiguration, games take part in the production and negotiation of spatialities in play, which points to the active and relational way games, which are also sites, play with the player, who is also a researcher in the present context. Hence, the practice of siting refers to a methodological framing of both particular games and moments of game play without subjecting either to the other.

In the upcoming Chapters 3 to 6, the use of games as sites and the practice of siting serve a double function. On the one hand, siting implies putting in position a tool or concept for action. The site plays an active role in this regard: it allows empirical access to an epistemic research object, speaking with Krause. On the other hand, siting refers to the act of locating something in a site or giving place or location. This points in the opposite direction, from or through the concept and the epistemic research object back towards the game. Put differently, the game is made to speak through the language of the conceptual frame. Hence, siting necessarily involves a double epistemic motion: it grounds a conceptual concern back in culture bringing the politics of the perspective into a conversation with an empirical field. At the same time, however, the site expresses its own topics, concerns, medial links, impulses, flows, and politics, contributes and enables situated knowledges, and animates the approach to reach new levels of conceptualization and reflection.

While many games will be referenced in passing, most of them can only contribute as examples. The games chosen as microsites in Chapter 3 and for the three full-length case studies of Chapters 4 to 6, however, are strategically and specifically chosen as sites due to their potential in relation to the main questions of the analysis. Three cases and their respective sites were selected. While the case studies will be introduced properly and the selection of games addressed, it can be already said that the three case studies add to the general spatial approach a focus on dominant spatialities in play. Probing the three relations that constitute the historical being of a culture, the social, the environmental, and the mental, according to Guattari, aspects of ant/agonistic, extractivist, and psych(olog)ic spatialities will thus be examined in the context of practices of de/racialization, farming, and de/marginalization respectively.

3. Microsites

Simultaneously accompanying as well as subsequently following the previous arguments, several initial case studies site the conceptual work and the perspective developed so far. Drawing from the combined insights of the previous chapter and the following case studies, the approach towards the emergence of spatiality in play is summarized in an open framework drawing from the fourfold mediality of digital game play involved in the production/negotiation of spatiality.

Keywords: spatial game analysis, ant/agonistic spatiality, machinima, embodiment, sound, touch, perspective

3.1. Microsites I-IX

The following games were selected as sites: *Undertale* (2015), the *Half-Life* (1998-2004) and *Call of Duty* (2007-2019) series, *Path of Exile* (2013), *Hitman: Absolution* (2012), *Phasmophobia* (2020), *Tappy Tree* (2019), *Baba Is You* (2019), and *Superliminal* (2019). To ensure relevance and timeliness, the titles all date back to the previous decade with the exception of the *Half-Life* and *Call of Duty* series, which, however, will be addressed indirectly as part of two recent machinima series, *Freeman's Mind* (2007-present) and *Modern Pacifism* (2016-2021). The sites are engaged through varying aspects of an eclectic methodology spanning semiotic and formal game, play, and, sporadically, film analysis, postphenomenological techniques (of reflecting and writing) that tie the perspective closely to the experience of lived play, and cultural-historical contextualization all informed by the present account of games-as-play-partners.

3.1.1. Site I – (Meta)Ant/agonistic Spatiality in *Undertale*

A game explicitly reflecting upon its use of ant/agonistic elements in its spatial preconfigurations is *Undertale* (2015). *Undertale* is an indie game[164] (originally written for PC but later ported to several other platforms) that positions the player in the role of a (human) child who falls to the "Underground" and embarks on a journey through this secret but vast region inhabited by a group of beings called "monsters."[165] Full of silly dialogues, puzzles, and moments of self-conscious breaking of the fourth wall, *Undertale* stands out for its re-configuration of one of the most widespread models of interaction in play, combat. When the player-character[166] meets one of the monsters in the traversable 2D-game world, a game mode logic[167] introduces and communicates the beginning of combat. As in the original *Pokémon Red*, *Blue*, and *Yellow* (all 1996) games for the Nintendo Game Boy, the screen is organized in

[164] Chapter 6 will engage more closely with the concept of an *indie game*, which needs not be further discussed in the context of the present section.
[165] The group of monsters is further described as a non-human "race" in the opening sequence, which foreshadows the frequent use of the concept for the de-humanization of NPCs and thus legitimization of violence to such scales as genocide, a theme *Undertale* also addresses through its possible endings. This is by no means a trivial example and the rampant ties of the concept of *race* to ant/agonistic spatiality in/of games requires more thorough investigation in Chapter 4, which discusses the zombie or ghoul, another monster figure, in the *Fallout* franchise.
[166] The term *player-character* is used throughout this dissertation to draw attention to the curious and exciting blending and overlapping of bodily and procedural phenomena, identity and character, self and avatar in play (see Westecott).
[167] Here and in every following chapter, my interpretation of procedural logics follows Wardrip-Fruin's model of "playable logics" in *How Pac-Man Eats* (see again my appropriation and overview in section 2.3.3.2.).

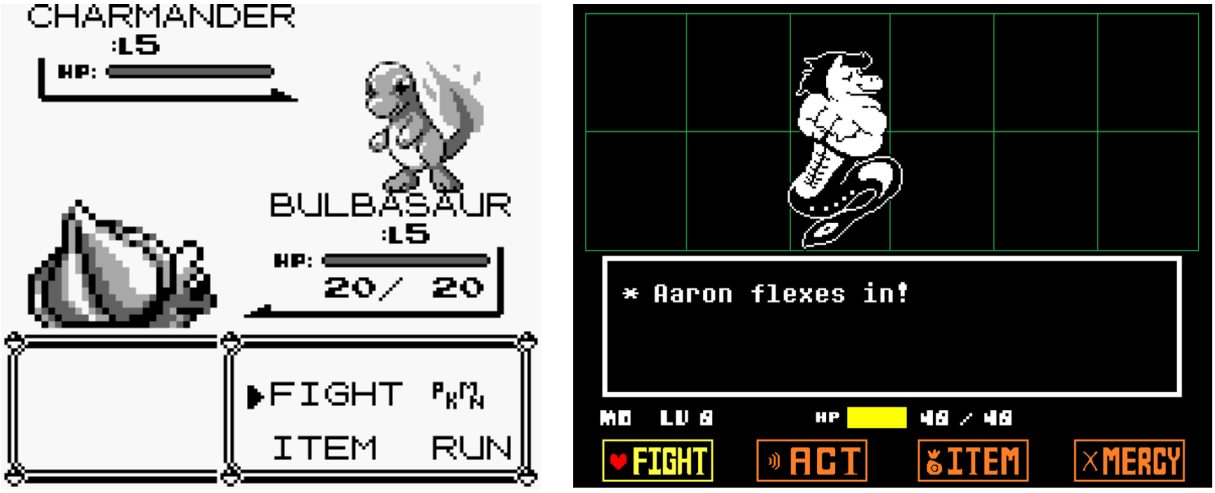


Fig. 4. *Undertale*'s reconfiguration (right) of the original Pokémon combat menu (left still) (Nintendo, "Pokémon").

two sections presenting the opponent at the top and possible player actions below (fig. 4). In addition, the spatial arrangement is accompanied by a turn-based organization of action that takes over (again, in both games).

The combat-based interaction in *Undertale* alternates an attacking instance in which the player engages in timed button pressing to maximize damage dealt with a defense instance in which the player-character's soul, presented as a small heart, becomes the inhabitable avatar of the player who must evade attacks in a bullet hell[168] section. Contrary to the *Pokémon* games, however, *Undertale* offers the player another route of interaction, which complicates its faithfulness to the design referenced. If this option is chosen, various possibilities specific to the encounter with the monster are opened, for example, "flirt," "intimidate," "smile," or "hum" all leading to different reactions based on present and previous player and NPC actions.

Take the couple of newlywed dogs, Dogamy and Dogaressa, who appear as mini-bosses in the second larger area: the non-fighting options given are "check," "re-sniff," "pet," and "roll around" (fig. 5). The peaceful solution to the encounter in this case is to pay attention to how they describe the player-character as a "smelly human." When the player-character first rolls around in the dirt and then lets the two re-sniff her, they think they have encountered a lost

[168] The term *bullet hell* relates to the action/shooter genre popular particularly in 1990s Japan. Here, the genre of *danmaku* (*弾幕* translating to *bullet curtain* or *curtain fire*) is used mostly for 2D games that require the player to constantly shoot and dodge in ongoing series of attacks with increasing (and often extreme) difficulty (see Wadeson). Typical examples of the genre, which originated with arcade titles but has since been extended to console and PC gaming, are *Batsugun* (1993), *DonPachi* (1995), *Ikaruga* (2001) or *The Embodiment of Scarlet Devil/Ouhou Koumakyou* (2002).

puppy. After finally petting them both, the player has found a way for the encounter to end peacefully: clicking on the "MERCY" option allows her to spare the two characters.

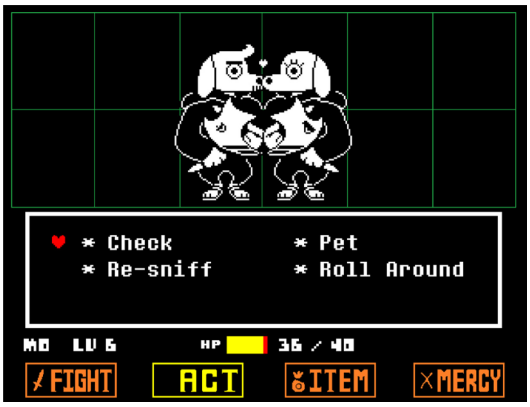


Fig. 5. Non-fighting choices in *Undertale*.

Though encounters like this can thus be solved without violence, *Undertale* does not abandon its ant/agonistic elements – the player-character still takes damage and has to dodge attacks between the turn-based non-violent actions. However, its selection logic communicates a discrete opposition between the options "FIGHT" and "ACT" (see again fig. 5.). In framing the alternative to fighting as acting, the game comments on a meta-level that fighting, one of the most common forms of play afforded by games as play partners, cannot be designated as *proper* acting. Providing the player with a larger range of options, the game enables her to wake up to the relational and complex micro-political and ethical dimensions of the encounters with the monsters. The two characters in the example above, for instance, can open up to the idea that dogs, too, can pet dogs, which exemplifies the mutual development of novel response-abilities the game thematizes but also affords the player. Two different architectonics of playful encounters thus become apparent. The first imagines play as the repetitive performance of a narration of progress, in which the monsters encountered are reduced to resisting resources in that they cause the "LV" (also "LOVE") of the player to rise up, resulting in more health points and stronger attacks (catering to fantasies of immortality and omnipotence). The second, its alternative, thinks of play as the development of response-abilities in exploring the (more-than-violent) possibilities of encounters. *Undertale* uses this latter imaginary of play as a counter-rhetoric to comment on the former. Towards the end of the game, the character Sans clarifies the game's concept of "LV," which the player is likely to have taken as the trope "level," the numerical index of player progression:

> So you finally made it. The end of your journey is at hand. In a few moments, you will meet the king. Together... You will determine the future of this world. That's then. Now. You will be judged. You will be judged for your every action. You will be judged for every EXP you've earned. What's EXP? It's an acronym. It stands for "execution points." A way of quantifying the pain you have inflicted on others. When you kill someone, your EXP increases. When you have enough EXP, your LOVE increases. LOVE, too, is an acronym. It stands for "Level of Violence". A way of measuring someone's capacity to hurt. The more you kill, the easier it becomes to distance yourself.

> The more you distance yourself, the less you will hurt. The more easily you can bring yourself to hurt others.

Sans's comments expose the unquestioned and (in the sense established above, doubly) unconscious way players take such concepts as *level* or *experience points* for granted. Positioning the concepts themselves as play partners that can become excessive and expressive in play, *Undertale* sarcastically questions the ant/agonistic formalization of play, which a hegemonic consensus shared by games and players' gaming literacies takes for granted.

In sum, *Undertale* can be described as a site for *meta-agonistic spatiality* emerging from the self-reflective and intertextual preconfigurations of the game and the negotiation this allows in play. The multiple endings of the game crystallize this negotiation. With every character that can be killed potentially making a significant appearance throughout the game (if spared before), the world of *Undertale* relates and questions a hegemonic model of ant/agonistic game space, which the intertextual links to *Pokémon* testify to. Said model of ant/agonistic space becomes subject to a negotiation of the kind of play the player (enabled by the game) prefers. Though a cornucopia of various ways the player-character can exit the "Underground" can be realized, there are three main routes for endings: the "genocide" ending, in which all monsters are killed, the "true pacifist" ending, in which everybody is spared, and, between the two extreme options, several so-called "neutral" endings, in which at least one but not all monsters are killed. The different endings of *Undertale* are procedural expressions of the processual unfolding of play between the game and the player in which ant/agonistic spatiality is constantly negotiated. Though the Other is already positioned as a monster by the game, the potential for an escalation of this agonistic framing within an antagonistic practice of play, entailing the positioning of the monster as an *enemy*, its dehumanization and consequential eradication, is up to the negotiation in play.

3.1.2. Sites II and III – Playing with Form: Spatial Negotiations/Productions in Machinima

All digital games require the player to embody and submit to some of their formal qualities. Usually, this intimate aspect of play remains unconscious for the player and is only reflected upon in the course of sudden breaks with narrative framings of the practice that game

study scholars have described as ludonarrative dissonance.[169] *Machinima*[170], however, which merge media practices with practices of play, can give insight into the negotiations and the interdependencies of play and form because, firstly, they use (and are bound to use) play and its visual formalization on screen for a means other than the one inscribed into the procedural character of a game and, secondly, because they tend to comment on the form and the narrative setting of the original game used to pursue said means.[171] In the following, two machinima, *Freeman's Mind I* and *II* by Ross Scott and *Modern Pacifism I* and *II* by Kent Sheely, will emerge as sites and sightings of spatial negotiations of play and digital games. Both, in their unique ways, participate in first-person shooter games and comment upon their supposedly empty and unquestioned elements by, as one could put it, making their silences scream.

3.1.2.1. Making the Silence Scream I – Playing with Voice and Character in *Freeman's Mind*

The meaning of a game is not reducible to its form. Beyond the formal qualities of games, further play partners like ideas may be gathered to the place of play and influence the processual unfolding of play in profound ways. Role-playing in this sense is play with an idea, an imagined character, or an identity open to exploration by play's excessive precessuality. As a practice of play, it may alter the ways any game can be played and how it may in turn affect the player. While some games explicitly invite players to role-play, others use explicit characterization of the main protagonist and do not leave much opportunity for the performance of different characters. Some games, moreover, are notorious for merely leaving an empty slot,

[169] The term *ludonarrative dissonance* was originally coined by Clint Hocking in a 2007 blog post that criticized *Bioshock*'s "powerful dissonance between what it is about as a game, and what it is about as a story." The term later proved to be influential for game studies as a critical and analytical tool (see Grabarczyk and Kampmann Walther). *Undertale*'s use of ironic breaks between gameplay and its narrative framing can be viewed as a prime example of a game that does not suffer from ludonarrative dissonance but gain in expressive potential.

[170] The term *machinima* broadly refers to the practice of using game engines to create films (for an overview, see *The Machinima Reader* co-edited by Lowood and Nitsche). It has evolved bottom-up with content creators such as Burnie Burns moving from voice-overing gameplay videos to creating own episodes and seasons like the famous long-running 19-season *Red-vs.-Blue*, which uses the *Halo* games to stage comedic conversations among characters based on the soldiers who feature in the games (see *Season 1*).

[171] Of course, not all machinima use formalizations of play (emerging from the efforts of a game to contribute visual and sonic images, which are then captured as material to work with). In opposition to other machinima, which may as well only use a game's engine or character skins to create content for their own forms, the two cases selected here are indeed based on recorded play-throughs of the *Half-Life* and *Call of Duty* game series. In this regard, they can be read as sites of (embodied and lived) play in spite of their more complex mediality.

a blank for the player to step in, to embody the game through forming (rather than adopting) a *player-character*.

Half-Life 1 (1998) and *Half-Life* 2 (2004) are known for the particularly shadowy anonymity of their main protagonist, Gordon Freeman, whose role the player comes to embody. Freeman is a scientist who escapes the Black Mesa Research Facility, which is invaded by aliens after a failed experiment in the first title. In the second game, he joins a resistance group battling an oppressive alien empire to free humanity and the Earth. Strikingly, although he is the main character, Freeman is entirely faceless and mute throughout the games, neither appearing in cutscenes nor being depicted by quest logs or character menus. This supposedly empty position of a silent protagonist, which other games like *Bioshock* (2007) or *Dark Souls* (2011) are famous for, is exactly what allows for the creation of a player-character, which the series *Freeman's Mind* (2007-present) bases its storytelling on.

Freeman's Mind is a two-season humorous machinima series created by Ross Scott. It combines recorded footage from the *Half-Life* games with voice-over narration performed by Scott in the form of an interior monologue attributed to a re-imagined character of Gordon Freeman (hence the title, Freeman's mind). The series thus combines practices of play with the performance of voice (the series is known best for its screaming protagonist), which both infuse each other with meaning and enable and comment upon each other. Both voice and play are linked via the concept of an *inner mind*[172], creating a sense of unitary self, personified by Scott's voice and used as the focal point for the re-narration of the story of the games.

Freeman/Scott's voice often thematizes the immediate surroundings the game confronts the player with, e.g., by commenting on the lighting conditions of the research facility, which are already strangely dark and green even before the experiment goes wrong in the first game. Frequently, this meta-commentary includes a re-narration of in-game events and moments of ludo-narrative dissonance for comedic effects. When Freeman pushes an under-the-desk security button in the entrance hall in the second episode, for example, the voice-over frames it as an attempt to help the busy-looking security guard reboot his computer, whose screen (in contrast to the seriousness of the moment in the narrative of the game) only gives a static blue screen (Scott*, Episode 2*). However, the constant re/framings of Freeman/Scott also create novel moments of dissonance between the original storytelling of the game and the emerging re-narration. Thus, the moment when the player-character encounters Freeman's locker in the

[172] Here, the analysis stumbles across a first instance of what will be reframed as an instance of *mindspacing* in Chapter 6.

facility, the only space that explicitly serves as a visible marker of the ephemeral sense of identity of the main character – not unlike a shrine of the generic –, there is a notable negotiation of this characterization (fig. 6). As Freeman/Scott opens the locker, he says "What the hell? Whose stuff is this? There's my name. But… But here's a bowling certificate, baby pictures, blue poncho… Where's all my stuff?" (Scott, *Episode 2*). Clearly, the character Freeman as performed by Scott diverges from the original in-game characterization and, indeed, downright refuses this other identity he here steps out of.



Fig. 6. Freeman's locker in the second episode of *Freeman's Mind* (Scott, 00:05:34).

The way Scott plays the game for the recording, on the other hand, also develops a distinct style and is the second source of performative negotiation of both game content and the prescribed form of play itself. After the incident at the lab, for example, Freeman/Scott initially moves in a waving and non-efficient way in a couple of moments to signify the attempt of avoiding puddles of blood on the floor (Scott, *Episode 4*). Scott said in an interview that he often has to "try not to turn too fast, walk most of the time instead of run, try not to make my shots too accurate, 'put away' my weapon when I'm picking up items, using a ladder, etc. If I have some relevant dialogue planned, I try to account for that in the motion of the character, standing in one area longer than normal to contemplate, etc. My gaming style in an FPS is much more spastic, fast, and jumpy than what someone would do in reality, so I'm trying to slow everything down" (Scott "Community Heroes"). The attempt of creating a sense of realism for the machinima even has Scott use the no-clip cheat in a couple of instances where he thinks "someone could reasonably do a pull-up to bypass a hazardous area." Clearly, Scott's style of play has a specific claim to realism that differs from other ways of playing *Half-Life*, and yet, his comments reveal that the sense of reality of a game is never set in stone by its contributions to play alone. Playing with the idea of a character reconfigures the very economies of stimuli, their affective capacities, and their own claims to relevance in play. This becomes most obvious in the second season of *Freeman's Mind*, when Freeman/Scott ignores the most well-known and emblematic tool of *Half-Life 2*, the gravity gun.[173] Upon entering a room in the level of

[173] The gravity gun in *Half-Life 2* draws attention to the innovative physic engine of the second game and, for many fans, is an iconic epitome of the whole title. It allows the player to attract and hold physical objects with the secondary fire option (embodied by clicking the right mouse button for PC users) and launch them with considerable force using the primary fire option (via clicking with the left mouse button).

Ravenholm, in which the player is invited to physically manipulate numerous saw-blades and use them as gory weapons against the human/alien enemies, Freeman/Scott briefly attempts to fire the gun like one would with the other weapons (rather than use it on the saw-blades). As the gun does not fire as expected (because it simply does not function like the other weapons), Freeman/Scott briefly comments upon this and resorts to using the previous other weapons, disregarding what is arguably the most iconic weapon in the game (Scott, *Episode 17* [00:03:38]). Again, an insistence on a distinct sense of reality by the player-character here claims hegemony over the narrative of the game, which tries to affect and invite the player, but ultimately cannot determine the course or meaning of play alone.

However, the subtle intricacies of how the *Half-Life* games *do* preconfigure not just the character of Freeman but also its re/imagination by Scott (and potentially, its entire player base) require attention. In the characterization of the games, as was already pointed out, Freeman appears as a faceless and silent scientist who steps in to serve as an unexpected gun-wielding hero. Prior to expressing his refusal of this identity with the insides of his locker, Scott's version of the character voices his intention to get Oxycodone for breakfast: Scott's Freeman initially appears as a drug-using, anti-social, narcissistic, aggressive, intelligent but immature, and technology- and gun-obsessed control freak whose state of mind, throughout the course of the two games, escalates into a delirium of paranoia, random violence, and destruction, hallucination, and Godlike self-exaltation. This shift of character is most notably conveyed not just by Scott's writing but his delivery in terms of voice acting, which more and more shifts towards the well-known and frequent use of screaming throughout the series. From his puzzled muttering as initial reaction to seeing an alien for the first time and ongoing self-satisfied blurting out of comments on his surroundings to anxious screaming when combat breaks out more often and the later psychotic singing when routinely wiping out whole troops of unsuspecting soldiers – Scott's use of voice creates mood, speed, and rhythm, infuses the game world with a distinct mental atmosphere and thus embodies the affective mania accompanying the mass killing in the games. Most importantly, one could argue, this re/imagination of the character is utterly dependent on the game and its architectonics of play. The question here is less how Scott (as an author) interprets what he once called "a silent protagonist with no personality traits" (Scott "Community Heroes") than how the silence, preconfigured by the game series, comes to scream through Scott's voice. Read in this way, the empty and unmarked positionality of the character of Freeman and the way it already implies the madness of *Freeman's Mind* need to be scrutinized. Especially, this unmarked and naturalized position of

what exemplifies a *Freeman* in the game entails being male, white, and legitimized to wield power by an antagonistic discourse, which aligns science with its projects.

Scott's practice of improvising voiced-over lines for the character reportedly starts with what he describes as "the equivalent of daydreaming or letting your mind wander" (*Special Guest*). *Freeman's Mind*, in this regard, can be described as an *imaginative extrapolation* of the implicit position of the character put forth by the game, which the player comes to embody and is embodied further through associative verbal improvisation in Scott's case (although spontaneous speech acts like the ones he performs are typical rather than rare phenomena of game play). Thus, the hyper-masculinist figure obsessed with his beard and heavy weapons is an extrapolation of an implicit positionality also shared, for example, by Walter White, the protagonist of the series *Breaking Bad*, whom fans of *Half-Life 2* have imagined in the role of Freeman as well. [174] Both are white, male, and armed vigilante characters legitimized to use violence through a narrative of vengeance. In the case of *Half-Life 1* and *2*, the theme of white hegemonic authority at loss (tied in particular to science and the military) appears as a colonial fear, personified by the figures of the enemies, aliens that colonize and zombify the human body (fig. 7).[175] Here, the architectonics of play, drawing from the logics of progression, killing, and antagonistic survival, already point to the madness at the heart of the colonial/colonized subject whose violence is not repressed but escalated in the games and whose humanity is questioned both in them and in Scott's machinima series. Ultimately, it is both telling and not surprising that Freeman fails to grasp the concept of the gravity gun in Scott's reimagination precisely because it is the only tool in the game that may serve more purposes than killing.



Fig. 7. The colonized and zombified human body in *Half-Life* 2.

[174] See, for example, the machinima series by "eli_handle_b.wav" on *YouTube*, which inserts footage from *Breaking Bad* in *Half-Life 2* and thus highlights the common element of an anti-hero and armed white male protagonist who is (argued to be) legitimized to break with an established social order that is framed as no longer just (*Walter White*).

[175] Once more, ant/agonistic spatiality is here linked to dehumanization, and, through the element of zombification, diffuse notions of colonialization and racialization. Chapter 4 will return to these strangely related themes (which have already appeared in microsite I) by explicitly formulating the question for the ant/agonistic as a matter of de/racialization and the colonial history of the zombie figure.

Summing up, the microsite *Freeman's Mind* testifies both to the distinctness and the interdependencies of play and a game's preconfigurations. Playing with voice and character may negotiate the spatiality of digital games by rewiring what matters in play and how play itself proceeds in ways that differ from those prescribed by the game (though still enabled by it). In the case of Scott's Freeman, however, the character makes the unmarked position of *Half-Life* scream and thus draws from, highlights, and comments on the politics already implicit in the series.

3.1.2.2. Making the Silence Scream II – Playing with Pacifism in *Modern Pacifism*

The second example and third microsite is the machinima series *Modern Pacifism* by Kent Sheely, which was released between 2016 and 2021 in two seasons, working with footage from the single player campaigns from *Call of Duty 4: Modern Warfare* (2007) and its reboot *Call of Duty: Modern Warfare* (2019), respectively.[176] The two *Call of Duty* (CoD) titles can both be described as military-themed first-person shooters that employ ant/agonistic and particularly pro-American worldbuilding with modern settings, which tend to refer to real-world historical events but insist on the fictionality of their narratives. In Gagnon's reading, the CoD titles "(1) resonate with and reinforce a tabloid imaginary of post-9/11 geopolitics; (2) glorify military power and elicit consent for the idea that state violence and wars are inevitable; and (3) encourage our myopia by depicting a sanitized vision of war and by downplaying the negative consequences of state violence" (3). Needless to say, the two titles the series is based on heavily use ant/agonistic and competitive architectonics of play, which mirror Freeman/Scott's inability to see a tool as something more than an instrument for killing. The machinima series *Modern Pacifism*, however, adopts a decidedly different strategy for interacting with the game as the description section of the very first video of the series discloses it as "[a]n attempt to play through Call of Duty: Modern Warfare without killing anyone" (Sheely, *Pacifist Run #1*). Contrary to *Freeman's Mind*, there is no voice-over narration and only the practice of play is used to negotiate, probe, and explore the spatial unfolding of the game. Regarding the ways the series recombines practices of play with practices of video-making for critical (even activist) but also artistically explorative purposes, it can be read as

[176] Please note that this microsite thematizes themes of war and violence. Particularly the second half, which deals with the second season of Sheely's machinima series, discusses and graphically shows explicit imagery.

another case of a spatial negotiation in play that re/formalizes its interactions with the form of the digital game.

Modern Pacifism I engages with the spatial presentation of *Call of Duty* in a way that transcends the range of interactions afforded and imagined by the game design – it plays with the concept of *pacifism* as much as it plays with the game. Entering the prescribed situations with an imperative in absolute opposition to the affordances of the game does not only alter the action-related but also perceptive and affective dynamics of play together with the relationships of all three play partners, the player, the game, and the idea of pacifism.

On a first level, the videos thus document the formation of a body at play that is disciplined differently (and more by the pacifist idea than the game) rather than being docile to its prescribed narrative role, that of a killer. By, first of all, refusing to participate in the killing and constantly resisting firing their gun (which is hard given that the game makes it as easy as a soft click with the index finger), the player-character becomes an outsider in the middle of a digital warzone, an uncalled-for visitor never able to escape. While the gun is not shot (except for some instances in later episodes in which the game does not allow progression otherwise), there is still a constant tracing of the action on screen. The reticle in the center becomes the focal point of a spectacle of killing, an affective marker of both the camera position of the player-character, who has turned into a hunted and yet distanced witness, and the role of the viewer, who is even more distanced and yet immersed in the silent performance of resistance addressing her. At the same time, the reticle also points to the lingering and unrelentless possibility of giving in to the logic of the inescapable design and shooting the gun after all (fig. 8).



Fig. 8. The reticle as affective marker of the gun/camera/audience witnesses a teammate (right corner) aiming at an enemy soldier (left corner) (Sheely, *Pacifist Run #3* [00:02:20]).

The disciplined body identified and affected by this camera/gun perspective can be seen (although never directly, in the third person) ducking, crouching, and taking cover behind brick walls, bombed-out cars, trees, and rocks. After all, the enemy is always engaging, and the player-character is fragile, entirely dependent on their teammates to take out the approaching soldiers. This leads to novel tactics of play that are not merely passive (in that the game would at some point fully play itself) and require different and sometimes creative action. For example, the viewer witnesses the player-character attempting to move the NPC teammates onward by using the collision logics of the character models to their advantage (fig. 9). While proning[177] behind one's teammates would not usually make sense because it renders the player unable to target the enemy, this micro-practice becomes vital in one of the episodes when advancing through the level by opening fire is not the preferred line of action. As the teammates are, furthermore, unable to die like the player-character, they become suitable as human shields that enable the player-character to move on.[178]



Fig. 9. Moving an NPC teammate on while using them as human shield (Sheely, *Pacifist Run #6* [5:40]).

By ongoingly and performatively positioning the body and inscribing the idea of pacifism in the game space, *Modern Pacifism* shows that the meaning of *CoD* is not reducible to its procedural logics. While the game generally attempts to portray war as a controlled and efficient enterprise of trained experts, the series' pacifist type of play counters this narrative as it focuses on witnessing the teammates do the work - however, they often stand still or, as just

[177] In first-person shooters like the *CoD* titles, character models often have three state logics: *stand*, *crouch*, and *prone*. Proning coming close to laying flat on the ground with the head looking to the front as to minimize the portion of the body that can be hit by enemy fire while still being able to shoot.

[178] The game play that the footage documents is full of many more interesting alternative play practices that, unfortunately, go beyond the scope of this section. In episodes five and seven, for example, some game actions like the pattern of a dog attack and the amount of damage dealt to the helicopter, which the player-character is supposed to fire from, make use of procedural chance logics. Hence, Sheely strategically saves and reloads the game until the player-character survives the attacks without having to fight back. Further moments in the machinima series document more directly interactive moments like the picking up and redirecting of enemy grenades from the own team without harming any enemies.



Fig. 10. Dilemmas of pacifist play: an old man (right) is being threatened by enemy NPCs (Sheely, *Pacifist Run #5* [00:02:03]).

mentioned, need to be pushed along. Other in-game events receive new levels of meaning, too: in one instance, the player-character sneaks up on a group of enemies who threaten to kill a civilian (fig. 10). Whereas the implied (instrumentalized) player would even more readily react to yet another justification for opening fire, the scene becomes an ethical challenge for the pacifist player. As the player-character in the episode does not choose to fire the gun and the old man is murdered, the concept of pacifism itself is probed and explored as a play partner. Should pacifism be a deontological imperative like in the Ten Commandments or rather a utilitarian doctrine that might allow killing in extreme cases? Is pacifism equivalent to an ethical code that minimizes absolute harm to the individual, as the player-character's actions imply as they shoot an enemy in the foot when the game again requires them to attack a sniper (Sheely, *Pacifist Run* #9 [00:13:16])? If the player-character merely waits for their teammates to obliterate the other soldiers (*Pacifist Run* #4 [00:08:44]), is pacifism not equivalent to delegated killing? Is violence without alternatives in a violent world?

Ultimately, in the second series of videos, *Modern Pacifism 2*, which explores the more recent *Call of Duty: Modern Warfare* (2019) in a further pacifist playthrough, the idea of pacifism and the game cease to be compatible play partners. In the eighth and final episode, progression in the game becomes impossible without resorting to violence. The level in question is the much-criticized sniper mission entitled "Highway of Death." The title is a direct reference to the actual Highway 80 between Kuwait and Iraq, which became a site of massive U.S. violence against retreating Iraqi troops in 1991. In the course of the in-game mission briefing, however, the player is told "The Russians bombed it during the invasion, killing the people trying to escape." In the mission, the game leads the player-character to the top of a house and equips them with a sniper rifle. As the scope is elevated to the camera/gun/audience perspective in the machinima, however, a montage shows footage from the game cross-cut with actual video footage from the Gulf War, revealing a deserted and ghostly road with charred or still burning vehicles and military equipment but also scattered belongings, and what could be bodies under blankets in the sand (fig. 11).



Fig. 11. Actual video footage from the Gulf War with added in-game elements such as the rifle scope and ammunition interface (Sheely, *Pacifist Gameplay #8* [00:02:04]).

The illusion of a safe world for play is shattered in this hyperreal moment that highlights the non-innocence of the game's claim to realism and its previous but now-called-out monopoly of truth-writing. Ironically, the viewer comes to realize (though not immediately) that these images speak in a different tone and of a different world because of the pixelated form of the images that thus appear *less* real compared to the clear shapes and well-lit spatiality of the in-game graphics. The emerging effect feels like falling through the scope, out of the world, into an older, more distanced one; one that is unable to speak or was silenced, one in which a bomb is not a play partner but where play has been bombed; this is the world of Tony Harrison's poem "A Cold Coming," in which the war poet imagines an interview with one of the countless charred bodies that haunt him from one of the few but gruesome war photographs (the one referenced is by photographer Jarecke, see fig. 12) of Highway 80:

> I saw the charred Iraqi lean towards me from bomb-blasted screen,
> his windscreen wiper like a pen ready to write down thoughts for men,
> his windscreen wiper like a quill he's reaching for to make his will.
> I saw the charred Iraqi lean like someone made of Plasticine (Harrison lines 1-4)



Fig. 12. *The Death of an Iraqi Soldier, Highway of Death, 1991* by Kenneth Jarecke. The image was initially banned in the US and inspired Harrison's poem "A Cold Coming."

In the machinima, the images flow on and the audience witnesses the following: a vehicle on the side, black smoke rising. Cut. View from above looking out of a helicopter onto dozens of deserted vehicles on the dusty road. The camera moves up, the road extends: there is no end to it, no horizon. Cut. View from a vehicle moving between the skeletons of cars. Now, the ground is littered with unidentifiable things, belongings, things that belong to unidentifiable people. Now the ground is empty again, just dust. Cut. View on foot, the camera shakes with the steps of an invisible person. A brown, charred car, now appearing huge as it is singled out. An obstacle, the gun/camera/audience moves around it. No windows. No color. Cut. View from below, close to the ground now. A blanket. A shoe. Is there still a foot in it? Silence. Not just the absence of sound, but a silence captured by the recording, inseparable from the image, shot through with the wind, shot through with steps, a silence like a hole, screaming. Cut.

Yet, we return to the previous world, the one that equipped us with the scope and the rifle attached to it. A turn left, the scope is elevated again and this time it is drawn to the margin of the map: a white flag is waving in the distance (fig. 13). The flag wavers, stutters, is moved on by forces outside of it. The procedural breathing of the player-character swings the perspective slowly up and down, mesmerized by the look, witnessing. Everything is still silent. Play has stopped, the game is no longer moving the player on. No more in-game events are triggered. At this point, play has been replaced entirely by the motions and im/mobility of documentation and witnessing. In the last 20 seconds of the machinima, however, which crystallize the relations between play and form, between the player and the character, and between the audience and the digital camera, the on-screen no longer refers to a game or the end of a video but a place for a conversation that is only beginning. Ultimately, what connects the indexical forms of the photograph, the poem, and the machinima referred to here is the inability and the refusal to go on where a silence is screaming. As the final words of Harrison's poem *index* rather than denote: "I pressed REWIND and PLAY and I heard the charred man say:"



Fig. 13. A flag on the margins of the map, where the machinima ends (Sheely, *Pacifist Gameplay #8* [00:03:13]).

3.1.3. Site IV – A Postphenomenological Glimpse of *Path of Exile's* Lived Spaces and Non-Places

Beyond formal givens of digital games, space and spatialities emerge from the playful (i.e. affective) entanglements with embodied living beings. One of the major arguments of Chapter 2, therefore, was that spatiality arises from the medium as a *lived* phenomenon. Academic explorations into space that rely exclusively on objective descriptions of digital games and their worlds often fall short in this very regard. In the following, the free-to-play

action-RPG *Path of Exile* (2013)[179] may serve as a site to detail how a particular style of play allows quite idiosyncratic experiences of space-time, which often escape (but, it needs to be pointed out, only enable) primarily semiotic readings of games.

Path of Exile is an online-multiplayer hack-and-slay[180] RPG with a quickly progressing leveling system, whose difficulty rises substantially towards the later game. It features seven character classes, all starting in different locations on the enormous skill tree, which consists of 1325 different skills. The cornucopia of randomly generated items, such as flasks, weapons, and armor dropped by the defeated enemies, can further be combined with so-called gems. The latter provide the player with novel combat and magic attacks or upgrade these. As there are 454 different gems, a large part of the gameplay consists of obtaining and re/combining equipment, gems, and passive points on the skill tree.[181] This is captured adequately by the customary expression *character build*, which testifies to the almost mechanical trial-and-error process of finding synergies to make a character with suitable offense and defense stats to traverse not just the ten acts and their distinct parts of the dark fantasy game world but also the end game with its extreme (and often frustrating) difficulty levels.[182]

From a postphenomenological perspective, the experience of space-time with *PoE* depends to a large extent on the difference between melee and ranged builds. While a Marauder build progresses by head-on close combat attacks initiated by clicking the left mouse button on the next target, a Ranger is first of all positioned statically to shoot from a safe distance and only resorts to movement to bring further enemies into the shooting range of the bow. With the first build, I click where I want to go and attack where I stand, with the second, I click where I want to attack *or* where I want to go but the two are not the same. Both, accordingly, have different *rhythms* of play and differ in how they traverse the game space: the melee fighter moves from kill to kill always directly engaging entire groups of NPCs in straight lines

[179] Though the official release date of *Path of Exile* was in 2013, the game has been continuously developed further in larger updates, so-called leagues, which have cyclically introduced novel mechanics, maps, and characters. The most recent league, as of writing, was added in 2024 with the *Necropolis* update.

[180] The term *hack-and-slay* already captures the imbalance between the story and combat elements of this genre, which was pioneered by such games as *Ultima* (1981) and *Diablo* (1996). As the first site, *Undertale*, details, a dominant logic of games grouped under this term is that of progression in which an amount of experience points (or EP) is gained by defeating (often large groups of) enemies.

[181] In light of the gem mechanic, the game is a prime site for linking and recombinatory procedural logics, as gems and gem sockets in armor and weapons come in three colors (and an uncolored type). In addition, the sockets are sometimes linked to one another, allowing the effect of one gem/skill to adjust or combine with others. In this regard, the game features prominent elements of both of Juul's types of contingency, i.e., recombination and progression.

[182] Often involved in this at times tedious work is a particular series of practices describable as *grinding* and *farming*. For an in-depth discussion of these practices of play, see Chapter 5 and the additional quantitative and qualitative data gathered and discussed in the appendix.

exploring the edge of the screen as the new battleground for the next moment, aiming to become a gravitational center for the movement logics of the enemy that is programmed to quickly approach the player. The ranged fighter, however, moves much more carefully in smaller heaps, as coming too close to an enemy will result in a shortened time frame for shooting first and unharmed. The first build necessarily feels more tanky, while the second feels fragile in the encounters on the maps.

While these general remarks about play styles apply to a multitude of various games from the genre, *PoE* is special when it comes to the variety of experiences of space-time that different builds and mechanics have to offer. Take my recent build of what the community describes as a *Cold DoT Elementalist witch*. *DoT* stands for *damage over time*, which is a mechanic only perpetuated in the later updates. The build makes strong use of an area debuff that automatically (i.e., without having to target) affects enemies within an area-of-effect with an entity-state logic inflicting damage over a period of time.[183] More specifically, it uses the skill *Vortex* on the left mouse button, which causes an icy explosion to expand around the current position in conjunction with various skills to increase the former's DoT, its cool-down time (the time interval before it can be used again), and its area of impact. Playing with a focus on this particular gem (a style of play only afforded by it rather than pointing to the player as an author) brings substantial changes to the experience of space-time in *PoE*, which postphenomenological points of access may illustrate.

As I enter a map or area in *PoE*, I activate all buff effects (like permanent defensive auras and totems from other gems) and immediately open up the mini-map with a firm and routinized slap on the tab-key. The mini-map, which is a common design element in RPGs and open-world games, is not placed in some corner of the screen in *PoE* but appears overlayed in the very middle of the screen. A quick glance makes out the position of my character and allows me to move toward the blue frontier on the mini-map that indicates the yet undiscovered and untraversed regions of the map. For this, I click and hold the left mouse button, pointing the mouse in the direction indicated by the mini-map (rather than the actual game-world or map that only appears under it). My character keeps running and thus unveils the regions covered by the fog of war, revealing novel borders and shifting the blue frontier on. Moreover, the very moment I click and my character moves, the *Vortex* ability triggers, and a considerable portion

[183] Compared to the Marauder's way of moving closely into enemy groups to kill them, the logic entailed by the *Vortex* gem/skill here mirrors the difference between the collision logic of the original *Pac-Man* (1980), in which the player-character makes the opponent disappear by colliding with their position, and the timed entity-state logic of *Bomberman* (1987) for the NES, in which bombs take out the adjacent spatial areas.

of the screen is filled by a floating and swirling circle indicating the area of effect. Since the skill has a cool-down time, it triggers again some fragments of a moment later (I exactly though not objectively know the time frame when I move). I reach the first creatures of the map and they immediately run toward me. A peak of action and pleasure - the scene contracts. My body automatically reacts: while *Vortex* keeps triggering, I either press the E or R buttons with my right middle and index fingers to trigger *Flame Dash* or *Shield Charge*, which both allow me to dash on with enormous speed leaving the gathering crowd behind me to die in the line of vortexes (fig. 14). The dash is so quick it almost teleports me towards the unknown section of the map. The next vortex already triggers, my eyes dash over the map, my right hand finds the next angle for the mouse, the left mouse button is still pressed, my pulse accelerated.



Fig. 14. Playing with the Vortex gem in *Path of Exile* creates a lived spatial experience of rhythmic movements full of speed and abstractions.

Playing with the vortex gem in *PoE* lets the movement across the map itself be the primary mode of spatial engagement as no single enemies are attacked, contrary to most other play styles. The rapid experience of space-time is framed by the rhythm of the exploding sounds of vortex triggers, individuated by the gaps resulting from the cool-down time of the skill. The sound mixed with the explosive visuals filling up the screen with shimmering grey-blue vortex bubbles becomes an embodied measure for the movement, the synesthetic pulse of a deadly spatio-temporal distribution of vortexes over the map and pleasure over my body. When my character flies across the map, movement and combat are merged into the same thrilling motion of a diffuse, affective spacing. The use of the *Shield Charge* skill adds plateaus of intensity and

even more speed to the rhythmic experience. Strikingly, the creatures on the map do not become individuated, they do not capture my attention. Passing by in the periphery of my eye, they appear close to walking treasure chests that open automatically to drop loot. Most importantly, however, they offer experience points, which the greedy speed-run across the map reaps and is affected by. While the enemies are centers of attention for other builds, the DoT witch treats them as epiphenomena of her speedy spacing practice. The usual game mechanics of combat, offense, and defense (the intimate movement back and forth of the Ranger, for example) are replaced entirely by a highly affective flow of experience that abstracts the entire map to a resource, the play experience to a flow of experience points.[184]

The use of the mini-map over the actual aesthetic look of the game world exemplifies and perpetuates the spatial abstraction of the play style. In this aspect of a deindividuation of space, the lived spatial experience the build allows and affords can be described by Augés concept of *non-places*.[185] The "traveler's space," Augé writes, is the "archetype of non-place" (86). However, I do not even look at the surroundings of the player-character anymore. Imagine instead a traveler who *only* looks at their map while the places pass by at lightning speed in its periphery. The two still converge and, indeed, merge, but the rapid movement requires the abstraction of the (mini-)map to secure the smooth operation of embodied navigation.

PoE sends me through atmospheric dark fields, vast beach areas with a full moon reflecting on the water surface, steaming deserts, magical forests, burning city ruins, and narrow and convoluted sewers; and yet, I tend to neglect the visual presentation of these crisis-laden settings and operate the same schematic mini-map in my lived experience of space-time. While spatial analyses focusing on these postapocalyptic spaces and their ant/agonistic imaginaries

[184] Here, we are already touching upon a practice of play that could be described as farming and will be conceptualized further in Chapter 5.

[185] Augé defines a non-place as a novel, in his theory, "supermodern" type of place that lacks some qualities of what had previously constituted a "place": "If a place can be defined as relational, historical, and concerned with identity, then a space which cannot be defined as relational, or historical, or concerned with identity will be a non-place. The hypothesis advanced here is that supermodernity produces non-places, meaning spaces which are not anthropological places, and which [. . .] do not integrate the earlier places" (77-8). The places he has in mind are functional, prescriptive, prohibitive, transitional, tied to capitalist practices, anonymous, yet informative, not meant primarily to be lived in as homes. They are populated by supermarkets, taxi ranks, slot machines, credit cards, warning signs, means of transport (the plane, the car, the train), stations, and hotel chains. Despite his negative term *non*-places, they can still be described as places because both are not discrete categories but "opposed polarities" (78). While I also draw from the capitalist abstraction and anonymization of space that the term *non-places* captures, the way they also create "the shared identity of passengers, customers, and Sunday-drivers" (100) in Augé somewhat exhausts my metaphoric use of the term in the realm of games. Here, discussions of place-lessness as in Edward Relph's *Place and Placelessness* or Meyrowitz's *No Sense of Place*, which could be read as accounts calling into question the novel senses of place produced by digital technology (including digital games) - usually in favor and lament of a more traditional sense of place to be recovered or saved –, are not of interest for the present work. Many of these arguments rely on a problematic framing of *digital space* (opposed to and severed from space), which was problematized as part of the previous chapter.

are certainly possible, the lived experience of the player, as a postphenomenological approach to games and the current microsite reveals, may clash fundamentally with primarily semiotic and disembodied analyses of space and place.

3.1.4. Site V – Indexical Spatiality and the (More-than-)Possible in *Hitman: Absolution*

The present work has emphasized that games embody imaginaries of play and that various ideas, things, and bodies are inscribed into the ways games preconfigure play. While a game's architectonics never fully determines play nor should be the only interest of academics and critics, it preconfigures play in far-reaching ways, particularly where the digital technology of its architecture is territorial and defies many immediate attempts of engaging with the procedural logics in ways other than prescribed (microsite III already gave an account of how play practices ultimately rely on game design to a large extent). The upcoming site is meant to explore these doings of games further especially where design practices disclose and thus explicitly conceptualize their own architectonics, and, more exactly, the roles of the possible and the more-than-possible as attractors for play.

In the southern part of the frozen world of *Skyrim* (2011), I come across a treasure map of Fort Neugrad (fig. 15). It indicates a particular position behind a lake next to a castle. With a raised eyebrow, I decide to go on a treasure hunt and, after a short but frantic search, I find a chest hidden in a rocky area. While *Skyrim*, for the larger part of its world-building, uses free exploration or narratively pre-scripted quests, the game here switches to a different strategy to enable me to play: it *indexes* one of its elements and thus invites me to a spatial-explorative model of play, which is an alternative to its more combat-



Fig. 15. Treasure map from *Skyrim* (2011).

based elements.[186] In the following, *Hitman: Absolution* (2012) may serve as a site for the kind of *indexical spatiality* highlighted by the map because it has dedicated an entire mode of space (and a mechanic) to this indexical function that communicates a game's architectonics to the player.

Hitman: Absolution is a 2012 third-person-perspective stealth game in which the player takes on the role of Agent 47, a genetically engineered contract killer. Each level has the player-character interact with an environment, social situations, weapons, and tools to take out one or several targets. Whereas the game accommodates different play styles varying in how much violence is used, a stealthy approach is generally favored and results in higher ratings and rewards. There are five difficulty settings to choose from that alter the behavior and strength of NPCs and the availability of a core mechanic of the game, which this title introduces to the *Hitman* series, the so-called "instinct" mode.[187]

The instinct mode in the game is presented as a mode of space, accessible through the pressing of a button.[188] As I move through the crowded but dimly lit streets of Chinatown in the second level of the game, I spot the target in a pagoda in the middle of a public square. He is heavily guarded by police forces who blend in with the crowd. I look around by letting the mouse wander in slow circles, searching for clues to the situation. Suddenly, he gets up and leaves his guarded nest. I follow him slowly through the crowd but keep my distance. In a side-

[186] The map found in the game world, especially, transcends the practice of navigation that concerned the first chapter in that it only vaguely indicates a location (one could say it opens up an intense region and a regional intensity) in opposition to the world map and mini-map mechanic, which unambiguously and objectively locate the player-character on the map.

[187] Note that *Hitman: Absolution* is not the first game to use such a mechanic. A more comprehensive review of the kind of meta-communicative mechanics, which exceeds the scope of the present section, would have to start with Samus Aran's X-ray scope in *Super Metroid* (1994) for the SNES (Super Nintendo Entertainment System). The scope reveals fake walls or hidden game elements and temporarily freezes time (as with the present site). Furthermore, the scan visor feature reappeared in a different shape in *Metroid Prime* (2002) for the Nintendo Game Cube, where it reveals pieces of information (like enemy weaknesses). These early game design mechanics were then used and popularized further, most importantly, by the eagle vision mechanic in *Assassin's Creed* (2007). In this initial title of the famous game series (2007-2023), it temporarily turns the screen grey and identifies NPCs in different colors. In most of the games of the franchise, the ability is a superhuman skill of the protagonists and became available constantly with the later titles. An exception would be the prequel *Assassin's Creed Origins* (2017), in which the protagonist sees through the literal eyes of his companion, an eagle, in a variation that plays with the name of the mechanic. The second series engaging in a similar mechanic more consistently would be the *Batman: Arkham* games (2009-2024), with *Batman Arkham Asylum* (2009) being the first one to use the iconic detective vision to reveal pieces of information during the analysis of crime scenes. Later, many more games picked up on different versions of the mechanic, with the revelio spell in the recent *Hogwarts Legacy* (2023) being another prominent adaptation. As this brief overview reveals, the prefix *re* in *p/re/con/figuration* often entails intertextual repetition of design patterns across decades, game series, platforms, and genres.

[188] Beyond the spatial-informational aspect of the instinct mode, there is a second key function: it allows Agent 47 to blend in with his environment and thus bypass or ignore attracting the attention of passers-by, security personnel, the police, etc. Though this second function has sparked controversy among players (with the point of contention being that it makes the game much easier or that such a mechanic should not be needed by the player to master some situations), this aspect is not the focus of the present section.

area, in which sushi and fish are sold, he approaches a food stand. I sneak into the opposite side of the booth and stand directly behind the chef. Time runs fast now, and I become aware that only a limited window for action opens up. Open fire across the counter? Is there a silent way to distract the chef? A way to abduct the target? Act now or strike later? To consider my options, I press the control key and the in-game world slows down considerably, the screen is plunged in grey and only certain parts of the visual image transform to reappear in signal colors. The target appears in red, I can see the chef appear in yellow (he must have a special role), and a further person becomes visible through the wall. My eyes catch glimpses of a gasoline can in the bottom right corner of the screen, a filet knife in front of the chef, the highlighted food on the counter (it can be poisoned with venomous Fugu fish, as I find out later), and behind the target, a garbage can big enough to let a body disappear (fig. 16).



Fig. 16. A scene from the mission "The King of Chinatown" in *Hitman: Absolutions* (2012) without (top) and with instinct mode enabled (bottom still).

The instinct mode is primarily indexical: it individuates, hierarchizes, and evaluates the spatial elements appearing on screen. It thus explicates and visualizes not just the mechanics and logics of the game but also their evaluations (the latter usually remain implicit as they are unconsciously embodied by the player as she adopts the game's affordances). In doing so, the mode exercises a didactic and disciplinary function and, hence, reveals an imbalance of knowledge between player and game, which is, again, seldom thematized directly. Most significantly, the game's indexical spatiality communicates its architectonics (appearing as an altered or commented-upon architecture), its imaginary of play: it frames play as the player's task to find a solution to a problem not posed by her (but adopted from the game narrative); a solution whose approaches are already distributed (preconfigured) and now become highlighted

by the game, as with an ongoing tutorial section. The authoritative claim to the problem, its solution, and their narrative framing thus remain with the game.[189] Through the spatial interaction provided by the instinct mechanic, the player shares the game's knowledge of prescriptions on a representational level: a particular set of *the possible* enabled and bounded by procedural structures appears.

However, there is a conflicting imagination of play present in the architectonics of the game world. It is made visible by the design choice to render the instinct mode optional and subject to player preference. It is not random that the highest difficulty level is labeled the "purist mode" and that this "pure" level does not feature the instinct mode at all. In this alternative style of play, the set of the possible is not and cannot become knowable from the onset – the knowledge imbalance between game and player persists and permeates a series of challenges. The player moves about, pays attention differently, explores, imagines, puts forth hypotheses to falsify, reimagines, recombines the options gathered so far, recursively moves through steps and sequences to share and become intimate with the secrecy of the game: in all of this, there is a negotiation between the possible (which only becomes knowable gradually and in retrospect for the player) and what could be deemed the *more-than-possible*. The latter is not representable, often only vaguely present, an intensive excess of potential meaning generated by both game and player together. It is ideal and real, a solution, but one for a different problem than the one preconfigured and communicated by the instinct mechanic – the shifting problem of how to renew play. The indexical spatiality of *Hitman: Absolution* threatens to make it superfluous by subjecting the more-than-possible to the possible, but it also testifies to it by giving in to the desire that challenges the game to reveal its secrets.

Coming back to the role of the map in *Skyrim*, it is notable that this indexical practice also sites the significance of the imagination and fantasy of the player. By indirectly representing rather than disclosing the element of the new and leaving its precoded set of possibilities unrepresented, however, the treasure chest exemplifies how games can give place to fantasy, which is always on the verge of the possible and the more-than-possible. As the player is driven by fantasy, she transcends her very being rather than merely recombining her

[189] In this framing of play, which relies on a lusory goal as well as more and less effective means permitted by the rules, (particularly in regard of its two easier game modes) *Hitman: Absolution*'s conception of play comes close to Suits's concept of play (see again: "to play a game is to engage in activity directed towards bringing about a specific state of affairs, using only means permitted by rules, where the rules prohibit more efficient in favour of less efficient means, and where such rules are accepted just because they make possible such activity" [48-9]). An alternative idea of play and its organization is embodied in the *sandbox* concept of games such as *Sim City* (1989), *Minecraft* (2009) or *The Forest* (2018). The idea of the sandbox will be revisited in Chapter 5 with the sites *Animal Crossing: New Horizons* and *Conan Exiles*.

or the game's notions of the possible. Fantasy is what pushes the possible to its edges and this intensity affects the player. While I do not remember the items inside the chest, I vividly recall finding the map and going on a hunt. The item of the map testifies to an architectonics of play that frames the idea of the unknown, or a virtual idea, as a prime way of forging relationships between game and player. At the same time, by communicating the rough direction or area of the location of the chest, *Skyrim* reconfigures and actualizes the virtuality of play and likely future game states by directing player action according to its distinct architectonics of play. Indeed, the treasure chest only appears in the game once the player-character has accessed the treasure map.

In sum, the indexical spatialities of *Hitman: Absolution* and *Skyrim* give insight into the games' architectonics of play, both of which contain knowledges of fantasy, which is made place for. *Hitman: Absolution*, in particular, reveals how the disclosing of possibilities (together with the very construction of the category of the possible) can be the death or the making superfluous of fantasy and the imagination. The games thus reveal that the concepts of the imagination and the unknown are driving forces of play and that fantasy edges on the possible and the more-than-possible (the non-representable, the virtual), potentially transcending both a game's procedural possibilities as well as how these possibilities are affectively played out.

3.1.5. Site VI – Messy Sonic Spatiality in *Phasmophobia*

A core thesis of the previous chapter was that the digital is not a bounded and Other sphere detached from processual materiality – its experience is always messy, hybrid, and mediated by spaces, technologies, bodies, and practices. As a technological and territorial practice of procedurality, digitality strives to organize and formalize lived and chaotic phenomena as intelligible pieces of information for various means. One of these means can be the preconfiguration of the processual flow of play with a digital game.

Among the core elements to reveal the messy nature of the spatiality of game play is sound. The phenomenon of sound is decisive and constitutive for experiencing space and place as meaningful, emotional, and social parts of life and play. Sound adds mood, intensity, rhythm, and voice to the procedural and processual unfolding of play. In some games, sound even becomes a core mechanic through which the body and the game communicate and relate.

Phasmophobia is a 2020 first-person horror/investigation/survival game in which up to four players take on the roles of ghost hunters and investigate paranormal activities in a haunted house.[190] In the dark and often claustrophobic domestic spaces presented by the game, the players use various pieces of equipment (such as a flashlight, a photo camera, an EMF [i.e., an electro-magnetic-field] reader, or a UV flashlight) to identify the type of ghost they encounter together. Besides the attraction of the puzzle aspect, a large portion of the affective intensity of the game comes from the play with emotions, affective responses, and the safe kind of fear that the game renders enjoyable. One of the strategies engaged by the game is to position the players together in a shared situation of *disability* in relation to a mostly invisible and supernatural threat. The tools of the ghost hunter, on that note, are like prosthetic sensual mediators that re-enable the player/team to take on their task of identifying the ghost (UV light and flashlight allow the embodiment of light, the positionable video camera of distance, the spirit box of sound, etc.).[191] Taken together, they signify the relational way the procedural logics self-consciously operationalize the shared aspects of embodiment constitutive of the circuits and flows between body/game, digital/analog, and procedure/process. Between the latter, they effect and communicate bidirectional exchange and translation, which a postphenomenology of sounding practices with the game can outline.

Grafton Farmhouse, ground level. Squinting my eyes, I direct the beam of my flashlight through the room, let it wander and wave over the dark wooden walls. My friend B. follows me closely. My headphones give me a squeaky sound on my left. He has just opened a door. I turn to take a look. As I see him disappear into the room, his voice tells me he is going to check the room with the UV. As he moves further away as he speaks, his voice becomes quieter. I affirm this and tell him I will go one room further. As I move closer to the door, I hear a muffled, soft noise. I hold my breath for a second, my face closer to the screen now. I click and hold the left mouse button over the door, move it right in a slight circle: the door opens with the same wooden squeaky sound. The light cone of my flashlight reveals a roll of toilet paper on the ground. I quickly call my friend, and his footsteps draw nearer. He crouches, and his EMF reader gives a level five signal: ghost activity. I position the camera at waist level in a corner of the room while he checks the room for UV evidence. “Nothing”, he tells me. I announce I will try to speak with it and then meet him in the van to get more equipment. He affirms and

[190] While the game can also be played in single player mode, it truly shines when played together with other embodied human play partners as this enhances the experience of the game play and, in particular, of sound and the communicative aspects greatly.
[191] A player can carry only up to three items at a time in *Phasmophobia*, which keeps up both the condition of partial disabilities and the resulting necessity for teamwork and recursive lines of action in multiplayer mode.

leaves the room. His footsteps fade away. Alone with the ghost. I change my equipped item with the mouse wheel and select the spirit box. A croaking and buzzing sound comes from the recording device and creates a novel soundscape affecting the room. I have to focus now so as not to miss anything that could be a voice. Eyes on the orange display, I clear my throat and ask my questions hurriedly, but routinely stressing the syllables: "Are you here?" Pause. No response. "Are you old?" Pause. No response. "Are you close?" Pause. Then, as the spirit icon on the device flashes, a voice replies: "I'm behind you."

Sound and voice are among the main play partners of *Phasmophobia,* as the game play heavily features practices of sounding, communicating, and listening. Against the background of the dimly lit and sometimes pitch-black interiors, sound adds modes of spatial relationality, individuation, navigation, investigation, addressability, and shared accountability.

On a first and basic level, sound is used by the game to make its world and events audible, which adds to the mutual intelligibility of sound, visuals, and touch, allowing for experiences of embodied multisensory immersion. This way, affective relationships can be established, and the place for play (including the on-screen but also the sonic echo chamber of the space occupied by the player; indeed, the space that *is* the player) easily becomes a place of play. Doors squeak, floorboards sigh, walking (i.e., pressing the W-key) produces footsteps, and flipping light switches makes a fast, cracking clicking noise. The game world presents itself as a sonic play partner.

In the multiplayer mode, the ghost hunters perform as a group, and, therefore, need to communicate: sharing current projects, ideas, strategies, new knowledges, commenting on the present events, ratifying, being baffled or speechless, gasping, screaming, verbalizing, synchronizing, rhythmifying, disrupting, doubting, making fun of… The game equips the players with the ability to talk to one another in-game either by establishing local auditory relations as long as they are in (digitally preconfigured) hearing range or across distance via in-game walkie-talkies. Sound thus becomes a measure of spatial intimacy, a way to appear to one another, and a means of establishing co-presence.

Beyond the in-game soundscapes and the possibility of team-speak, which are among the most common doings and affordances of multiplayer games today, *Phasmophobia* further establishes sound as a play partner through the option of communicating directly with the game itself via sounding and voicing. The primary gadget to enable the sonic link between the player and the ghost is the spirit box (fig. 17).



Fig. 17. Using the spirit box as a sonic play partner in *Phasmophobia* (2020).

Though not all ghosts that can be identified and differentiated in the game are sonic beings, those who speak are likely to share their voice when the player uses this device. The game uses voice recognition technology to detect cue phrases with regard to location (e.g., "Where are you?"), aggression (e.g., "What do you want?"), or age (e.g. "How old are you?") of the ghost and gives short but chilling responses (e.g., "I'm close", "hurt", or "old", respectively). When the device is not used, however, the ghost may also react aggressively upon hearing its name or any utterance made when on a hunt. The game thus continuously eavesdrops upon the team of players, which may considerably alter what is said or how much is spoken in a situation. Finally, when the ghost kills one of the players, the game emits a chilling choking sound, taking over their voice and then silencing them totally until the next round.

Taken together, the various functions and sources of sound in *Phasmophobia* add up to a *sonic spatiality* that is fundamentally messy, hybrid, and, nevertheless, vital for the game play. During play, it is often indiscernible where a sound comes from as there are multiple mediations at hand and sound/voice implies but does not always reveal a body.[192]

The multiplayer aspects highlight how the digital as a practice (rather than as a bounded space or place) merges and converges various elements of geographically distinct locations into shared spatial experiences. With digital technology, the place of play may be shared even if the

[192] Here, the phenomenology of sound contradicts the theoretical propagation of a smooth and objective separation between game and non-game elements/actions (see, e.g., Galloway).

respective places for play are not. For each individual player, however, the embodied experience of sound already testifies to the inseparability of game-world-player for which play produces new resonances and echoes.

As a site, *Phasmophobia* further makes observable how the procedural and the processual may share a sonic mediation in play. The processual communication of the players is thus mediated by the procedural structure imposed by the game: they usually start with a discussion of the hints given at the starting point (the van in front of the house). Then, they look for the room the ghost dwells in, search for evidence (each player accounting for the types of sensualities they embody through the tools they pick up), maybe have to recursively look for the room again if the ghost changes its location, etc. In contrast to other games, however, *Phasmophobia* listens to the voices of the players. Therefore, the procedural doings of the game reconfigure what can be uttered when. On the other side, the processual and affective unfolding of the players' voices (mediated by the procedural structure of language) also affects and mediates the procedural states of the digital game. Here, the reductive nature of the procedural logics sometimes leads to amusing non-sequiturs as the algorithm searching for cues will react to meaningful sentences (like "Are you friendly?") the same way as to nonsensical ones (e.g., "Are you French?").

In sum, *Phasmophobia*'s soundscapes and sounding practices testify to the key roles of voice, sound, and speech in the experience of (shared) spaces. A sonic perspective particularly highlights the messiness of sonic spatiality, in which player and game, the processual and the procedural, play and its preconfigurations, ongoingly affect and enable each other.

3.1.6. Site VII – Touch, Economy of Affect, and Intra-Passivity/Activity in *Tappy Tree*

Besides sound, touch is another fundamental and often neglected form of embodiment in the context of digital games. The very term *digital* lends itself to an alternative history of the genesis of digitality through embodiment, and, more precisely, touch and the role of the hand and the finger.[193] Not besides but in conjunction with vision and sound, touch is a constitutive mode of how games are embodied and meaning-form relations come into being in play.

[193] The Latin root *digitus* literally refers to the *finger* and its capability of *pointing* but also the way it has come to stand in for a unit of measurement in procedural practices of abstraction and standardization.

Clicking (in the context of PC games played with a mouse) or tapping (those played on smartphones or tablets) games highlight this rudimental way of digital embodiment by stripping more complex architectures and architectonics of play down to a few core elements and their procedural logics. In the following, the 2019 mobile game *Tappy Tree* is approached as an exemplary site of how games affectively come into being through touch and simultaneously charge it with meaning.

Tappy Tree is a curious blend of a mobile game, an eco-game, and an incremental game; i.e., it is played on a smartphone, thematizes ecological and environmental issues but also indulges in capitalist logics of progress, growth, and the fetishization of numbers. To say it merely thematizes ecological topics does not go far enough, though. Part of the design and the concept of *Tappy Tree* is its promise to enact that which is played with, the practice of re-forestation. The "How to Play" section in the game tells the player to "[p]lant as many trees as you can! [. . .] While your [sic] tapping to plant trees, you are helping us plant real ones." The production company Heads Up Software writes on its webpage that 5-15 % of its revenue is donated to an international environmental NGO, One Tree Planted, and an advertising video claims that "[w]hen you play Tappy Tree, you're planting a forest" (Heads Up Software). While the sum of money thus generated by the individual player without in-game purchases is usually negligible, the link between the practice of play and the practice of reforestation still enables the narrative framing of the main in-game mechanics.

Tappy Tree's procedural logics enable the player to choose from two game modes. The first one is given with the standard environment and presents the player with a comic-style image of a tree in the center (fig. 18, still a). What could adequately be labeled as the *tapping mode* enables the player to tap on the part of the surface of their smartphone that indicates the tree. The latter, upon being tapped, changes its color to a lighter shade of green and grows a bit (almost imperceptibly). Upon being tapped again, it changes its color back and turns back to its original size. Together, both parts of the entity-state logic of the tree present the player with an image as a direct reaction to her own action but also with a tree as an affectively responding, sensitive, and demanding play partner. As the player and the tree speed up their contributions to the tapping mechanic together, leaves are hurled from the tree and the upper half of the background of the scene begins to spin: clouds and even the sun are flung around by a god-like force as the universe begins to curve around the tree and steps out of its bounded individuation to become a pure locus of affection. Somewhat in contrast to this processual affective indeterminacy, the top screen simultaneously gives an exact numeric translation of how the game procedurally understands the motion performed by the play partners. Two in-game

currencies are communicated here: first, the number of trees planted, which increases with every single tap on the screen, and second, the number of credits (a monetized currency also referred to as "Earth Credits") gained. The latter can be increased by "redeeming" one's trees at a rate mediated by optional in-game advertisements or through the second game mode, called "frenzy fall." This second mode can be triggered by tapping on a squirrel that appears under the tree in seemingly random intervals. If tapped on in time, the frenzy fall begins, and a continuous stream of acorns and apples drops from the top half of the screen (fig.18, still c). The player can gain credits by tapping on them before they reach the bottom whereas tapping on the rotten apples ends the frenzy fall without any rewards.



Fig. 18. Three stills from *Tappy Tree* (2019): a) tapping mode (left), b) planter menu (middle), and c) "frenzy fall" mode (right still).

Mirroring the form of reproduction under capitalism (albeit omitting the crucial role of the worker and the secretly exploited excess work), the credits gained by the player can be "invested" in upgrades that plant trees automatically (fig. 18, still b). As this is possible right from the beginning of the game, the tapping practice always has multiple (procedural and processual, living and non-living) carriers joined in a flow of mutual affect beyond authorship and active/passive dichotomies. An account of how these mechanics are experienced in play may offer further evidence for this argument.

After an exhaustive journey, I am sitting on the train back home. I stare out the window. The landscape flies by in a slightly arching motion, curved strangely by the shape of the train window before disappearing somewhere in the corner of my vision. There is nothing to do; I yawn, stretch, look around, get out my phone to check the time. More than an hour to go. Too tired to read, I browse through the apps, but nothing catches my attention. I remember the game with the tree, open it up, and check my progress: level 8. My planters are already planting 12.8 million trees per second. For the "Park Planter" that will plant 100 million per second, I need to reach planting level 9 by accumulating more overall trees and invest 1 trillion credits. Level 9 already seems close. I start tapping the tree crown with my right thumb to see the bar of the tap multiplier fill. I feel the cold and smooth surface that also lets me feel my thumb in turn. Too slow – the bar is barely filling up. The left thumb joins the right one for an alternative rhythm with more efficiency: right, left, right, left, right, left, like a drum. Nice and easy. I tap the area next to the tree trunk now, left and right. This is effective: the multiplier reaches level 2, level 3, then 4. The tree loses more leaves, and the universe incurves around the spectacle. More than 50 million trees per second now. Good, good. But I can do better. Next up is the right hand only, the stereotypical hand gesture of the waiting person: ring finger, middle finger, then index finger. They drop one after the other but rest until all three are lifted together again, like in the hammer-on and pull-off technique for the guitar. The rhythm consists of triplets now: da-da-dam, da-da-dam, da-da-dam... The impact is so rapid that the triplets sound like eights: da-da-da-da-da… Dull knocking noises resonate through the shaking train compartment (I play without sound on, as I find it annoying). I get to multiplier level 8 easily, level 10 with maximum effort. I realize that I have changed my posture, sitting all crooked now with the left hand holding the phone tilted so the right hand aligns with the rectangular shape I am aiming for. About 130-something million trees per second, I only glance at the first digits and then look down at the multiplier level again. Satisfaction – look at how my trees multiply! Is planter level 9 close? No. Frustration. I exhale notably, releasing some tension. I look around the train, still nobody in sight. That is for the better, as my next move looks admittedly awkward, all rightfully demanded social acceptance for gaming aside. I put my phone on the table in front of me and place my palms left and right of it. Alternating triplets: the combined effort of six fingers, all except thumbs and little fingers, which are too slow for the maneuver. Right hand: ring finger, middle finger, index finger; then left hand: ring finger, middle finger, index finger. Not easy to pace but offering a maximum of effectivity. I reach multiplier levels 11, 12, even 13 now, at more than 167 million trees per second. My hands drum on the screen like a hail of horse hooves in a race. I get warm, my breathing intensifies. My fingers begin to hurt with a pulsing pain.

Small hammers in a spinning clockwork, out of control and yet in line. The numbers on the tree counter go up steadily. However, my muscles begin to cramp. Come on, a little longer. I grit my teeth and keep going. More and more, I move my entire hands up and down rather than performing precise and elegant movements with the fingers only. The keeping of rhythm somehow takes over the intricacies of the single fingers, the form of my touch escalates into a spastic drumming. I lose it and become notably slower, now moving individual fingers again. The multiplier levels drop one by one. Level 3 is kept for a while longer, then stop. I stretch my hands and sit up straight again. I have not reached planter level 9. Sigh. Whatever, I think. Back to the thumb. The numbers will go up by themselves. I sit back now and merely assist the algorithm. I look outside the window again where the world flies by. I do not need to look at the screen, it is boring anyway. Am I even still tapping? Do the numbers go up? A quick glance. Yes. Good, good.

Many of notions captured by the previous paragraph on how *Tappy Tree* takes part in play point to touch – touch as a way the body may relate to the world but also only feels itself in it, touch as a site for the genesis and release of affect, touch as sensual path towards the phenomena of rhythm and speed, touch as primordial way of relating to play partners, and, indeed, touch as the only (and, in this sense, *primordial*) modality of the sensual body that may casually take part in play without any synesthetic help from the other modalities. As the non-visual practice described at the end of the previous section reveals, touch plays a primary role in the embodiment of digital games, which here becomes separable from visuality: play as a non-visual spectacle offers an intimacy beyond the eye, a festival of the flesh.

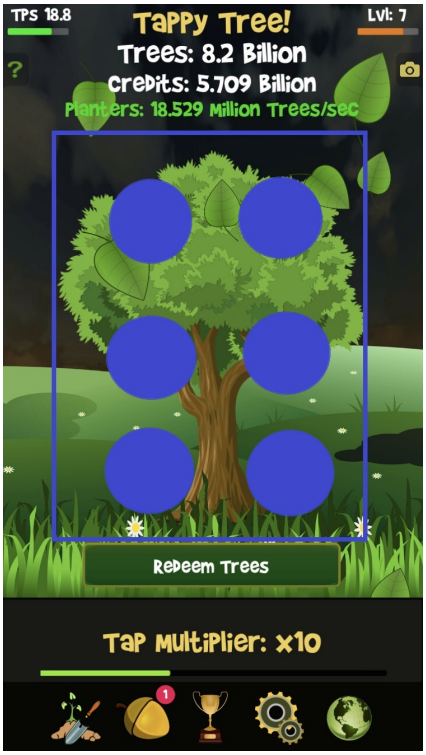


Fig. 19. A visualization of *Tappy Tree*'s zone of sensitivity and the approximate distribution of the player's fingers.

Moreover, touch offers depth and variety through rhythm and speed. Enabled by the game's procedural sensitivity for touch, operationalized by an affective field analogous to a nervous plate, the player can distribute spatio-temporal points of communication with the game such as with the technique of two-handed alternating triplets (fig. 19). While the shape itself clashes with the narrative framing of the tree planting practice (in that the sensitive section is not identical with the shape of the tree), it establishes mutual intelligibility more easily. Once the game's framing of the practice is

visually communicated and adapted by the player, vision may become redundant in many moments. For the accomplishment of high-intensity affective plateaus, however, it remains crucial.

Vision and touch thus form an *economy of affect* that links the game and the body as play partners but also as carriers of the practices of play, those of in-game advertisement, of donation, of non-profit-organizations, and of re-forestation. These real-and-imagined practices become intertwined in the place of play, get in touch, by making touch meaningful together. The on-screen image serves as immediate feedback for the work of the fingertips and the algorithms by presenting an affection-image that, despite its rudimental structure, affectively entangles the time-space of the place for play, the body, and the digital procedures of the game. The player's attention (which always comprises more than the attention of the eyes) and her pleasure (which is more than pleasure in looking) are the resources harvested (or, one could say, farmed) by the game as much as the number of trees planted and "Earth credits" are harvested by the player.[194] At the same time, the capitalist logics of progression and resource extraction are fed into environmental practices as much as the latter infuse the former with additional ethical and affective value. As a *site* rather than *sight*, *Tappy Tree* thus makes the messy spatiality and the complexities of play visible while at the same time dethroning the visuality of the video game.

Finally, two different poles of play have become visible, enabled by different game logics and architectonics of play, an *active* and a *passive* one, which are, however, neither reducible to a binary pair in terms of pure types of play nor in terms of their authors. The first pole appears as a high-intensity kind of play with the player feeling in control, performing at maximum efficiency and skill, while the second one appears as an idle, lazy, and passive affair, one in which she might not even be looking at the screen. The previous section has argued, however, that play only becomes meaningful with *Tappy Tree* in an affective economy of touch that already includes the flows of affectivity through various bodies, which only enable each other, indeed share each other's geneses in play. As the tree planter mechanic highlights, the effort and agency of the player are always already intertwined with and mediated by a game's procedural sensitivity. When my hand seemingly autonomously keeps tapping as I look out the window, lost in thought, the unconscious of the digital and the unconscious of the body become one. The so-called "offline planting" mechanic conceptualizes this further: here, beyond

[194] The practice of *farming* refers to the repetitive and instrumental reaping of rewards in the context of digital games. Chapter 5 will return to the bidirectionality of the concept of farming in the course of its analyses.

physical touch, the game's tree planting goes on alone, without the player.[195] The player, however, beyond being passive, is enabled to continuously relate to the imagined tree-planting, revealing how the planting with the game is always a real-and-imagined planting of real-and-imagined trees. Looking out the window while tapping, play becomes a ritualistic and almost kenotic working through of the imaginary shared by the game and the body. The opposite pole, the high-intensity play, likewise affords both embodied and procedural actions in exchange. The only way the two poles differ is gradually, in terms of rhythm, speed, and affect.

In sum, both poles of play, accommodated and exemplified by the high-intensity mode of the frenzy fall and the (offline) planting mode in *Tappy Tree* site conditions (shared by the game and the player) of what could be called *intra-activity* and *intra-passivity.*[196] Rather than simply being passive in opposition to an active play partner, game and player both share complex relations of delegation, intimacy, affect, and touch, which are accomplished together and which only bring forth the game as an idle game[197] and the player as an idler. *Tappy Tree* thus reveals how play escapes the everyday binary concepts of *activity* and *passivity* and how it rather, in the words of Sonja Fizek, "emerges out of a delicate balance between action and inaction" (xi).

3.1.7. Sites VIII and IX – Meta-Spatial Architectures and Architectonics of Play in Puzzle Games

Architectures and architectonics of play are crucial for a game's contributions to the spatialization of play. Puzzle games are special sites in this regard as they carry practices of

[195] Or, at least, the planting is communicated to go on, whereas the procedural logics of *Tappy Tree* merely keep track of the time between play sessions and provide a proportionate reward for any time frame up to eight hours.
[196] Here, I draw from Robert Pfaller, who coined the term *interpassivity* in relation to *interactivity*. By the term *interpassivity*, Pfaller described a new socio-cultural phenomenon in which "[t]he enjoyment of something is – partly or even totally – delegated to other people or to a technical device. Entirely in keeping with the notion of 'interactivity', we would like to introduce the term 'interpassivity' for this strange practice. A certain transfer takes place in both of them: in the case of interactivity, some activity is transferred from the producer or from the product to the consumer (in the case of interactive art, from the artist or from the work of art to the observer); in the case of interpassivity, some passivity is being transferred from the consumer to the product. In the case of interpassive art, a masterpiece would observe itself, relieving the observers of this task (or pleasure)" (19). The prefix *inter* is very valuable in that it captures the element of an exchange between the two parties. However, it also suggests that they can be presupposed as clean entities going into it and leaving again as the same entities. To highlight how they both affectively emerge from the encounter, as Barad's concept of *intra-action* highlights, the term *intra-passivity* seems apt for the phenomenon the present game sites.
[197] Sonja Fizek uses the concept of *mediated distance* to describe *idle games* such as *Cookie Clicker* (2013), *Clicker Heroes* (2014), and *Godville* (2010), which "do something other than invite the player to an interactive spectacle where their participation is the necessary condition for the game to go on. Play emerges as a substitutive act - the player, represented by the automatic clicker algorithms, may take absence from the game" (25).

play that often go beyond spatial concepts embodied by other titles. This is because puzzle games tend to arrange spatial elements as play partners rather than engaging in Newtonian models of space in which their architectures primarily serve as settings or containers of action. In the following, two recent puzzle games, *Baba is You* (2019) and *Superliminal* (2019), will be approached to site architectonics of play that explicitly thematize and strategically use their architectures as play partners. The architectonics of both games can be described as *meta-spatial* in that, by focusing on either the procedural nature of the architectures or the dynamics of their perception, spatiality itself becomes a play partner in the two titles.

3.1.7.1. Playing with Procedural Logics in *Baba is You*

Baba Is You is a 2019 single-player puzzle game, released for PC and the Nintendo Switch. It features more than 200 different levels each containing a one-screen puzzle. When loading the first level, the player is confronted with an on-screen presentation as in figure 20.

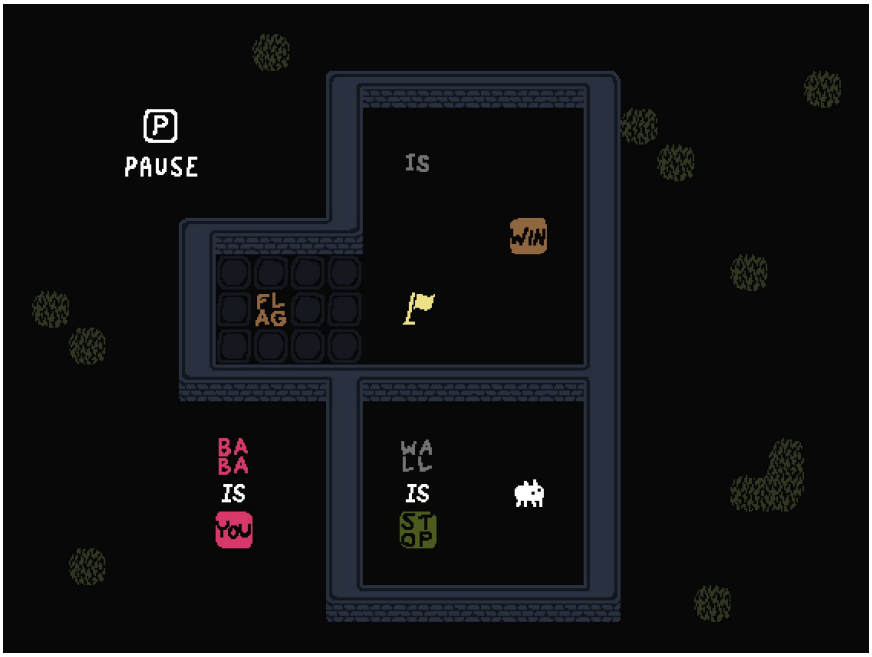


Fig. 20. Still from the first level of *Baba Is You* (2019).

Via pressing the up, down, left and right buttons on the keyboard, the player moves the small rabbit-like creature on the screen along horizontal and vertical fields. The screen presents a two-dimensional ensemble of movable word tiles, various objects, and recurring characters (here: grass, walls, and a flag, but, in the further progression of the game, also stones, lava, jellyfish, crabs, doors, keys, etc.). In the first level, the tiles add up to two combinations in different sections of the screen, "BABA IS YOU" and "WALL IS STOP," whereas three further tiles are spread out in a third section, "FLAG", "IS," and "WIN." When the player-character moves to the right, a collision logic prevents further progress and communicates that the walls surrounding the player are

obstacles. If she turns left and runs into the word tiles, a collision logic enables her to push one of them (e.g., the "IS") on so that she occupies the previously taken place. An entity-state logic communicates a change to the tiles: they lose their bright colors in the very moment their vertical arrangement is broken up. Attempting to run into the wall again, the player discovers that she can now move through it – by changing the arrangement of the tiles (here: undoing the "WALL IS STOP"), the player has not only changed the in-game architecture but the way it functions and behaves. Turning to the other sections of the screen that have become accessible, the player learns that the game is over (but not won) once the tiles presenting "BABA IS YOU" are broken up. If she moves the player-character to the flag, nothing happens at first. Only when the tiles are rearranged to form "FLAG IS WIN" either horizontally (left to right) or vertically (starting with the top), an entity-state logic flashes their colors and signals the rule to be exercised: the player can finally win the level by moving to the flag (fig. 21, still a). Alternatively, the tile from the bottom segment can be fetched to form "WALL IS WIN," which results in a second win condition (fig. 21, still b).

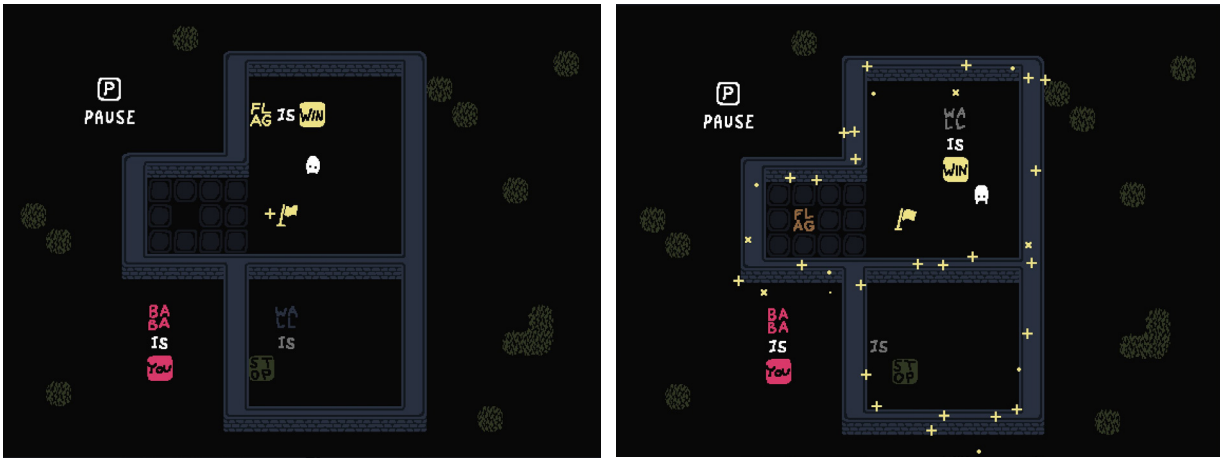


Fig. 21. Two solutions for the first level of *Baba Is You* (2019) using either a) the flag (left) or b) the wall (right still) in an IS-WIN-statement.

Taken together, these insights into the first level of the game show how *Baba Is You* not only confronts the player with an architecture to traverse but with the very means of changing how it operates. This is to say that the spatial arrangement on-screen includes a (re)presentation of some of the procedural logics that constitute it: the form of the means of spatial production leaves its confinement to an unconscious of the place for play and enters the place of play. Put short, in *Baba Is You*'s architectonics of play, procedurality becomes a play partner. The logical[198] sentences given by the tiles and enacted as rules themselves resemble statements in

[198] My use of *logical* here does not denote a way in which the statements are somewhat naturally or intuitively accessible but rather how they are *generative* of logics, i.e., stereotypical procedural doings.

computer programming, syntactical combinations, or strings of code. Despite their communicative and, indeed, meta-communicative roles, there are procedural logics that the player cannot change, such as statements being either active or inactive or the obligatory non-infringement of the assertion "X IS YOU" (with the variable "YOU" open for equation with "BABA" but also many other tiles/objects in the game). Overall, pattern-matching logics (for the detection of active statements), entity-state logics (for the representation of active statements), collision logics (for the rearrangements of tiles), control logics (when a change in statements reconfigures which element can be controlled by the player), and linking logics (for the way the other logics are linked to communicate cause-effect structures) work together to enable the player to manipulate the spatial properties and relations during the levels. Through these logics, the player can mainly change collision logics (e.g., whether Baba melts when it touches the lava or whether walls are permeable) and control logics (which entity is embodied by the player) via the tile mechanics.

In the game play, the procedural logics-as-play-partners can be embodied by the player in various ways, from mindless doodling and affective experimentation to highly abstract sequencing through the player's imagination before Baba is even moved in the first place. From a processual perspective, the way various different logics thus meet in play is intriguing: the tiles themselves exercise the logic of language or, to be exact, semantics. The tile "BABA" points to the figure of Baba present in the same on-screen image but not identical to the tile. As tiles can be recombined, syntactical relations emerge between the semantic elements. However, the statements do not work according to the syntax of the English language and, generally, are informed by, yet sometimes also oppose, the wider logic of common sense. Take the 13th level from the lake section as an example (fig. 22).



Fig. 22. Still from the level "Burglary" in *Baba Is You* (2019).

To get to the "WIN" tile, the player must find a way out of the section Baba is trapped in. Common sense immediately suggests using the key to open the door. However, this is not possible as the statement "KEY IS DEFEAT" cannot be changed from within the confines. Can the "STAR" tile be used to open the door instead? Following such common-sensical lines of thinking here

is entirely futile: what can be opened is not the door but the wall. To solve the puzzle, the player must combine the logics of language and code creatively. The solution requires combining the "WALL" tile with the "SHUT" tile, as, in the procedural logics of the game, only what is shut can be opened (fig. 23, still a). Then, the star can be pushed to a piece of the wall to open it and the "KEY IS WIN" statement can be completed with the "KEY" tile. As there are two conflicting statements now, the player-character must then undo the statement "KEY IS DEFEAT" before, finally, the level is completed (fig. 23, still b).

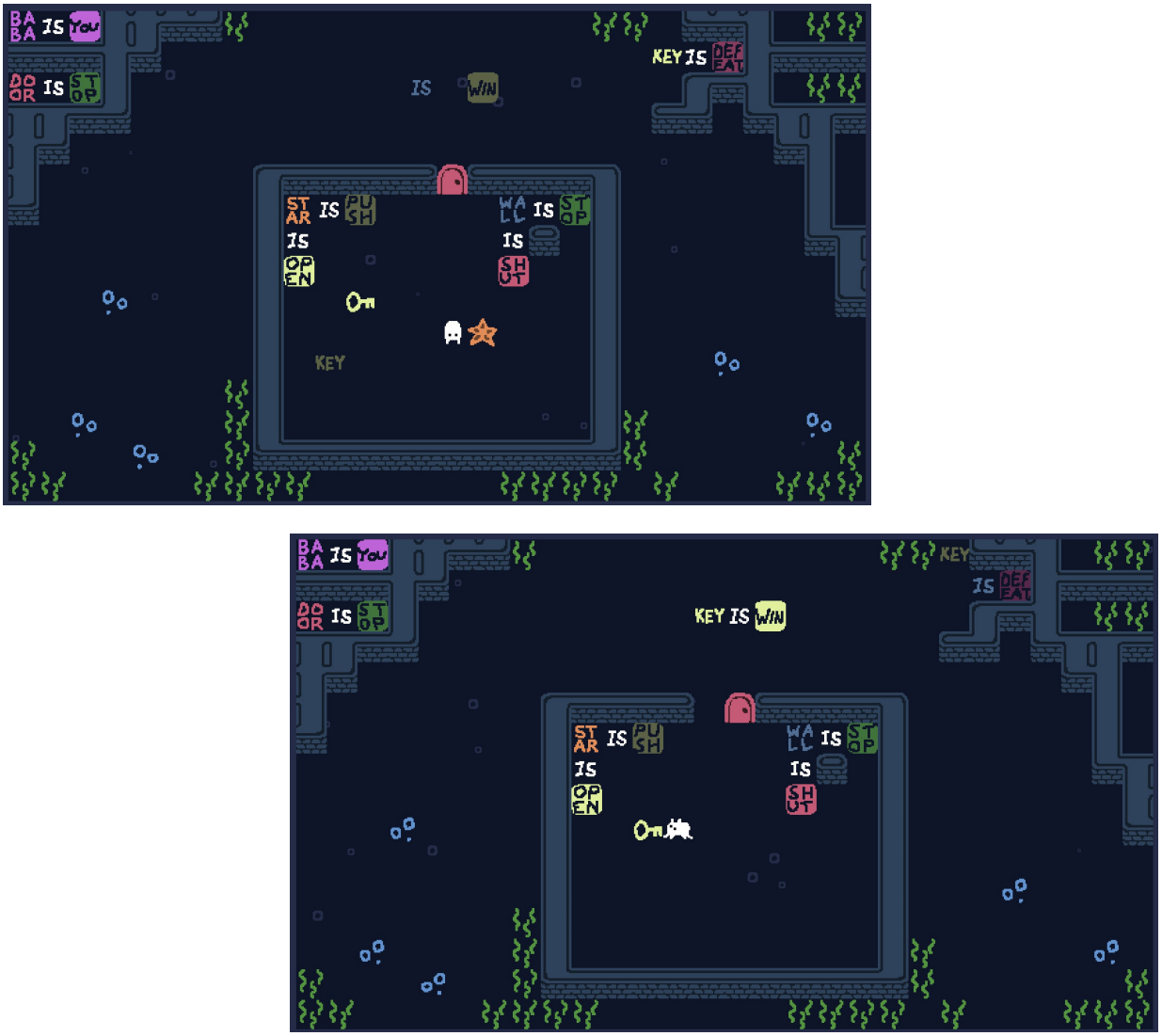


Fig. 23. Progressing through the level "Burglary" in two steps, a (top) and b (bottom still).

In this way, three conflicting and yet overlapping logics that infuse each other with non/sense work together. The logics of language (semantics and syntax) only make the procedural logic behind the tiles intelligible in the first place. Language thus is used as a referential net between in-game elements and for how they can be combined to change their procedural logics. This, however, often clashes with the procedural logics embodied by the

tiles: while on a semantical and syntactical level, both statements "WIN IS KEY" and "KEY IS WIN" can be meaningful, the procedural logics only accept the latter sequence. This rather pragmatic urgency of what works (according to the game procedures) rather than follows abstract rules of common sense is always present in the way the player must creatively imagine and submit to the logics of the code.[199] The latter's arbitrary territoriality becomes obvious when one considers that the very creator of the game has described some of the players' ways of solving the puzzles as "unintended solutions" and excluded them from the game.[200]

In conclusion, *Baba Is You* highlights the constitutive roles of procedural logics for game architectures in that they become self-aware and self-referential play partners in the title. However, the game also sites the interrelations and potential clashes of procedural logics and the wider taken-for-granted cultural patterns of knowledge that make both games and play intelligible. Along with the logics of language (which pre-structures what can be intelligible and make sense in thought and practice of a community of speakers) and common sense (which infuses the world with meaning without an apparent position for its knowledge claims), procedural logics appear as tied to particular projects (such as making the game and its tasks intelligible) and valuations (such as differentiating between true and false solutions). Logics carried by *Baba Is You*, whether procedural, linguistic, or commonsensical, are interdependent strategic significations and expressions of power. Through their procedural logics, games, as the site shows, may at the same time depend on and defy the implicit logical terrain that makes them intelligible, thus carrying an inseparable potential for sedimentary repetition and unveiling critique, the hegemonic and the counter-hegemonic.

3.1.7.2. Playing with Perspective in *Superliminal*

The 2019 *Superliminal* (also released for PlayStation 4, Xbox One, and Nintendo Switch in 2020 and Play Station 5 in 2022) narratively embeds the puzzles the player is confronted

[199] Other puzzle games (like, for example, the *McPixel* series [2012-2022]) have based their entire premise and architectonics of play on this opposition to common sense. The 1997 *Granny* also known as *Dementia* in Europe and *Armed and Delirious* in the U.S., famous as one of the weirdest games of all times, is maybe the most consistent and hence puzzling attempt at making a nonsensical story featuring surreal scenes and puzzles. In this crossover of a graphic adventure and puzzle game, the player takes the role of an elderly woman named Granny, who tries to save her family from an anthropomorphic rabbit, whose revenge scheme has cut their house out of the world with a giant pair of scissors and created various chaotic planets from the parts of the mansion that have been sucked into outer space (I am still waiting for the screen adaptation of this one).

[200] "Almost every single level has been adjusted at least a bit after testers found unintended solutions" ("I'm the Developer"), they write in a social media post.

with in a spatial journey through the player-character's dreams. After having taken part in a dream therapy program, the player-character seems to be trapped in a recurring dream cycle. In search of a means to escape, their dream landscapes need to be traversed by finding creative and out-of-the-box ways to exit the rooms not unlike the recursive level structure of the original *Portal* (2007). While in *Portal*, spatiality became a play partner through technology and the name-giving portal mechanic, it is linked to the lived dynamics of perception and the role of perspective in *Superliminal*.

As a first-person game, *Superliminal* relies on the central perspective that "corresponds with the position and viewpoint of the player sitting in front of the screen, thus creating the relationship between player and implicit character" (Theilhaber 64). Contrary to many other titles that use this perspective, most prominently, the larger part of shooter and action games, *Superliminal* also explicitly refers to its perspective and offers it as a play partner.

In the first room of the very first level, I am presented with a schematic sketch instructing me to orient myself using the W, A; S; D-keys and the mouse. I move the mouse and realize that the instructions are painted on the wall in the room I am in rather than being communicated via an interface level overlay. I have to smile as I feel complicit in the meta-awareness of the game. I move around, find a table with a "terms of service" sheet, move around again, and a door has appeared where the instructions were just a moment ago. I move on and find a desk with chess pieces next to a paper saying "Perception is Reality" (fig. 24, top still). As I click on one of the pieces with the left mouse button, I realize I can move it around. As I move the mouse, the entire perspective and thus the part of the game world that fills the screen moves, too. Suddenly, I realize that, as click I again to drop it, the size of the pawn has changed notably. Having appeared small when closer to me before, it appears significantly larger now when dropped further away. I pick up the pawn again and move it to the ceiling opposite of my direction. I drop it to find it filling almost the entire room (fig. 24, bottom still).

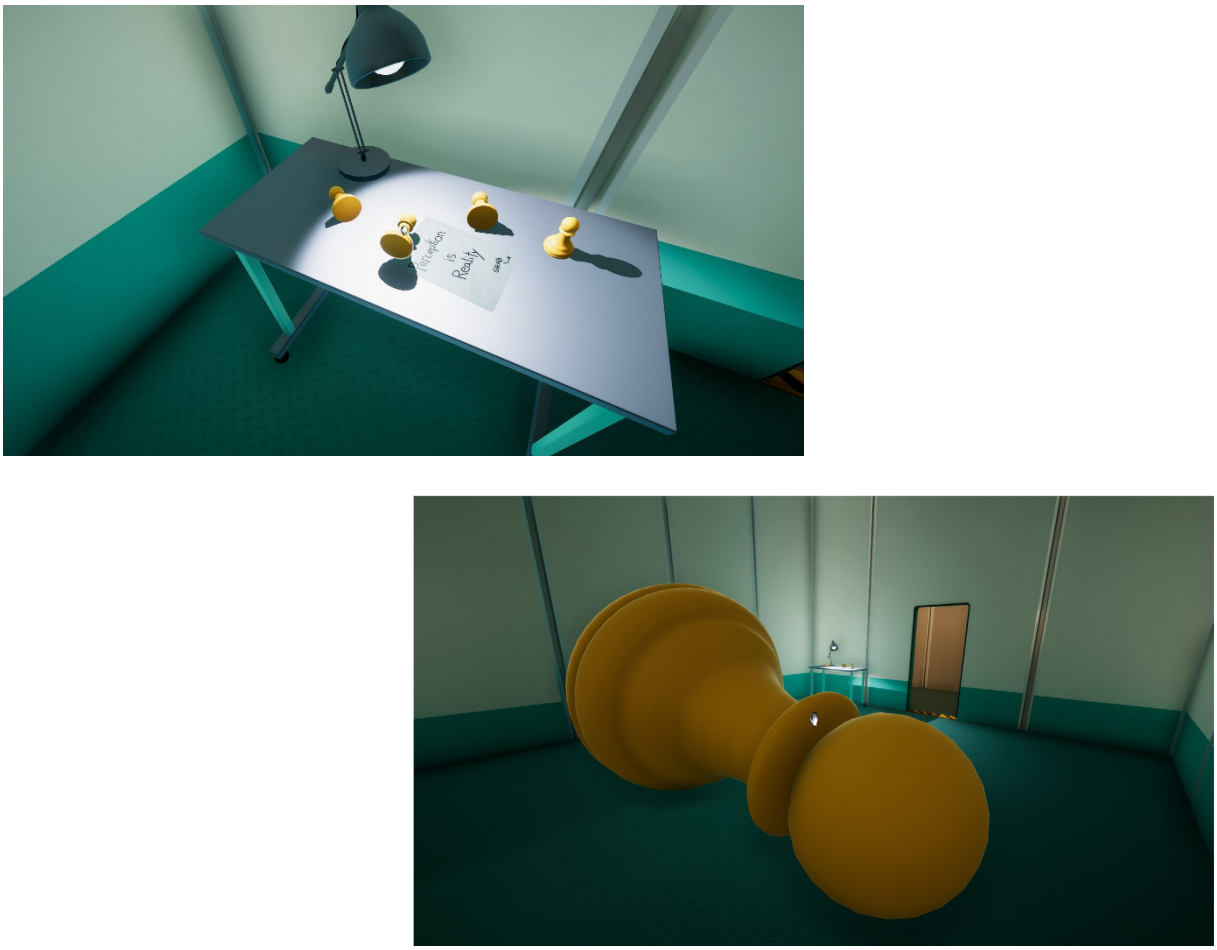


Fig. 24. Using the forced perspective mechanic in *Superliminal* (2019) with a chess pawn.

By enabling the player to increase or decrease the size of in-game objects, *Superliminal* plays with both its perspective, presented by its visual images, and the embodied perspective of the player. The mechanic used could be said to reverse engineer the perceptive phenomenon known as forced perspective. Forced perspective, which is used in practices of photography, film, and architecture, "plays with the apparent scale of objects through their relative positioning within a Euclidean visual cone" (Hosseini et al.). As our perception of objects depends on our surroundings, art practices may manipulate our perception of the size of objects by contextualizing them correspondingly. The forced perspective mechanic used by *Superliminal*, in this regard, somewhat reverses this practice as perception and perspective become ways of manipulating the game world.

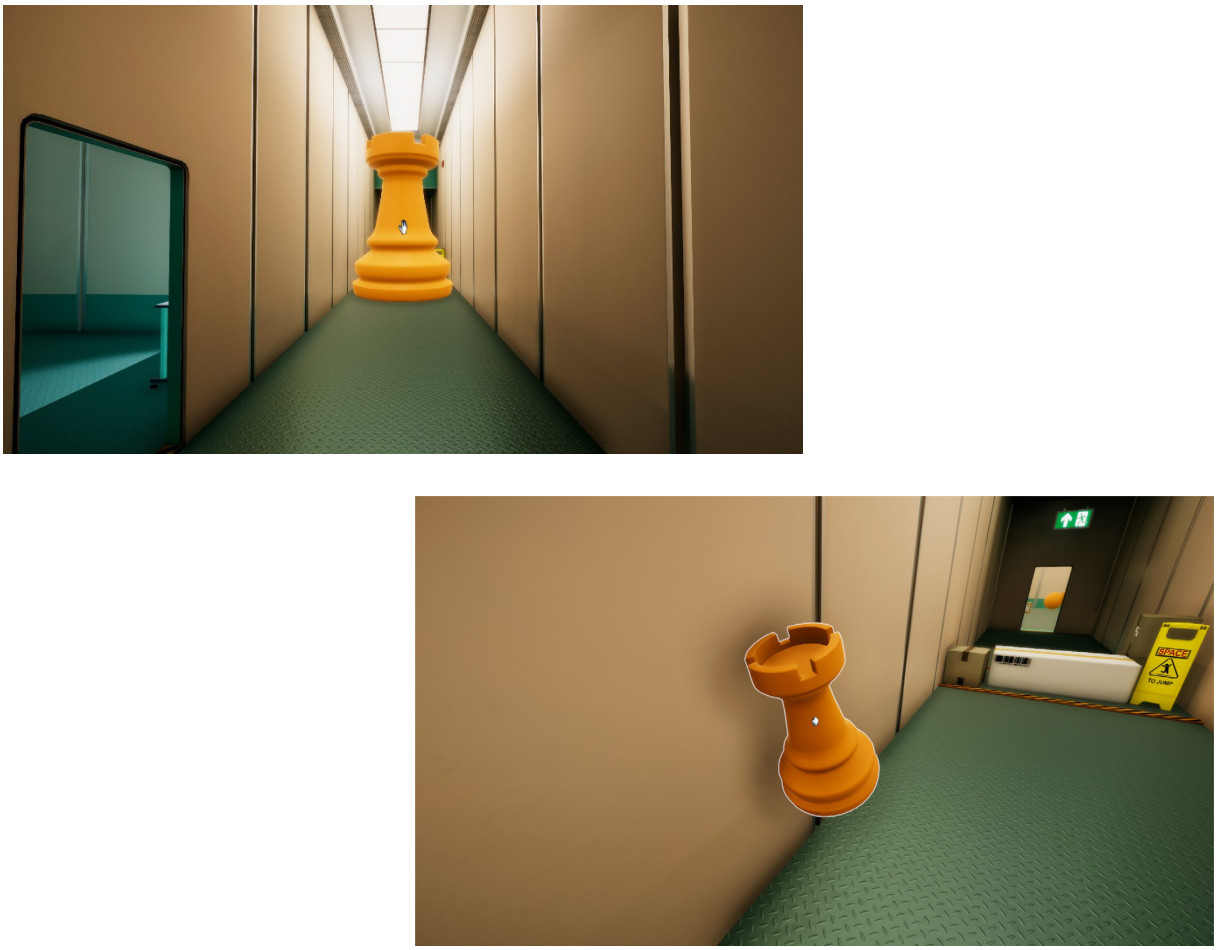


Fig. 25. Using the forced perspective mechanic to traverse a blocked path (top) by rearranging the size of a rook through its spatial relations to the surrounding game world (bottom still).

In the next room, a giant rook blocks the way of the player-character (fig. 25, top still). By clicking on it, it can be picked up and moved to the side so that it appears much smaller contextualized against the wall (fig., 25, bottom still). Now the tiny rook can simply be dropped, and the path is free. In puzzle sections like this, *Superliminal* allows the player to play with spatiality and perspectivity to find a solution and thus a way of progressing through the levels. In this way, the game highlights how the player does not move through space per se (as there is no spatial world in or behind the screen, although digital games rely on this very illusion). Rather, the player moves space itself. As this distinguishing feature (a necessary illusion) of digital games here becomes an active mechanic, *Superliminal* can be described as a highly self-referential play partner that thematizes its own mediality and spatial genesis between procedural algorithms presented as perspective in the image and the phenomenological embodied perspective of the player. This framing of the game is invited by its (inter)textuality as the objects being moved exemplify architectures of other games (most obviously, dice or chess pieces).



Fig. 26. Anamorphic perspectives inscribed into the level architecture: a phenomenal pawn seen from the front (top left) and the side (top right) and a phenomenal pair of dice seen from the front (bottom left) and the side (bottom right still).

Later in the game, *anamorphic* perspectives (resembling the hidden skull in Holbein's painting "The Ambassadors") are encountered by the player. Chess pawns (fig. 26, top stills) and a pair of dice (bottom stills) initially appear as phenomenal figures but lose their object permanency as the player comes closer or shifts the angle of vision: they appear as merely painted on the floors and walls to trick the player. In the next level, this self-referentiality of the architecture also becomes part of the practice of play and thus the architectonics of *Superliminal* as the phenomenon of anamorphic shapes is again reversed in a mechanic.

Take the example of what appears as a giant green paint stain on the floor and wall of an industrial room (fig. 27). If the player finds the right position up on a higher area, the oddly colored surroundings turn into a phenomenal chess piece, which, in turn, is transformed into a movable object. The mechanic practically reverses another technique known from the art context, the so-called *trompe-l'œil*, which takes advantage of an optical illusion of three-dimensional space (and objects) on a two-dimensional surface. In the game mechanic, however, a two-dimensional surface, itself appearing as part of a phenomenal three-dimensional game world on a two-dimensional screen, appears as and thus can be turned into a three-dimensional object. Through this second mechanic, *Superliminal*, relying on the effect of the trompe-l'œil

to be intelligible and embodied as a play partner, practically inverts the optical effect that is part of its own embodied genesis in play.

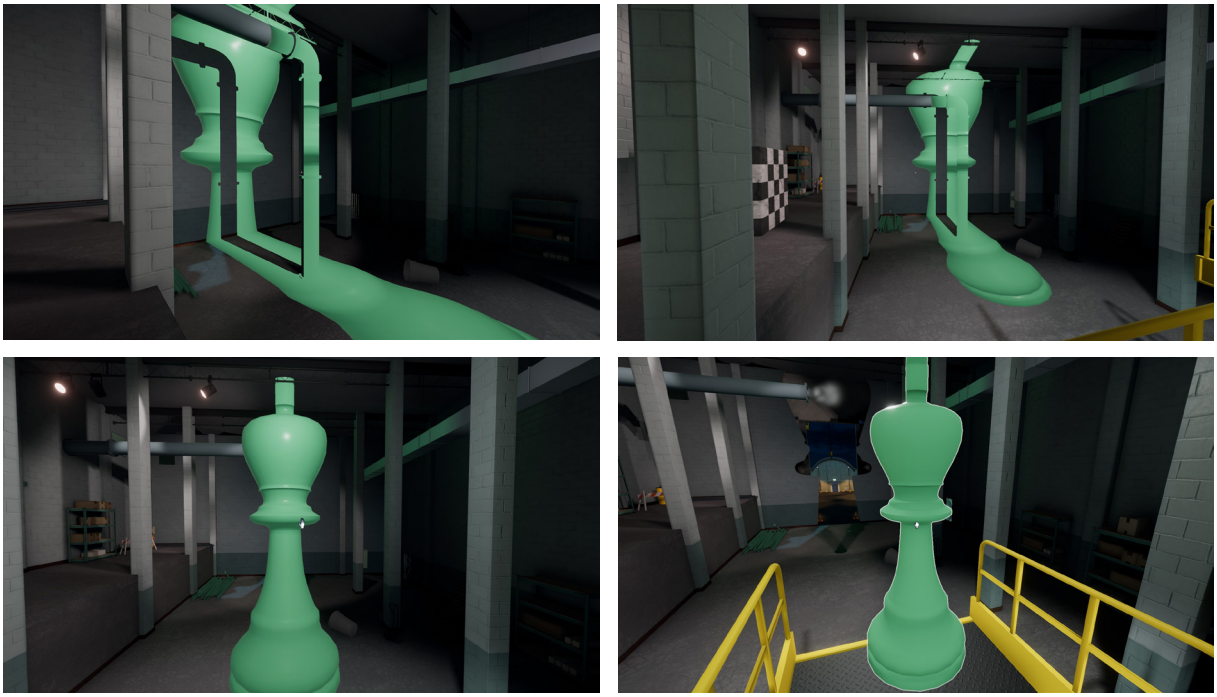


Fig. 27. The trompe-l'œil mechanic in *Superliminal* (2019): oddly colored surroundings turn into a phenomenal chess piece if the right position and perspective are found.

Summing up the insights from the two sites, it can be said that both games, *Baba is You* and *Superliminal*, do far more than conceptualize their spaces and architectures as containers. By highlighting and playing with the elements of procedural logics and perspective, they both reveal the interrelational elements of spatiality and its genesis as shared accomplishments of the medium and the player. Neither procedural logics nor perspective as phenomena of digital game play are framed by the sites as thinkable or opposable akin to "machine actions and operator actions" (Galloway 5). Rather, by highlighting procedural logics as play partners, *Baba is You* shows that it is the player who actively needs to embody them, which (beyond mastery) includes submitting to their territorial nature, while *Superliminal* argues that the phenomena of perspective are themselves part of both the spatial experience of the player and the visual preconfiguration of the image. In these regards, both games engage in play practices through self-referential architectonics that thematize the architectures of the medium of digital games and give insight into their relational character.

3.2. The Multiple Medialities of Digital Game Play

Summing up the claims developed throughout the twin project of this chapter and its predecessor, the present work proposes a reading of digital games as play partners and architectonic space and time machines to account for their roles in play. In his spatial perspective on games, Günzel has recently argued that the medium does not represent but "exemplify" ("What" 20) spatial concepts. However, this framing is at risk of neglecting both the processual embodied genesis of space and the plurality and diversity of spatial experiences in play. Therefore, drawing from spatial theory and a spatial rhetoric of play, the present work has put forth a more complex account of spatiality in a discussion of the mediality of digital game play. Through theoretical and practical analyses, it comes to portray games as vital ontological and epistemological parts of spatial sets of relations in play: practicing both places for play and places of play, games take part in a production of spatiality and temporality that is always socio-culturally situated/situating and necessarily tied to afforded and enabling forms of playful embodiment. Through the excessive mediality of play, they also enable and are subjected to a spatial negotiation that they preconfigure. In the case of digital games, four non-discrete and mutually enabling aspects of mediality have thus emerged (fig. 28).

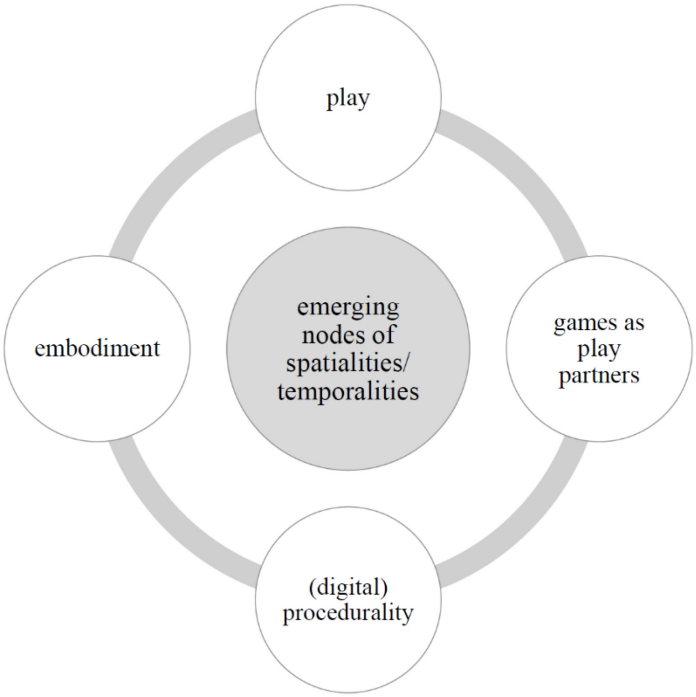


Fig. 28. The interrelated medialities involved in the production/negotiation of spatiality/temporality in digital game play.

The remarkable and prominent plurality of the phenomena of spatialities and temporalities arises in and with digital game play through a production/negotiation that involves the following four (overlapping) medialities:

1) The excessive and affective mediality of play characterized by mutual enabling and expression, intimacy, exploration, and Lugones's "openness to being a fool" (17). Sharing each other geneses in play, bodies, things, and ideas, gathered at the place for play, processually negotiate meaning and matter in non-innocent encounters as play partners, driven by the real-and-imagined local multiplicity of the emerging place of play. The lived experience of play is not reducible to the form of games alone, as the sites *Path of Exile* or the two machinima series *Freeman's Mind* and *Modern Pacifism* have shown. However, as became observable with the self-referential game *Undertale*, a game's p/re/con/figurations can greatly enhance the routes open for spatial negotiations.
2) The mediality of games-as-play-partners, which is not equivalent with a formal or exclusively semiotic framing of games. As play partners, games urge to be regarded as technologies for play that put their respective imaginations of play into practice in specific moments of affordances. Their ludic-narrative architectures require a thinking in terms of game architectonics, i.e., the question of how a game's (more-than-visual) presentations shape play and en/disable other play partners, who they address and position, and whose embodiment they form through specific affordances. The sites *Hitman: Absolution*, *Baba Is You*, and *Superliminal* have testified to fundamental and decisive ways games embody different philosophies of play, may link them to their own architectures in a self-aware manner, and enact them via various modes of procedural spatialization and communication together with the player.
3) The mediality of the body that points to the lived aspects of embodied play: the body is a meditator of worlds in that it continually enables games to come into being as play partners. In this sense, it carries an obstetrics allowing for the communication between living beings and non-organic in/organized matter. As an active if (to the greater part) unconscious play partner, the body infuses play with an inhabited and inhibited cultural horizon, with and against which it negotiates meaning and matter that often appear rigid and unquestionable outside of play contexts. Embodiment involves both submission and docility but also de/territorialization and an ethico-politics of being (play is non-innocent in this regard). In the context of digital game play, embodiment involves but must not be reduced to visuality or spectatorship, as the two machinima series, *Phasmophobia*, and *Tappy Tree* have detailed. Synesthetic links make touch, vision, and sound inseparable dimensions of the multimodality of the body.
4) The mediality of digitality and digital practices. For a theoretical perspective, the framing of the digital as a space separated and deviant from non-digital reality seems detrimental. An emphasis on the role of the body, an insistence on the messy, hybrid, mediated, and contingent character of all human experience, and a reminder that digitality does not lack materiality in any way all help to frame games and game worlds as parts of the real-and-imagined planet Earth whose spatialization they take part in. As a form of technology that necessarily inscribes valuations, digitality can be described as

> territorial procedurality in that it relies on the reproduction of its own genesis, puts forth knowledge claims about the world, may practice forms of sensitivity that understand the world while reducing its processual becoming to a set of pre-configured states in particular ways, and, finally, attempts to resist the influence of entropy, non-human forces, and other sources of deterritorialization. Basically, all previously discussed sites have evidenced that their procedural logics need to be embodied. The self-referentiality of *Baba Is You*, in particular, suggests that procedural logics have both a spatially constructive and a communicative function (see Wardrip-Fruin, *How* 13).

The four medialities in question are by no means discrete phenomena and overlap substantially. Furthermore, the present account does not aim to sort the manifold different phenomena of spatial genesis in play into a more rigid sequential model, thus submitting the processuality of play to another procedural and reductive frame. The present open framework goes as far as this work allows itself to indulge in the formalizing and generalizing tendencies of theoretical argumentation. With the scope of the result humbled in this manner, the potential benefit of the framework is to inform any discussion of digital games as spatial phenomena with regard to blind spots. To return to Günzel's discussion of spatiality, his analysis disregards the roles of the body, lived play, and the procedural architectures of games.

It remains to be emphasized again that the element of power runs through all four medial aspects gathered here. Power is exercised in the double moments of production and negotiation: it disciplines, addresses, and manipulates the player's body, is enacted by procedural logics that enable and limit player agency, is argumentatively exercised by games-as-play-partners, their affordances, and their worlding practices, and is negotiated in excessive and lived play, which is neither innocent nor reducible to the tyranny of fun. Any perspective on games via play or spatiality is inert without the capacity to raise the question of how play is enabled and disabled, consensually negotiated, and processually and procedurally brought forth in embodied exchange and communication.

This aspect, which points to dominant spatialities and games as carriers of hegemonic imaginaries of play, will be addressed in the following three case studies now that a space for an analysis of the emergence of spatiality in digital game play has opened up. Continuing one of the most recurring strands of discussion up to this point, the first case of dominant spatialities in play examines the role and construction of the ant/agonistic. Hence, the upcoming chapter discusses practices of de/racialization with the site of the *Fallout* game series.

4. American Ghouls – Race as Ant/Agonistic Concept in the *Fallout* Games

The first of three analytical chapters continues the exploration of ant/agonistic spatiality with the *Fallout* game series (focusing on the Bethesda titles from the period of 2008 to the present). It examines the way the series engages in the concept of race to construct and question ant/agonistic spatialities for play. More exactly, it takes a closer look at the figure of the ghoul whose role differs from that of the zombie regarding its relationship to human ontology in the *Fallout* universe. While games like the *Left For Dead* titles (2008-9) use zombies as figures of Otherness to legitimize orgies of killing and gore, they have come to embody more complex imaginaries of race, racism, and the postapocalyptic U.S. in the *Fallout* series.

The chapter starts with an introduction to the *Fallout* series with a focus on its characteristic retro-futurism. It then goes on to think of games as carriers of the concept of race and revisits the genealogy of the figure of the American zombie in a reading that decidedly questions its conceptual de-racialization. The role of the zombie in game studies is then read critically in relation to this conceptual history of the figure before the analysis takes shape. Concluding the analysis, the results of the chapter are contextualized against the background of U.S. race relations from the Bush to the (first) Trump era, further questioning the roles of games in wider discourses of de/racialization.

Keywords: ant/agonistic spatiality, race, de/racialization, *Fallout* game series, the colonial zombie, U.S. race relations

4.1. The *Fallout* Series' Retro-Futuristic Imaginary of a Postapocalyptic U.S.

The *Fallout* series was created by Interplay Entertainment in 1997 with the initial title *Fallout 1* receiving a direct sequel, *Fallout 2*, in 1998. While these two titles featured 2D graphics and turn-based combat, the later games would revel in 3D graphics, the open word concept, first-person-perspectives, and real-time combat once Bethesda Game Studios took the series over in 2008 and pushed them into an action-RPG direction. Though different designers have thus contributed to the series, McClancy argues, all games are "set in the same fictional universe, but none is an immediate, direct sequel to the previous; each game features a new protagonist, and each game is separated from the previous in the series by temporal or geographic distance (or both)." As a result, she goes on, "the series as a whole does not tell one continuing story so much as it creates one coherent world, by introducing the player to that world from a variety of directions." All titles are set in an alternative U.S. future, combining fantastic speculative fiction with a sci-fi post-apocalyptic setting. Hence, the settings of all four games reference real cities, their architectures, and memorial and historical sites of the U.S. (fig. 29).



Fig. 29. The U.S. Capitol (top) and the Lincoln Memorial (bottom still) in the post-apocalyptic setting of *Fallout 3* (2008).

In the timeline of the game series' history, which diverges from our world at some point after WWII, an apocalyptic nuclear war between the U.S. and its communist adversary, China, has ended civilization and society as we know it in the year 2077. Set in the 22nd and 23rd centuries, the games thematize the lives and struggles of post-apocalyptic survivors such as isolated vault dwellers, scattered rural and struggling urban populations, traveling scavengers, religious sects, anarchic tribes, rivaling indoctrinated army corps, futuristic cyborgs, radioactive mutants, and rusty but dangerously dutiful robots. Most notably, the barren and nuclear-contaminated wasteland (but also the overall narrative framing of the series' loading screens, advertisements, game menus, etc.) embodies various textualities (e.g., billboard advertisements, user manuals, computer files, toys, pieces of technologies, etc.) adding up to a particular imaginary of the 1930s-1950s United States, their position in the world, and their anticipated future. This pro-American, nationalist, technocratic, Fordist-capitalist, military and gun-obsessed, superficially democratic (but prone to leader cult dynamics), paranoid, future-optimistic and yet conservative, transhuman, nuclear-family-worshipping, and xenophobic set of clichéd and exaggerated set of worldviews, of course, utterly clashes with the barren and hostile setting of global destruction, nuclear waste, anarchy, and terror, thus escalating effects of irony and sarcasm (fig. 30).



Fig. 30. A withering billboard advertisement for an atomic car encountered next to a ruin and a burnt-out car wreck in the Mojave wasteland of *Fallout: New Vegas* (2010).

The *Wasteland*, which was also the title of the predecessor of the game series from 1988, is thus, a wasteland in the sense of an apocalyptic setting but also a literal *waste-land* that tells

of a future imagined by a past that only survived in the form of waste: ruins, trash, nuclear dumps, collapsed museums, and historical artifacts nobody can understand anymore, – a culture that can only be intelligible again through novel series of reimaginations. November reads the series as a "satirical depiction of a post-apocalyptic wasteland littered with the detritus of an Atomic Age civilization that, unlike our own, realized the techno-utopian visions of the future introduced to mid-twentieth-century Americans by popular science fiction and futurist public exhibitions" (297). He, therefore, describes *Fallout*'s imaginary as "yesterday's impossible tomorrow" and ties it to what William L. O'Neill has called the "American high" – the "consensus among postwar Americans that their society was essentially good and that given enough effort anything could be accomplished by it" (November 297). As this imagined past has already perished, however, there are two continuously conflicting imaginaries, one *post-apocalyptic* and another that could be described as *retrofucturistic*.[201] As McClancy puts it, the games "posit two imaginary histories: one in which the future of the Fifties came to pass, and one in which that future was destroyed."

Emerging from the friction between the two imaginaries, one ideologically charged with notions of the Cold War conflict, the other without illusions on the dire status quo of life in the wasteland, the game series puts forth a setting that is utterly ant/agonistic but, at the same time, tired of moral didactics and ideological usurpations. Fewster writes that the many factions in the titles tend to be "irreconcilable, their values and purposes are mostly exclusive, and the player may only choose to run the full plotline of one main group to its scripted end" (211). Hence, the games are often praised for their challenging but welcome ethical gameplay that "throws players into a world of moral judgment without offering any definite rules" for a world that is "morally ambiguous" (Schulzke). Beyond treating the games as sites of ethical gameplay and moral decision-making, however, the present account aims to tie them to Sara Mosberg Iversen's invitation to read them as "a comment on currently relevant topics" – "[t]he whole series," she argues, "invokes issues such as consumer culture, corporate power, propaganda, racism, and what it means to be human."

The last two questions raised by Mosberg Iversen find an entire series of ambivalent, complex, and thought-provoking thematizations in the *Fallout* games through the figure of the

[201] *Retrofuturism* is a recent neologism that "builds on the futurists' fevered visions of space colonies with flying cars, robotic servants, and interstellar travel but while futurists took the promise of progress for granted, retro-futurism emerged as a more skeptical reaction [. . .]. Put simply, retro-futurism is a half-nostalgic, half-sentimental memorializing of popular futurism" (Guffey 254). As Frelik maintains, retrofuturism can thus be thought of as "a practice of referencing, framing, or inserting elements of older futuristic imaginary [sic] into contemporary narratives" (207).

ghoul. The ghoul is emblematic of the wasteland itself since the figure touches upon the issue of human ontology and how global man-made catastrophes and mass destruction change it. Yet, the ghoul is not just literally but also figuratively a man-made monster, with topics such as stereotypes, bigotry, and racial Othering revolving around the ghoul in the games. What, however, are the racial notions carried by the figure of the ghoul in the *Fallout* games? How are they related to and tie into the overarching and dominant ant/agonistic spatiality of the series? Has the role of the figure changed throughout the games, and how does it mirror or reflect upon the context of U.S. race relations?

In the following, the present chapter addresses the figure of the ghoul in the context of *Fallout*'s game design and game play but also the recent historical context of race relations in the U.S. The four most recent titles are chosen as sites of ant/agonistic spatiality and its ties to the concept of race: the figure of the zombie Other or ghoul will thus be examined in *Fallout 3* and *Fallout: New Vegas* (2008/2010)[202], *Fallout 4* (2015), and *Fallout 76* (2018). These games are particularly apt for this discussion since, contrary to the majority of other zombie games, the U.S. ghouls are allowed a distinct series of own voices that explicitly discuss their social and ontological status as formed through the concept of race in the *Fallout* universe and are, furthermore, used to effectively question the imaginary of the zombie.

Following up on the present discussion, a second section will draw up a brief analytical lens on digital games as carriers of practices of racialization to link the present account to other perspectives in the field; a third section will explicitly look at the conceptual baggage and potential of the figure of the zombie/ghoul in the Haitian/U.S. context, and a fourth will address its role in digital games and game studies. The main fifth section then examines the *Fallout* games answering the questions outlined above, before, finally, a conclusion is given in which the historical socio/cultural background enriches the present reading.

4.2. Games as Carriers of Practices of De/Racialization

While game studies still generally neglect perspectives on race and racism regarding the medium of digital games, several different approaches have made efforts to foreground these

[202] Though marketed and sold as two different games, *Fallout 3* and *Fallout: New Vegas* rely on the same engine, take place in the same part of the fictional world, and at roughly the same time (with the newer title, *Fallout: New Vegas*, being set four years after the previous *Fallout 3*) making *Fallout: New Vegas* technically a spin-off title rather than a sequel.

issues and their intersectional ties to other performative constructs such as gender, class, ableism, etc. Early groundbreaking studies on the internet have shown that the digital is by no means unaffected by or outside of the racial logics that attempt to differentiate the body: Nakamura found that "[s]upposedly 'fluid' selves are no less subject to cultural hegemonies, rules of conduct, and regulating cultural norms than are 'solid'" (4). Examining the cultural landscape of game protagonists, Everett and Watkins reveal that nearly 70% of them were white males in 2008, while Williams and colleagues found a similar, if (at 80%) not even higher, systematic over-representation in the U.S. context a year later. In the fictional world of *World of Warcraft*'s Azeroth, to mention a case study on a well-known title, the world-building is inherently tied to biological essentialism through conceptualizations of race and ethnicity (that determine alliances, language, intellect, temperament, occupation, strength, and technical aptitude), as Monson's work has noted.

David Leonhard has argued early on that game studies need to scrutinize racial representations in games ("Live"; "Not a Hater"). Drawing from Omi and Winant's work on racial formation in the U.S., he conceptualizes games as "racial projects" ("Life" 3). Leonhard thus urges us to take digital games seriously as "a powerful medium in which racialized ideas, bodies, and structures are constructed, mediated, and presented" (3). He argues that games disseminate racial stereotypes but also problematically exemplify how "pleasure can be derived from visiting and becoming the racialized other" (4). Gathering evidence in qualitative interviews, Srauy has further shown how game designers at once depend on social beliefs to make their games intelligible, but also that this internalization of problematic tropes is largely economically perpetuated ("Professional Norms").

Beyond game design and representation, dynamics of meaning-making in play are crucial, as the present account has maintained. Richard and Gray argue that players not only have unique but intersecting and diverging experiences in play, emphasizing that the experiences of women and players of color are marked by exclusion and resistance. Examining the experiences of players of *GTA: San Andreas*, Devane and Squire's research has detailed that players do not passively consume racial depictions but make individual interpretations based on these and their positionality concerning class or ethnicity. Considering these results, Leonhard's way of thinking of digital games as "a *space* to engage American discourses, ideologies, and racial dynamics" ("Live" 3; my emphasis) rings true. The latter, crucially, includes their potential to serve as "a powerful medium of education, propaganda, and therapy" (8) at the same time.

Together with their players, then, games can be described as *carriers of practices of racialization* and *de-racialization* (i.e., the construction and deconstruction of racial and racist framings of bodies and bodily difference resulting in a hierarchical system of classification of bodies that unequally distributes humanity and death across its matrix) implying both critical potential and hegemonic reproduction respectively.[203] Clearly, however, this framing extends beyond (the few) games that explicitly thematize questions of race, no matter how expressed the resistance to address games as political agents or sites. Soraya Murray has recently insisted on this very point:

> I operate from the base assumption that *all* games engage in a politics of identity, not just some of them. It should be understood that the perceived neutrality of games, even those that do not purport to deal with issues of identity, traffic in the assumption of a perceived 'universalism' or 'neutrality' that is fictive. It has never been the case that there was a politically neutral or a raceless form of games representation. (*On Video* 40; my emphasis)

In addition to her argument, the very resistance to calling into question the supposed neutrality of games is, at least to an extent, fueled by the natural, i.e., sedimented way games not only represent worlds but also offer them as play partners and thus conceptualize play. Therefore, the very construction that games (supposedly) naturally feature (and enable) ant/agonistic models of space and that play inherently involves racialized Others that legitimize but also are legitimized by said spatial imaginary, in turn, should be even more called into question. A critical perspective on practices of de/racialization, in this sense, needs to go hand in hand with a critical archeology of game architecture and architectonics of play. As the present account deals with the oversaturated figure of the zombie/ghoul, a brief overview of its racial history and role in games occupies the next step.

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[203] Here, my use of *race* and *racialization* is indebted to the works of Mbembe and Veronelli. Gabriela Veronelli writes that "race refers to a classification that dictates 'this being is not human' or 'is less than human'; racialization is the process that dehumanizes, the processes of dehumanization that reduce people by putting them in situations and relations that stripe them of their humanity" (113). Achille Mbembe, too, considers the category *race* in conjunction with *practices* of racialization because "[i]n order to reproduce itself, the racial principle requires a series of practices whose immediate starting point is the body of the Other and whose field of application is life in its entirety" ("Zu seiner Reproduktion bedarf das Rassenprinzip einer Reihe von Praktiken, deren unmittelbarer Ausgangspunkt der Körper des Anderen und dessen Anwendungsbereich das Leben in seiner Gesamtheit darstellt"; my trans.; 111). He describes the category of race as follows: "The racial principle is to be understood as a whole spectrum of forms of dividing and distinguishing people, which can be used for purposes of stigmatization, exclusion and segregation, with the aim of isolating, eliminating or even physically annihilating a group of people" ("Unter dem Rassenprinzip ist ein ganzes Spektrum von Formen der Unterteilung und Unterscheidung der Menschen zu verstehen, das sich zu Zwecken der Stigmatisierung, des Ausschlusses und der Absonderung einsetzen lässt, mit dem Ziel, eine Gruppe von Menschen zu isolieren, zu eliminieren oder gar physisch zu vernichten"; my trans.; 111).

4.3. A Conceptual Genealogy of Zombies/Ghouls as Racialized/Racializing Figures

Elsewhere, I have argued that the cultural figure of the monster is more than a representation of evil and needs to be scrutinized as a link of the sayable/thinkable and the unsayable/unthinkable, the discursive and the extra-discursive (see Wischert-Zielke "Impulse-Image"). The monster shows us what is at stake in the moment we meet, what needs to be exorcised (in us) if we are to enable ourselves to go on but also what cannot be eradicated as it stands on the border of our being and threatens to collapse us if we fail to acknowledge, respect, and love it – even should we never be able to fully understand it. The ongoing relevance of zombie figures in popular culture testifies to the plurality of notions they carry and their adaptable potential to embody a wide range of socio-cultural and historical anxieties and hopes. However, the racial histories and dynamics it has come to absorb through the numerous cycles of appropriation and adaptation often remain in the unconscious ways we relate to the zombie/ghoul.

Mogk's popular definition of the "modern zombie" has recently offered a three-part conceptual inventory of the popular culture zombie: it is 1) a human corpse, 2) relentlessly aggressive, and 3) comes into being through biological infection, i.e., it is "biological in nature, even if dead. It is not supernatural or magical and is thus subservient to scientific rationale (6–7). As a figure of modernism – Deleuze and Guattari are ubiquitously and somewhat superficially quoted referring to the zombie as "the only modern myth" (*Anit-Oedipus* 335) – the zombie has for many come to stand in for secular and scientific monstrousness seemingly bereft of a racial and colonial history (i.e., the question *Whose modernism?* is what is neglected). In this regard, the ontology of the zombie as a revenant is in danger of being accepted as a purification where, with and beyond Freud, the "repressed" (*The Uncanny* 147) should indeed be allowed a return. Therefore, it will be the argument of this section that the zombie and the intertwined figure of the ghoul have never ceased to carry notions of race and practices of de/racialization; the zombie/ghoul indeed shows us that zombification relates rather than severs a difference and a repetition.

The zombie does not have as smooth or identifiable an origin as its trope of resurrection implies today: beyond an *Ursprung*, however, its constellation of emergence points to several elements:

a) African religious beliefs and practices, as well as

b) their displacement to the Caribbean (in particular the island of Hispaniola and Haiti, which came to be centers of Spanish and later French colonial practices) in the course of brutal colonial abduction; and
c) the emergence of Haitian religious practices of vodou (to be distinguished from the Western racist imaginary of allegedly uncivilized and black magic using Others today constructed via the term *voodoo*[204]) that are inseparable from the experience of slavery and anti-colonial resistance (specifically in the course of the successful Haitian revolution from 1791 to 1804).

The term *zombi* does not have an arborescent etymology (see Moreman and Rushton 3) and was used to refer to a variety of different figures tied to the resurrection of the dead in African traditions. Moreman and Rushton (see 2-3) distinguish two initial figures: On the one side, the *zombi astral*, in the Haitian creole also *zonbi astral* (McAlister 459), is a raw and disembodied (but living) spirit whose powers are captured (this notion has notably not been translated to or appropriated in the Western and North American context).[205] On the other side, there is the figure of a soulless body resurrected from the grave but lacking its soul or personality (which obviously is part of the Western imaginary today). This later version came to be violently displaced and therefore part of the Haitian imaginary, albeit not as a threatening or aggressive figure (zombification itself, however, was indeed perceived as a real danger, and present Haitian law is reminiscent of anti-zombification regulation). Haitian folklore believed the zombi to be "the product of evil magics employed by a dark priest known as *bokor*, or sorcerer, to be distinguished from the benign priest and priestess, *houngan* and *mambo*" (Moreman and Rushton 3).

While today, the zombie is often described as a unitary figure marked by "the emptiness of a negation of negation, a free flying and autonomous signifier, meaningful in its meaninglessness" (Webley 2), such framings sever the zombie from its colonial history that ties

[204] Moreman and Rushton use *voodoo* to denote "the racist image of devil-worshipping, black-magic wielding, and uncivilized tradition imagined by Western popular culture" (2). Vodou, however, is to be distinguished from this image as a spiritual tradition "loosely affiliated, syncretistic religion originating primarily in Haiti (though aspects of it can be found in the West Indies, and similarities exist with traditions such as Santeria and Candomblé), that combines elements of a variety of African spiritualities, most prominently from the West African kingdom of Dahomey (modern-day Benin), with Roman Catholicism and 'New World' native spirituality. The religion began when slaves of wide-ranging African backgrounds were brought together in what became the hub of the slave trade – Haiti. Huge numbers of Africans from varied tribal affiliations and cultures were forced to find common ground as they were gathered to the island of Hispaniola" (2). To external commentators, however, as Webley points out, the central role of vodou in the Haitian revolution unfortunately "presented the fledgling nation's opponents with the ability to narrativize the link between a slave revolt, the foundation of a black nation, and revolutionary politics with a supposedly barbaric belief system" (10).
[205] See Elizabeth McAlister's ethnographic work, which details how she accidentally came to buy and later release two zonbis in Haiti (462-9).

it inherently to "the fear of being enslaved" (Moreman and Rushton 3) but also, as McAlister maintains, "rebellion against it" (461). Borrowing from Taussig, she refers to the zombi's place of birth as the "colonial 'space of death,'" which is inextricable from the "'culture of terror' of the plantation" (461). Beyond an alleged meaninglessness, in which the zombie would abstractly point to the concept of death in life, it carries the lived weight of real lives cast into death zones in capitalist and racist projects that must not be allowed to become invisible.

Before going into the dynamics of cultural appropriation and re-colonization of the zombi into the zombie, there are often overlooked sedimented predecessors in the U.S. context that are worth mentioning. Ann Kordas labels them the "original American zombi" (which is not without problems). Prior to the well-known adaptations from the American film industry in the 20th century, the term *zombi* had already found use in stories published and reprinted in newspapers a century earlier. As Kordas reconstructs, there already was an emerging colonial trope of "a creature of African 'origin' that willingly performed services for whites" (16). Furthermore, a second use of *Zombi*, spelled with a capital *Z*, points to "the name attributed to the leader of various pre-nineteenth-century, non-American slave revolts" (17) (e.g., in the 17th century in Pernambuco, Brasil). Thus, before the zombie was made to walk the U.S. screens, it marked the place of colonial slavery and colonial resistance in the American imaginary, too.

At the beginning of the 20th century, the anti/colonial figure of the Haitian/Caribbean zombi was transformed into the American *zombie* through the first of what would become a long and obsessive line of adaptations to and within U.S. popular culture(s). This process of conceptual recolonization began in travel literature with William Seabrook's *The Magic Island* in 1929. Published during the still ongoing U.S. occupation of Haiti (1905-1934), the book paints a sensationalist image of a savage and exotic Other by framing the zombie as a real phenomenon witnessed by the autobiographic author. The book inspired the 1932 film *White Zombie* directed by Victor Halperin and starring Bela Lugosi as a sinister sugar plantation owner. In the mills of the film, zombified workers toil all night, their mindless bodies controlled by Lugosi's character in scenes predating but mirroring Chaplin's zombified masses of workers in *Modern Times* (1936). Gradually, the original non-American context (and with it, the figure of the bocor) was removed and replaced: in the Depression era, the zombie was used as a vehicle to raise gender issues, in the WWII period for comedic relief, and in the 50s as a metaphor for the communist invasion from within (see Dendle 48).[206] Crucially, however, the early U.S.

[206] Molpeceres describes this development as a transition from what she calls an original "voodoo" zombie myth to the U.S. "pulp" zombie myth (see 155-6).

zombie at the beginning of the 20th century carried the notion of "human reductionism" – imported from the Caribbean figure – that marks the colonial and capitalist projects of "reduc[ing] a person to body, [. . .] behaviour to basic motor functions, and [. . .] social utility to pure labour" (Dendle 48). Yet, contrary to the zombi, the early American zombie was "synonymous with a kind of barbaric racial blackness" (McAlister 472), and in many respects still carries those practices of Othering through the concept of race today. Kordas links the figure of the U.S. zombie, therefore, primarily to the anxieties of the white middle class:

> [B]oth the zombie and the zombie master came to represent those elements of society which America's white middle class found disturbing or troublesome and over which it wishes it could exert control. Cultural representations of the zombie in the United States have thus been intimately linked with cultural ideas regarding African Americans and other people of color, southern and eastern European immigrants, and 'modern' women – elements considered potentially dangerous to white, middle-class society in the early twentieth-century. (16)

Thinking with Toni Morrison, McAlister describes those ideas further as "American Africanism" (461).[207] In *White Zombie*, for example, several of these fears come together as the plot revolves around a white middle-class couple in Haiti who gets split up as a local plantation owner and Lugosi's character turn the fiancée into a zombified Other (the white female body in a white dress is revealed as the title character) who needs to be purified for the status quo of the white nuclear family to be restored.

A significant change in the zombie trope came with George A. Romero's influential series of cinematic reimaginings in the late 60s. The 1968 *Night of the Living Dead* reimagined the figure as a violent and aggressive threat (where it had rather evoked, and not enacted, a psychic imperialism before). The film follows the main characters Ben and Barbra together with a group of others in an antagonistic struggle[208] against an entire group of walking dead. The sole survivor, Ben, a Black character, is unexpectedly shot by a White group of armed men and police forces at the end of the film, conjuring repressed images of lynching in the U.S. The

[207] Morrison's term *American Africanism* refers to the "denotative and connotative blackness that African peoples have come to signify, as well as the entire range of views, assumptions, readings, and misreadings that accompany Eurocentric learning about these people. As a trope, little restraint has been attached to its uses" (qtd. in McAlister 461).

[208] In Romero's vision, it could be argued, the zombie transforms from an ant/agonistic figure (i.e., a figure implying an Other, particularly in the context of a master/slave relationship that could potentially be annulled or even reversed) to a figure as part of an antagonistic space (i.e., a space only intelligible through the very idea of existential struggle, violence, and the Other as enemy). Hence, Romero's survivors are not even safe among their group (humans as opposed to zombies), and in-group dynamics are subjected to constant rivalries and power struggles.

film thus combines an evocation of "repressed memories of colonial slavery and racism" with an element of "ideologically charged survival space where the survivors fought each other in disastrous displays of non-cooperation and a clash of worldviews" (Webley 5). This political framing of the zombie (that now appears as part of a horde) defies superficial readings in terms of "straightforward allegories of White power and Black abjection (or masculine power and feminine abjection)" and urges the audience to recognize, as Kee puts it, "that much of [the film's] horror is produced by the destabilization, collapse, and uncanny merging of such binary identities" (54).[209]

Furthermore, in Romero's vision, the U.S. zombie moved closer to and, as I argue, merged inseparably with the figure of the *ghoul* (hence my frequent use of *zombie/ghoul*). Indeed, the first film in the series does not use the term *zombie* at all and rather introduces the threatening Others, whose ontology remains in the dark in the film, as "ghouls". The figure of the ghoul has mythological origins as old as the Mesopotamian civilization and was later incorporated into Islam, prior to being adapted again, this time by the West, in the aftermath of the French 18th-century translation of *Arabian Nights* (see Al-Rawi, "Mythic Ghoul" and "Arabic Ghoul"). In the Western imagination, the ghoul (and later, through Romero, also the zombie) came to be associated primarily with the (imaginary) practice of cannibalism and the place of the cemetery. Perhaps equally essential, however, is the framing of the ghoul as its own distinct race in opposition but uneasy proximity to the human. In the racist imaginary of Lovecraftian cosmic horror, a prime example of lingering eugenic paranoia of degeneration at the beginning of the 20th century, the ghoul is a figure of "madness and monstrosity" that appeared "seldom completely human, but often approached humanity in varying degree" (295), as Lovecraft writes in the story "Pickman's Model."

Through the fusion with the myth of the ghoul and the resurgence of capitalist framings in Romero's second film, *Dawn of the Dead* (1978), which replaced the setting of the domestic interiors of its predecessor with the suburban shopping mall, the zombie allegedly shed its Haitian legacy (and its magical ontology that science supplanted) but continued to embody and maybe to "expose the ways of racial oppression" (Molpeceres 159). Notably, the antagonistic spatiality it created expanded into the apocalyptic worlds from such films as *28 Days Later*

[209] Kee's readings of the original *Candyman* (1992) and the first film of Romero's series offer a valid criticism not just of the films but many of their readings that display "a tendency to inscribe the endless images of abjected bodies reproduced throughout U.S. visual culture with overly familiar narrative schema rather than asking what else they might represent" (54). Working from a visual studies perspective that strives to relink the imageries of the two films to U.S. lynching photographs, she argues that "[t]he images analyzed in these films suggest race and gender are not biologically innate or socially predetermined, but instead accumulate through the circulation of affects, discourses, and images within existing power structures" (54).

(2002) or *World War Z* (2013).[210] The zombie/ghoul became "enraged, feral, frantic, and insatiable" (Dendle 54) and de-individuated further beyond its psychic coloniality as part of a self-reproducing (i.e., self-colonizing) contagious horde of Others (sometimes maybe too) easily read as "capital itself" (Moreman and Rushton 7).

With the intensification of apocalyptic themes after 9/11 in the U.S., the zombie returned as "the ultimate metaphor operating within our twenty-first-century milieu" (Webley 2) and its variants have been ever proliferating. Two tendencies are significant in this context: on the one hand, Reyes describes a "cognitive and empathetic turn of the contemporary zombie" that has intensified "a problematic blurring of ontological boundaries – just where do zombies begin and humans end?" (99). On the other, the prevailing Whiteness of the zombie is noted by McAlister, who argues that zombies are today part of a "hyperwhite apocalypse" in which the "white zombie" as embodying average, inert, almost "dead whiteness" stands in opposition to the "black body" that is described as more "alive" (see 480).

Though this section has by no means offered a full conceptual account of the zombie/ghoul, a key finding of this contextualization remains the socio-cultural significance of the figure with regard to the construct(ion) of race. From the Haitian/Caribbean zombi (with its two variants, the bodily zombi and the disembodied spectral zombi) today inseparable from its racist framings and sensational Othering into the U.S. zombie, and the sedimented pre-20th century colonial figures of the subservient zombie and the slave revolt leader to the later capitalist allegories that have multiplied the zombie into a devouring and infectious mass of Others in apocalyptic scenarios, to finally, the present series of proliferations and (as will become apparent in the next section, multimedia) mutations, – the zombie needs to be regarded as a carrier of practices of de/racialization that is inextricably tied to colonial histories, anti-colonial struggles, postcolonial fears, and lingering attempts of Othering non-White bodies. In this regard, the present section is meant to specifically offer a reading of the zombie/ghoul that most accounts of the figure in the field of game studies have lacked so far.

[210] McAlister maintains that despite prevailing claims for the secularity of the zombie, the very apocalyptic worlds it has come to signify rely on the "biblical apocalyptic tradition" making zombies at least "residually religious" (474).

4.4. The Role of the Zombie in Gaming

Compared to literary and film studies, few works have discussed the role of the zombie in games. The few accounts that have done so have conceptually drawn from these former fields in particular, and yet, issues of race are rarely addressed. At the same time, the zombie has been as proliferate a character/element in game design as in film. In the words of Webley, the "zombie has become a video game character par excellence" (3). Before the analysis can begin, the present section gives an account of the zombie in games and game studies, starting with a look at the past with one of the earliest controversies surrounding games in U.S. culture.

4.4.1. (Legitimizing) Killing Others in 1976 – Ant/agonistic Spatiality in *Death Race*

In 1976, U.S. developer of arcade titles Exidy released a game that would be among the first to stir up controversy and be debated as a violent game: *Death Race* is an arcade driving game, played with a steering wheel and pedals either in single-player mode or together with a second player in competitive mode. The player steers a car across a playing field viewed from above and attempts to run over stick figures who run from her. When one of them is run over, the game emits a screeching sound, an entity state logic turns the figure into a static tomb stone signifying their death, and the player is rewarded a point (fig. 31). With tombstones acting as obstacles that fill up the screen, it becomes increasingly difficult to score further points. Of course, the player to run over the highest number of what is labeled as "gremlins" wins.

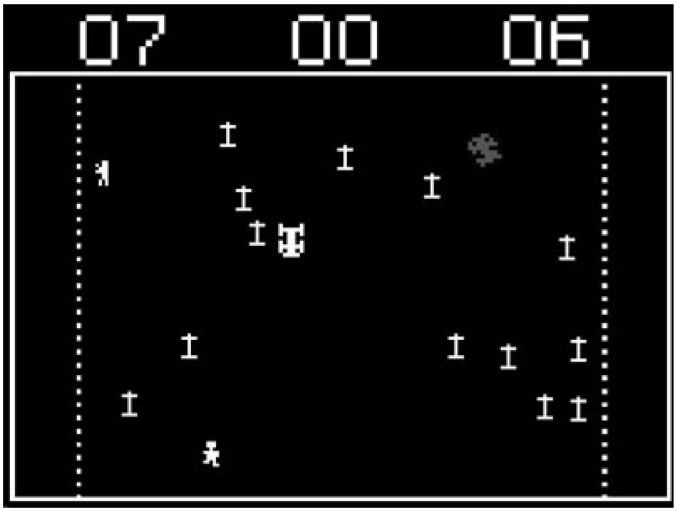


Fig. 31. Still from the 1976 *Death Race* (Smith, K.): thirteen tombstones fill up the screen while two gremlins run from the players. Player 1 is leading with seven opposed to six kills by Player 2.

While its graphical presentation appears schematic and abstract given today's standards of gaming and it came to be a standard phenomenon to run over pedestrians in titles such as

Carmageddon (1997) or the ongoing *Grand Theft Auto* series (1997-2013), *Death Race* was involved in a scandal at the time of its release. An unnamed Associated Press reporter wrote an initial article that was published with *The Minneapolis Star* on July, 2nd in 1976.[211] In the article titled "It offers that run-down feeling," the author notes that the "skeletal figures bear a strong resemblance to people" and goes on to quote Bill Aubbon, director of the Seattle Center arcade, who contends "[t]hose are gremlins that you run down. You're not supposed to think they're people" as well as Paul Jacobs, director of marketing with Exidy at the time, who admits that "they do resemble human forms." Several other newspapers picked up the topic and published similar articles criticizing the game (for an overview, see Smith, K.). Another employee of Exidy said in an interview, "[i]f we wanted to have cars running over pedestrians we could have done it to curl your hair. [. . .] But [. . .] we wouldn't build a game like that. We're human beings, too" (Blumenthal). By the end of the year, *Death Race* had appeared on several TV shows, psychologists had speculated on its detrimental effects on the players on radio shows, and it had been described as "insidious," "morbid," "gross" and "sick, sick, sick" (Blumenthal). As a case of moral panic and its paradoxical effect of boosting a product's sales numbers, the debate is intriguing in its own right. However, another question reappears in the arguments on several sides, a crucial question engaged in various argumentative projects that is also raised by the game design itself: the question of what may and may not count as human.

Like many other titles, *Death Race* is designed via a simple and ant/agonistic concept of play; two aspects stand out: first, the competitive arrangement of two play partners that strive to beat each other at the arcade hall (maybe cheered at by surrounding onlookers) and, second, the figures that the game deems killable. The double aspects of a shared spectacle and a competitive performance of killing are, furthermore, narratively framed by a single concept, the

[211] While it is generally a rich and informative source regarding the questions asked by the present section, Keith Smith's blog "The Golden Age Arcade Historian" refers to Wendy Walker's article as the initial starting point of the debate. However, it appeared a day later (on the 3rd of July) than the one referred to here.

idea of the monster, a non-human Other as a foil of and a target for the agency it allows and demands from the player(s). While the figures were labeled "gremlins[212]" by the makers of the game, the accompanying artwork showed a skeleton or ghoul creature and framed the playing field as a graveyard, thus conveying strong connotations of the zombie (fig. 32).[213]



Fig. 32. Advertisement for *Death Race* by Exidy showing one of the gremlins as a skeleton or zombie figure (IMdB).

In the statement of the Exidy employee, "We're human beings, too," the other possibility is only implied in passing, but it is what makes the argument. "We're human beings, too" implies that one is not a non-human, whereas the figure of the non-human is what ratifies the meaning conveyed with the manner of speaking; in the statement, the monster is an absolute negative that cannot appear for itself and, yet, instills sense to the shared and invoked binary of self/Other. In *Death Race*, the figure of the monster indeed appears, it walks across the screen, and adds affective centers to the movements of both the game and the player(s). Here, the meshed and not consciously differentiated figure zombie/skeleton/gremlin functions as legitimization of the narratively framed and cued actions of the player, as preconfigured by *Death Race* as a play partner.

Death Race is a prime site of ant/agonistic spatiality and how it is constructed for the very reason that the mere visual presentation of the figures on screen was as *ambiguous* in 1976 as it is today. It remains unclear and subject to player perception and imagination what the stick figures moving about signify – visually, they always remain schematic and abstract. Emphasizing again one of my core arguments, it is in play that the meaning of the figures

[212] The figure of the gremlin originally appeared as an early 20th-century fiction to take the blame for aircraft malfunctions in the U.S. Air Force. The character of a small, mischievous creature was popularized by military pilot turned children's book writer Roald Dahl in his novel *The Gremlins*, published by Walt Disney in 1943.
[213] Beyond the focus of the present section, it may as well be informative for rereadings of the history of zombie games – usually, the first titles credited as the first zombie games (i.e. games focusing particularly on zombies) are the 1982 *Entombed* (for the Atari 2600), *The Evil Dead* from 1984 (for the Commodore 64), and the 1984 *Zombie, Zombie* (for the ZX Spectrum), all of which the 1976 *Death Race* predates notably.

emerges from a constellation of play partners. The very first kill may indeed feel like an accident.[214] However, the game's preconfigurations speak a clear language on the position of the figures as the high score keeps rising with more rather than fewer of them driven over.

Death Race is extraordinary in that the dehumanization constructed as legitimization for killing is not manifested visibly on screen (by the figure itself) but captured by the explicit discursive and epi-textual arguments revolving around the game. Both argumentative sides of the moral debate agree on an underlying discursive level, the rhetoric of dehumanization in the context in which the zombie appears, maybe for the first time in a digital game. What justifies the moral outrage and the ant/agonistic imaginary of play emerging and meeting in the discussions is an exclusive concept of the human and its discursive distribution among digitally presented bodies as play partners: Does the figure not constitute a zombie, and as such, a *death race*, in that it is detached from the moral-ethical limitations of acting? This core function of the zombie, the contribution of a narrative legitimization for killing, has coined its dominant meaning in game design, but it has also limited game studies' perspectives on the figure and severed it from the colonial and racializing notions uncovered in the previous section.

4.4.2. The Role of the Zombie in Games and Game Studies

In line with the present account, most scholars writing about the zombie in games hold that its role is predominantly tied to antagonistic game design (Brock; Backe and Aarseth; Krzywinska; Hunt; Sihvonen). Krzywinska has argued that "most games present zombies simply as expendable and defeatable 'cannon fodder'" (165). Her initial analysis positions the zombie in relation to groundbreaking horror survival games and action titles such as the *Resident Evil* (1996-2023), *Wolfenstein* (1981-2019), and *Silent Hill* (1999-2012) series, *Doom 3* (2004), and *Painkiller* (2004). As mindless and non-human creatures in these games, zombies serve as an easy legitimization since they are "perfect enemies that can be killed without incurring guilt in the name of survival" (168). Games such as *Left For Dead* (2008) and *Left For Dead 2* (2009) or the famous (Nazi-)zombie mode in *Call of Duty: Black Ops* (2010) have

[214] As preparation for this section, I played the game at an art exhibition that addressed the topic of evil via various different media in 2022 ("Die Errettung des Bösen" by Michael Müller exhibited at the Museum im Kulturspeicher Würzburg in Würzburg, Germany, between November 26, 2022 and March 19, 2023; see: MiK). Strikingly, the exhibition included a version of *Death Race* that, like the original arcade version, was hardware-based (i.e., it did not feature a processor). However, the controllers used in the local arrangement of the console were typical one-button joysticks rather than the original steering wheel style controllers, making the steering quite unintuitive. For this reason, my first attempts at fooling around with the controls indeed led to the first death/kill by accident.

focused entirely on this use of the zombie to create apocalyptic spaces full of rhythmic and affective waves of charging feral bodies to be purged in the players' gun fire (fig. 33). Hunt likewise frames the zombie as "dehumanised antagonist that the gamer need feel no remorse for repetitive slaughter forming part of the pleasure of the game experience" (115). Beyond this, however, he points to a "zombie-ish" nature of all game antagonists: "many video games' antagonists are effectively zombies whether or not they borrow from the zombie tropes of other media forms or not [sic]. From the relentless marching – and multiplying – aliens of *Space Invaders* to the partially reanimated monsters of the *Doom* and *Wolfenstein* franchises, the game antagonist is usually an almost infinite supply of mindless and inhuman monsters" (109).



Fig. 33. Zombies attacking the player-character in *Left For Dead 2* (2009).

Going beyond Krzywinska's (somewhat formalist) claim that the zombie has a single meaning derived from its in-game function, Backe and Aarseth's 2013 review of zombie figures contradicts the notion that "game zombies can seem devoid of much deep psychological, aesthetic, or political meaning" (Krzywinska 165) compared to the zombies encountered in film. The authors' main thesis is that the figure carries various functions if viewed not just as a ludic but also allegorical figure, and in particular, a figure at friction between these dimensions. Backe and Aarseth argue that "while in some cases, dehumanized and deindividuated humanoids are used solely for their 'entertainment value', digital games can nonetheless invite and even provoke their reception as political allegories" (2). In their reading, zombies always suggest simultaneously "an underprivileged Other, the process of its Othering, and the politics and rhetoric of denial that goes with this process" (4). Games from *Plants vs. Zombies* (2009)

to *DayZ* (2012) may self-reflectively comment on the allegorical dimensions of zombies or engage the player in ethical reflections in play.

Other efforts have moved further beyond the ideal enemy scenario: Sihvonen's analysis of *Stubbs the Zombie in Rebel Without a Pulse* (2005) details how the zombie may attain hybrid, queer, and posthuman qualities when positioned as protagonist. Witkowski shows that zombies may serve as enabling figures in running apps that are tied to mobility and novel ways of moving. McKissack and May report that practices such as speedrunning (itself a form of collapse) in zombie games may bypass but also deepen storytelling tendencies. Finally, Barr's qualitative interviews with game designers, too, have painted a picture in which (beyond the antagonistically enabling qualities of the zombie), the figure offers designers a novel focus on the human in storytelling but also a certain pragmatic utility (e.g., no need to give them personality as characters).

Perspectives highlighting the racial connotations of the zombie/ghoul, however, are almost nonexistent. Brock's discussion of the racialized and, indeed, clearly racist depiction of African (zombified but also pre-zombification) bodies in *Resident Evil 5* (2009) is a notable exception. In his reading of the game, it is not just the zombie but its "race [which] stands in for cultural evil. [. . .] Africans are depicted as malevolent and savage" (442). Here, in the manner put forth in the previous section, the zombie appears as a construction of a death race, a figure allowing the construction of ant/agonistic spatiality by taking the form of a clearly racialized body and non-human Other. The line of thinking inscribed is that, as a distinct race, the Other is beyond mutual intelligibility and, therefore, needs to be erased. Existential antagonism is presented to be without alternatives; the only way to relate is through killing:

> The rationale of the game is kill or be killed, so murder is the default interaction. Humanity is reserved for the protagonist; every infected enemy has forfeited their claim to personhood. The parasitic infection provides the tipping point for those wondering if the infected should be preserved for healing and a possible return to full humanity. The only communication between the players and the Majini is violence and death; there is no other alternative. The combination of narrative, game mechanics, and cultural rationales of primitive strength and genetic susceptibility yield this result: an electronic rendition of savage, deformed, colored bodies that build upon long-standing stereotypes and in-game mechanics to power the player's revulsion and justify their extinction. (Brock 443)

Backe and Aarseth's influential overview is rich and yet tends to neglect seeing the zombie as a racialized figure that carries colonial and anti-colonial histories through all of its transformations in the U.S. context, as the present account has held. The title *Fallout 3* is among the games analyzed by the authors. They note that the ghoul serves as an embodiment of a novel race or ethnicity and thus enables the player to position herself in the ethically difficult entanglements of the game. Though their theoretical background points to issues of race and coloniality, their formulated hypotheses fail to address this in depth, and the issue of race only surfaces, almost by accident, with the themes of *Fallout 3*. To remedy this shortcoming, the next section strives to engage the zombie/ghoul figures of the series in a more substantial conversation across the various titles before they can be linked back to the U.S. context of current race relations.

4.5. The U.S. Ghoul, Race, and Ant/agonistic Spatiality

As main cases of this section, the most recent titles from the *Fallout* series will be examined in the following. More specifically, in line with the frame of questioning drawn up before, the games will be approached as sites of ant/agonistic spatiality, its preconfiguration and negotiation in play, and the figure of the zombie/ghoul as carrier of practices of de/racialization. The present analysis thus harks back to the 2013 study by Backe and Aarseth and strives to readdress the neglected issue of race in a more comprehensive and focused analysis. Moreover, by linking the uses and meanings of the figures within and between the four most recent titles of the game series, *Fallout:3 (2008), Fallout: New Vegas* (2010), *Fallout 4* (2015), and *Fallout 76* (2018), a more thorough comparative account becomes possible that also takes into account the historical background of race relations and political rhetoric on race in the U.S.

4.5.1. *Fallout 3* (2008)

The tutorial section of *Fallout 3* has me live through a few core moments in the player-character's childhood in a vault[215] until I leave the underground home and secluded community to enter the wasteland of Washington, D.C. and the countryside surrounding it. Among the few places in sight is the settlement Megaton, the first city I visit in the game. As I enter the local bar Moriarty's Saloon, I catch a glimpse of a line of shady figures in a dark and run-down room. I head to the bar and meet the first ghoul of *Fallout 3*, the bartender Gob (fig. 34).



Fig. 34. Conversation menu in the first meeting with Gob, a ghoul in the city Megaton in *Fallout 3* (2008).

Gob greets me: "Hey smoothskin, do you need something? A drink, maybe? Anything? Anything at all?" I stop short for a second at the unexpected appearance: there is something wrong with Gob's face – his skin seems necrotic, disfigured, sunken-in, corpse-like. A fragment of a moment later, I wonder what a "smoothskin" is. I search the conversation menu for some clue on how to deal with the situation. It presents me with three choices of interaction: a startled and rude reaction, an equally explicit but downright verbally aggressive one, and an attempt to be expressly polite to the point of being out of touch with the situation and setting.

[215] The vaults of the world of *Fallout* are pre-war bunkers meant to preserve human life on the planet during and after the time of nuclear war and fallout. As the inhabitants were sealed off from the outside world for decades, vaults come close to heterotopias of time that have preserved a version of the past: "The Vaults are in-game museums; places where the laws from before the world ended still apply. They are cozy and comfortable prisons, forcing their inhabitants to follow rules grounded on circumstances that are no longer given" (Pichlmair 110).

If the player chooses to go with the first option, Gob remains calm and routinely takes the time to explain his existence:

> Haven't you ever seen a Ghoul before? Well, not all of us got the chance to hole up in a nice cushy Vault when the bombs fell. A bunch of us got stuck out here in the world, and got a full on blast of heat and radiation, turned us into a pack of walking corpses. Near as I can tell, we age slower than you. A lot slower. There are even a few Ghouls that were alive during the war. Of course, with a face like ground Brahmin[216] meat, you can imagine that folks don't take too kindly to us.

When the player-character responds with "You know, it's not so bad," Gob answers: "Nice of you to say so. If you can't be nice, at least pretend, right? Fake it 'till you make it, and all that… [pause] Still though, a fake compliment is better than the usual spit in the face that I get. You're not half bad... for a smoothskin." Gob seems kind, yet extremely nervous and resigned. He struggles for professional responses and some kind of connection, yet seems to have received the same hostility and even violence over and over. Whatever the player does, there is something between Gob and her, a rift that cannot be bridged, from awkwardness to fundamental alienation in the moments shared (depending on player actions/perceptions), something that can easily be the end rather than the start of a relationship.

Ghouls in *Fallout* are not explicitly framed as a human race by the game itself[217] – they are positioned in uncanny closeness to the human via a violent and tragic ontology tied to the nuclear radiation they have been exposed to. At the same time, however, ghouls are repeatedly explored as figures that carry racial notions and hence require an analysis as carriers of practices of de/racialization. The simple and brutal fact of their appearance, and more exactly, as the present account will argue in the following, their *affective visuality*, enables the player to experience an Otherness that gives insight into and explores the complexity of affective responses and dynamics the problem of racism entails, too.

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[216] In the *Fallout* universe, *Brahmin* is the term for the mutated and thus two-headed cows of the post-apocalyptic U.S. (the name thus refers both to an actual type of cattle that was brought to the U.S. in the course of colonization and the highest caste of the Indian caste system).

[217] This becomes apparent as the explicit framing of human races starts with the character creation menu that distinguishes the options "African American," "Asian," "Caucasian," and "Hispanic." These options are non-overlapping (i.e., suppressing notions of ethical/racial hybridity) and create a seemingly biological distinction between bodies in terms of facial features and skin complexion. Though the ghoul cannot be chosen as a playable race of this sort in the game (and ghoulism can also not be acquired by exposing the character to high levels of radiation), fans and game lore (e.g., Wikipedia pages and forum posts) strongly frame the ghoul as a distinct race next to the "Supermutants" and "humans" in the game.

In his psychoanalytic analysis of racism in *Black Skin, White Masks*, Frantz Fanon describes the "black man[218]" as "the result of a series of aberrations of affect" (10). The site/sight of this set of affects is the skin – Fanon links the violence of a look that racializes the body as much as the internalized performance of an inferiority complex rooted in the (post)colonial history of a culture to an "epidermalization" (13).[219] Distorting the level of affects fundamentally, the problem of racism entails pre-thetic reactions that work "[b]elow the corporeal schema" where a "historico-racial schema" grasps the entailed bodies and installs "elements [. . .] provided [. . .] by the other, the white man, who had woven me out of a thousand details, anecdotes, stories" (111), as Fanon writes.

In *Fallout 3*, the ghoul may serve as a figure that carries notions of Otherness not merely because of abstract semiotics but, more concretely, because of an *affective* and pre-thetic quality encountered on the level of playful encounters and lived experience (and thus lived play). It is because of this affective power that ghouls first come to carry notions of racialization though not of an acquired "historico-racial schema." Instead of the latter, but in a similar structural agency to it, it could be said, ghouls carry an *existential-abjective*[220] *schema* due to their visual reminiscence of the corpse. In *Powers of Horror*, Julia Kristeva refers to the corpse as the ultimate frontier of abjection:

> The corpse (or cadaver: *cadere*, to fall), that which has irremediably come a cropper, is cesspool, and death; it upsets even more violently the one who confronts it as fragile and fallacious chance. A wound with blood and pus, or the sickly, acrid smell of sweat, of decay, does not *signify* death. In the presence of signified death - a flat encephalograph, for instance - I would understand, react, or accept. No, as in true theater, without makeup or masks, refuse and corpses *show me* what I permanently thrust aside in order to live. [. . .] There, I am at the border of my condition as a living being. [. . .] The border has become an object. [. . .] In that compelling, raw, insolent

[218] Note that "the black man" here is not to be read as a biologically grounded identity or essentialism in Fanon. Rather, "the black man" appears as a real and imagined dehumanized figure who is "sealed [. . .] in his blackness" (11) and hence "not a man" (10) only due to the "black-white relation" (11) of a "massive psychoexistential complex" (14) that Fanon seeks to destroy or oppose by analyzing it.

[219] It is important to add here that Fanon links the "internalization" that is an "epidermalization" to a temporarily and causally primary factor that is "economic" (13). Here, the psychoanalytic self-conceptualization of his analysis is "psychological" (12) as he claims, but his "clinical study" (14) does not regard racism as a problem of individuals (alone) but one which requires a thinking of "sociogeny" (13) (rather than phylogeny or ontogeny) and thus a "sociodiagnostic" (13) viewpoint.

[220] Julia Kristeva's thinking positions the abject somewhat between object and subject as an experiential and developmental phenomenon that "cannot be assimilated" (1) into either. Hence, the abject and abjection are describable only as a "twisted braid of affects and thoughts" (1) and, in the psychoanalytic context, relate to the figure of the mother and call into question Freud's distinction between the conscious and the unconscious in favor of a more fundamental or archaic distinction between inside and outside (see 6-7).

> thing in the morgue's full sunlight, in that thing that no longer matches and therefore no longer signifies anything, I behold the breaking down of a world that has erased its borders: fainting away. The corpse, seen without God and outside of science, is the utmost of abjection. It is death infecting life. Abject. It is something rejected from which one does not part, from which one does not protect oneself as from an object. Imaginary uncanniness and real threat, it beckons to us and ends up engulfing us. It is thus not lack of cleanliness or health that causes abjection but what disturbs identity, system, order. What does not respect borders, positions, rules. The in-between, the ambiguous, the composite. (3-4)

The ghoul disrupts and yet personifies the wasteland of the postapocalyptic U.S. due to the very affective-abjective power Kristeva refers to. Yet, as a speaking being with a personality and a social identity, the ghoul oscillates between subject, abject, and object, as the conversation with Gob details: upon being met with an abject reaction that also abjects the player-character ("Gah! Fuck! What are you?"), Gob turns himself into an object of knowledge in order to possibly become a subject again. Though the initial mere coming face-to-face with Gob does not entail a racial-epidermal schema, the structural eco-psychological dynamic of the encounter, which the game design explores further in the course of gameplay, intertextually recalls Fanon's notion of being "in a triple person" (112). Rather than the experience of a third person point of view, racism entails for Fanon, on the side of the subjugated, a *being* which is "given [. . .] three places": "I existed triply: I occupied space. I moved toward the other… and the evanescent other, hostile but not opaque, transparent, not there, disappeared. Nausea…" (112). This experience of being displaced in and by racism, as I am reading Fanon from a privileged White male perspective, entails a being for oneself, a being towards the Other, and a third kind of being: a being captured by and living through the racialization that besets the body and inscribes an own and ignorant image into/onto the skin, which resists being eradicated and lingers in abject proximity (neither an inside nor an outside). Gob's address of the player via the out-group marker "smoothskin" immediately builds upon the abjective schema and fills it with a social meaning mirroring an ascription of race to the body and the subsequent differentiation of bodies according to racial-epidermal schemas. Thus, the player is enabled by Gob and his affective visuality to come to embody an affective response that serves as an opening for the ghoul as a carrier of the many racial notions *Fallout 3* offers. In this way, the game engages the player in a new economy of perception and visuality to create a series of micro-political encounters with ghouls, in which doing and undoing race/racism are recurring phenomena.

The ghoul is an effective carrier of practices of de/racialization in *Fallout 3* because the game allows the player to link the affective opening of the visual appearance of the figure (i.e., its existential-abjective power) to pre-existing and novel historico- and historico-epidermal schemas. In their conversation, Gob tells the player not only that he is "used to being treated like shit around here" and that he "get[s] smacked around if [he] look[s] customers in the eyes." He also shares that he is "stuck here" and cannot leave until he pays off his debt to Collin, the owner of the bar, who "charges [him] room and board." Nova, another character at the bar, discloses his predicament in clearer terms: Gob was bought from slavers, is regularly beaten by his owner, and forced to work without compensation – he is, basically, a slave. Beyond Gob, the roles of the ghoul as a captured, colonized, mistreated, segregated, dehumanized, muted,[221] working, owned, despised, but also dangerous, terrifying, resisting, angry, healing, empathetic, believing, hoping, and loving body resonate and echo throughout the game in turn highlighting different rivaling histories of the concept of the zombie/ghoul.

Framed as a group next to humans, robots, and so-called super mutants,[222] the ghouls of *Fallout 3* take part in constructing the wasteland as an ant/agonistic space, but also call the means of this construction via the category of *race* into question. This is because there are two types of ghouls in the game: ghouls like Gob are like other people except for their looks, slightly more coarse voices, and the social marginalization they face. There is, however, a distinct second type of ghoul, usually called *feral ghoul*, that comes closer to the figure of the 20th-century U.S. zombie known from Romero's films. Feral ghouls, who other inhabitants of the wasteland often fail to distinguish from the first type, offer a kind of enemy that attacks the player on sight and hence can (and, indeed, needs to) be attacked on sight in turn (fig. 35).

[221] Note here that beyond the ubiquitous voiceless feral ghouls, Gob's very name entails the notion of being silenced.
[222] In the *Fallout* universe, super mutants share the ghoul's ontology as mutated humans, except they were created through a virus (the Forced Evolutionary Virus [FEV]) that renders them large and bulky. In the game, super mutants usually appear in groups of heavily armed soldiers.



Fig. 35. Feral ghouls attacking the player-character.

Feral ghouls act like mindless, voiceless, non-individuals bereft of personality; in short, the perfect enemy type, akin to a death race, only envisioned to help construct the wasteland as an antagonistic space in which the player can indulge in colonialist fantasies of survival, dominance, and struggle. Taken alone, the feral ghoul serves as a projected, personified fear of going feral, a post-human Other to the player-character, and hence justifies the use of *Fallout 3*'s vast arsenal of weapons. Together with the (here and in the following, non-feral) ghoul, however, the feral ghoul becomes a vehicle for thematizing the racial imaginary of the figure and bringing the player in relation to it in micro-ethical encounters. For the remainder of this section, three main parts of the game will be discussed: the often-analyzed Tenpenny Tower quest, the much less often-mentioned city of Underworld, and the barely mentioned Oasis quest, to give an overview of the various shades of the ghoul emerging from these encounters.

The Tenpenny Tower, as a first example, presents the player with a conflict between humans and ghouls, each framed as distinct and non-overlapping groups. The namesake tower (fig. 36) is a large and secluded building owned by Allistair Tenpenny, an elderly White character, who frequently shoots his rifle into the distance from his terrace high over the wasteland and calls this his "wasteland safari." A group of mostly White characters pay large amounts of money for their residencies in the secluded and heavily guarded fortress: shops on the ground level, living quarters above, an upper-class high-society floor just beneath the private chambers of the patriarchal colonist Tenpenny himself make it clear that the place is an epitome of stereotypical Whiteness in the postapocalyptic U.S.

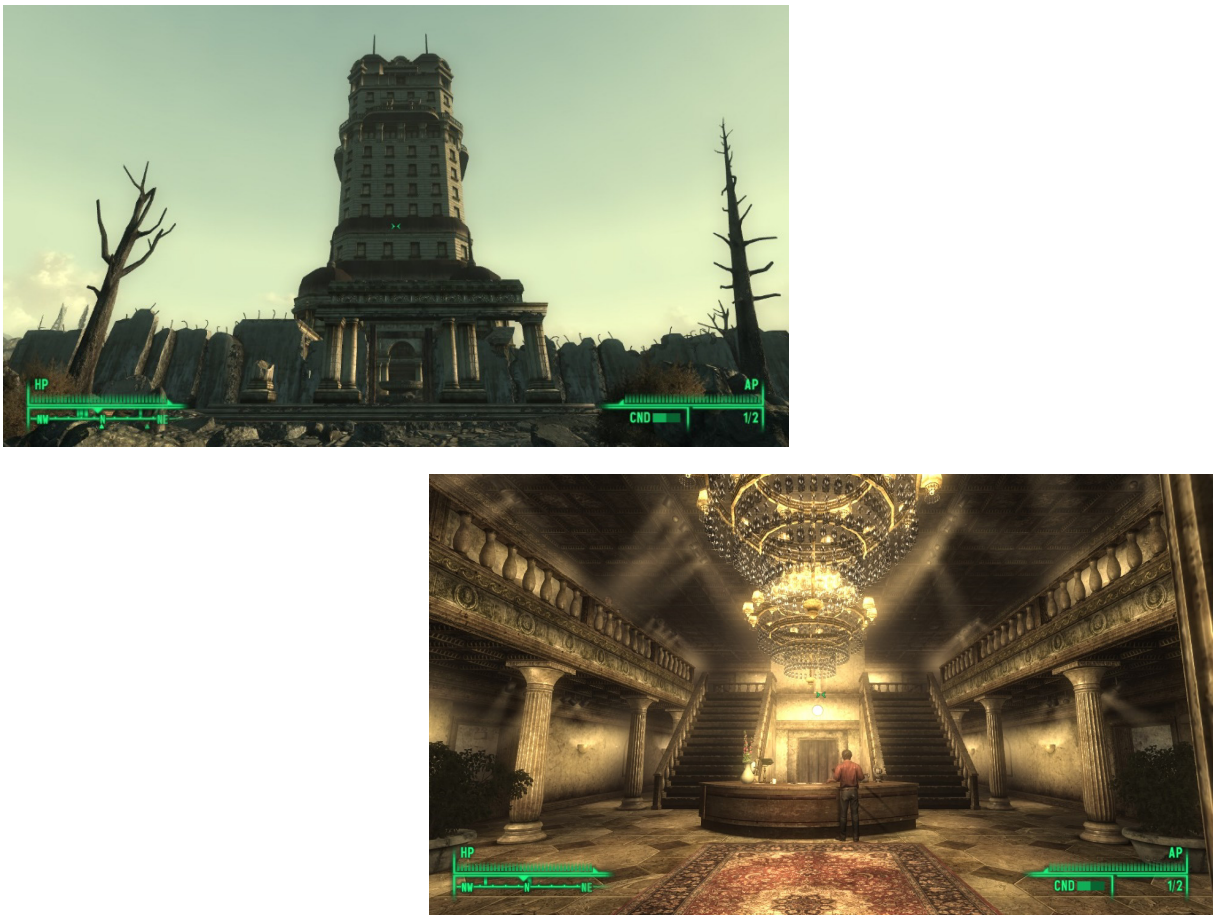


Fig. 36. Exterior (top) and interior (bottom still) views of the Tenpenny Tower.

In the quest, this segregated community faces its greatest fear, a group of ghouls led by Roy Phillips, a militant patriarch himself who claims "we got rights – and we'll take them if they aren't given to us." This agonistic inter-group conflict is used by the game to preconfigure play as an ethical encounter in which the player positions herself with regard to the racialization of ghouls. The anti-ghoul racism and xenophobia of the Tenpenny Tower residents, which Piittinen has rightfully called an "ideology of anti-Ghoulism[223]" (45), is voiced clearly: the prejudices include a) ghouls being dirty, disgusting, uncivilized, and carriers of

[223] Piittinen further links the anti-ghoul xenophobia to the role of China in the nuclear war and suggests an entire "racist history" and thus a "cyclicality of racism" (46) in the game lore.

diseases,[224] b) ghouls being evil or dangerous,[225] c) ghouls being cannibals,[226] d) due to the former reasons ghouls being distinguishable from humans and not having a right to live at the tower,[227] or e) not even having a right to live at all justifying claims for euthanasic genocide.[228] These prejudices are, furthermore, describable as racial prejudices in that there are attempts to ground them in a eugenic discourse of biology. Doctor Banfield, the scientist at Tenpenny Tower, claims that ghouls being "slaughtered" might be the "best solution." Though he admits that he has "never examined a ghoul up close" when the player-character strategically questions him in conversation, he excludes ghouls from a "disease-free environment" that consists of "the correct genes and living conditions," according to him. "Why introduce a weakness into a healthy system?" he asks and frames the existence of ghouls as "destructive," a "Ghoul condition" giving rise to "mindless killers." The other residents of the place further engage in this biological pseudo-scientific construction of race that essentializes and naturalizes the desired hierarchization. Anthony Ling, for instance, refers to the antagonistic framing of the ghoul as a matter of "nature": "What I have against Ghouls, is that they are Ghouls! [. . .] Don't blame me. Blame mother nature. Survival of the fittest. It's the game of life. We're the winners. And those Ghouls, they are definitely losers."

The character's use of the term "game of life" clearly draws a connection from the concept of the ant/agonistic in and beyond games to the practice of racialization (also in and beyond games). Through the tenants' failure or refusal to differentiate between ghouls and feral ghouls and their overall hostility and racism aimed at the figure of the ghoul, *Fallout 3* calls

[224] The present and the following four footnotes offer evidence from the game dialogues for the sake of keeping the section short and yet empirically well-grounded. For the prejudices of ghouls being dirty, disgusting, uncivilized, and carriers of diseases, the following statements (from the residents in the tower) can be considered: Dr. Julius Banfield maintains ghouls "carry diseases," while Margaret Primrose says, "I've heard they carry diseases. I'd have to sanitize everything after them all the time." Susan Lancaster calls ghouls "vermin," links them to "stink" and "dirty tunnels," and opposes them to "us civilized people." Anthony Ling calls ghouls "dirty" and says they "live in filth." Lydia Montenegro claims she can "smell them a mile away," and Edgar Wellington II describes them as "disgusting zombies," "a pack of zombies," and "loathsome."

[225] Margaret Primrose describes ghouls as "dangerous," Tiffany Cheng asks "something that ugly must be evil... right?" and Millicent Wellington states that "they may appear nice, but deep down they want to kill. It's common knowledge among the educated."

[226] Anthony Ling, for instance, claims, "Ghouls aren't human. They live in filth. They eat their own babies."

[227] Margaret Primrose voices this most clearly: "Lucky? Perhaps I should feel lucky. But really, we've all worked hard to get what we have. I think it's fair to say we DESERVE to live here. Those Ghouls on the other hand... they think they can just take whatever they want. Well, they have to earn the right to live here."

[228] The head of security, Chief Gustavo, says the following: "maybe you can get over the fact they look like someone took a cheese grater to their face. But it's what you don't see that's the problem. The radiation slowly eats away their brain, then they go zombie on you. It's better for everyone to kill them before all that, if you ask me. [. . .] eventually all Ghouls go zombie on your ass. It's only a matter of time. Kill them when you find them. It's a win-win. You put them out of their misery and save someone else from getting torn apart." Herbert Dashwood calls the security force's approach a "shoot first, ask later policy." Irving Cheng links the killing of ghouls to the idea of community service: "Speaking of service to the community... I don't suppose you are familiar with Ghouls, are you? More importantly, how to kill them?" Anthony Ling, finally, says, "People ARE dying to get in here. Like those dirty Ghouls... or at least they *should* be dying. Security has got to get their act together."

into question the racial construction of ant/agonistic space but not ant/agonistic spatiality itself. This becomes most obvious if one regards the options the player is afforded by the procedural logics: the player can either choose to invade the tower with the ghouls (who will use feral ghouls as mindless foot soldiers against the humans) or kill them. A less obvious third option entails convincing the tenants that the ghouls are moving in anyway, thus driving out those with the strongest anti-ghoul sentiments so that humans and ghouls can coexist in the tower. However, this allegedly less antagonistic option is problematic, as well, as it will turn out that the ghouls have killed the humans after all when the player-character returns to the tower some time after the end of the quest. Other readings of the quest have emphasized the ethical dimensions the game thus creates for the experience of play (see, e.g., Backe and Aarseth 11; Bosman 11; Kemmer 110). Backe and Aarseth write that "the quest conveys its message – all races are equal – by showing that they all are equally xenophobic, segregationist, and morally questionable" (11). Indeed, the leader of the ghouls also frames the humans as "smoothskin bastards" and thus in racializing terms. By simply siding with the ghouls, the player cannot attain a higher moral ground. However, Roy Phillips, the ghoul leader, further calls into question the link between the category *ghoul* and his own lived experience: "We Ghouls are just like the rest of you: Shit out of luck and doing our best to make it. Being a Ghoul ain't anything worse than any other thing somebody's got to deal with." Hence, rather than merely showing that all races are equal, the Tenpenny Tower quest narratively opposes the construction of ant/agonistic space through practices of racialization and enables the player (ludically) both to indulge in or oppose them.[229] What is not questioned, however, is the ant/agonistic spatiality of *Fallout 3* itself. While the latter is constructed not to a small extent by death races like the feral ghouls (besides Supermutants, radioactive animals, and so on), the ant/agonistic is also what adds to the capacity of the ghoul to carry the notions of a marginalized, racialized non-White Other, displaced and homeless, directed by violent leaders who strive for revenge against the privileged class in the post-colonial and post-capitalist wasteland of the American post-apocalypse.

In sum, the figure of the ghoul relives various historical notions in the quest: the U.S. zombie, itself a racial slur for ghouls used by the people the game refers to as "bigots," appears as a racist and flawed concept in the game. In addition, the pre-20th century Zombie as slave leader appears as a personified violent fear of the White middle/upper-class that comes to haunt

[229] Consider also the role of Mr. Crowley, who wins the player over for killing a group of "ghoul bigots. Real scum" who "all deserve to die" in the quest "You Gotta Shoot 'Em in the Head." Conversations with Quinn and Carol, however, prove Crowley a liar. Ghouls and humans in the game rarely fall into a mere dichotomy of good and evil.

them. Finally, and more fundamentally, the ghoul appears as a group of displaced people, subjected to a condition of "bare life[230]" (Agamben 4) and excluded from the tower. This final notion of the displaced refugee ties back to the Haitian zombie but also the popular U.S. zombie with Romero's 2005 *Land of the Dead*, in which the zombie/ghoul is placed outside of a gated community, for which it functions as an Other trying to get in. The biopolitical notion of the zombie as a figure doomed to restlessly roam the wasteland strongly echoes the game's overarching theme of (what is described as) purification reappearing at the very end of *Fallout 3*. In the final quest, the player can choose to clear the wasteland of radiation, thus killing all super mutants, mutated animals, and ghouls – the project of restoring life to the U.S. wasteland is once more tied to the decision to de/racialize the phenomenon of life.

A place akin to the desired save haven that the ghouls are denied in the Tenpenny Tower quest can be found close to the institutional and representational heart of the U.S.: between the Lincoln memorial and the Capitol, both contested ruins in the game (fig. 29), I stumble upon the building of the Museum of History (fig. 37, top still).[231]

[230] Agamben's notion of *bare life* is tied to the concept of the *homo sacer*, following a Roman legal term for a "person anyone could kill with impunity who was nevertheless not to be put to death according to ritual practices" (72). Most ghouls in the *Fallout* universe are reduced to bare life in this sense as several factions (e.g., the Brotherhood) simply shoot them on sight. The concept is, however, also tied further to the role of the refugee by Agamben and the present quest clearly highlights the biopolitical strategies of seclusion and xenophobia against this figure (see: "If refugees (whose number has continued to grow in our century, to the point of including a significant part of humanity today) represent such a disquieting element in the order of the modern nation-state, this is above all because by breaking the continuity between man and citizen, *nativity* and *nationality*, they put the originary fiction of modern sovereignty in crisis. Bringing to light the difference between birth and nation, the refugee causes the secret presupposition of the political domain – bare life – to appear for an instant within that domain" [Agamben 131]).

[231] The place resembles the actual present Smithsonian National Museum of American History in Washington, DC, regarding location and interior (a mammoth and a T-rex replace the elephant in the entrance hall in *Fallout 3*).



Fig. 37. View of Underworld from the entrance (top) and caretaker Winthrop describing the place (bottom still).

A sentinel guarding the building informs me I am approaching Underworld, a secret and underground city of ghouls. As a city located at the former public site of the national historical memory, it is both ironic and significant that Underworld embodies a secret and alternative history tied to the positionality of the ghoul, whose life is elongated by radiation but threatened by anti-ghoul racism. Only here, "out of sight and out of mind," as Winthrop[232], the caretaker puts it, can ghouls live safely (fig. 37, bottom still). While the many ghoul figures encountered in Underworld all add to the various shades of the ghoul, the city primarily intensifies the notions of slavery and the colonial past that the figures of the U.S. and Haitian zombie/ghoul carry and the ghoul personifies within *Fallout 3*.

On a fundamental level, the place serves as a shelter against ongoing attacks on the body of the ghoul that is threatened by colonization and enslavement: "Slavers usually don't come this far into the city," Winthrop says, and since other factions "see us and shoot on sight,"

[232] Winthrop, the caretaker of the ghoul retreat, bears a name tying the character (and the figure of the ghoul) further to the colonial past of the U.S. The historical referent, John Winthrop, is known for his role in the foundation of the second major settlement in New England, the Massachusetts Bay Colony, in 1630. His reference to the settlement as "city upon a hill" (a quote from Jesus's Sermon on the Mount from the Gospel of Matthew) presents one of the key ideological and rhetorical tropes of U.S. politics today.

he continues, the ghouls truly are "driven underground." It is for the sake of mere safety that the secluded and separated life in the city is accepted as a resident named Carol expresses: "so long as we stay down here, we can live our lives as people not monsters. I think things are better this way for everyone."

As a counter-place against enslavement and racial violence, Underworld as well positions its residents in a state of fragile post-coloniality: Cerberus, the security robot plays a pre-scripted message to the player that addresses human visitors (as possible aggressors) but also includes a collective self-positioning, a short but constitutive proclamation of a community of ghouls, that is utterly impossible at any other place. The robot proclaims:

> This is a town full of peace-loving Ghouls, so check your bigotry at the door. They're just like humans! They feel, they hurt, they bleed...They deserve the same love and respect as any human, and don't you forget it! At least, that's what they programmed me to say. Personally, I think they're a bunch of rotting zombie maggot farms, and I'd send them all back to hell if I could. Damn this combat inhibitor! Damn this pansy zombie programming...

The robot's racist and hyper-masculinist backlash immediately contradicts the statement and makes it clear that the technology the ghouls use still carries the inscribed "bigotry" the proclamation opposes. Through the short encounter with the robot, the game seems to express that the enslaved qua their relative positionality do not have the same voice even if granted the right to speak because the very means of expression (technology, language, and even the psyche, as the close link between self and Other in the statement shows, and as Fanon's analysis reminds us) are never neutral and continue to carry the marks of a cultural hegemony that excludes them.

Many of the conversations with the ghoul NPCs reveal personal accounts that bear strong testimonies of trauma but also healing. Carol shares her tragic backstory in detail, and her narration emphasizes the pain of displacement, the radiation of the nuclear fallout metaphorically shares with the colonial history of the U.S.[233] The player comes to learn that

[233] She gives the following testimony: "I was just a little girl then. We couldn't afford a space in one of the Vaults. I remember filing down into that shelter, my father rushing me in. He stopped to help this one family, and I looked up and called his name... there was a flash of light, brighter than anything you can imagine. I woke up a few hours later. The first thing I did was run up to where my father had been. He... he was gone. But the strangest thing...There was his shadow, burned into the wall, so crisp and clear like he was standing next to me. The heat had burned it into the concrete." Note how, in addition to the displacement of her family, her account also sheds light on the classicism hidden behind the trauma of ghoulification.

Gob, who has appeared at the outset of this discussion, was taken on as Carol and Greta's son. Here, the kinship among the ghouls, who share different but intersecting traumatic pasts, offers an alternative to the nuclear family and its genetic basis for kinship and love (fig. 38). Nevertheless, Carol is clearly affected by the reality of the ghoul's subjugated position in the world as she expresses that she would prefer Gob stay a slave so that he does not get hurt.



Fig. 38. Carol, part of a same-sex couple, offers an alternative to the genetic basis for kinship propagated by the fiction of the nuclear family.

On a social level, the element of trauma can be linked to ongoing practices of slavery and oppression as well as drug (ab)use with regard to the NPC Ahzrukhal[234], who owns the bar "The Ninth Circle." Ahzrukhal is a drug dealer who complicates the role of the ghoul as a sole victim – he clearly benefits from the trauma of his fellow residents, describing Underworld as "the only place in the Capital Wasteland where my people can escape the misery of the world above." "That misery," he goes on, "makes a man like me very happy. And very, very wealthy." The link between the ghouls' trauma and the trauma of slavery and racial violence of the U.S. is again reinforced by Ahzrukhal, who states he would "rather not end up at the receiving end of an angry lynch mob" (if his drug dealing were to become publicly known). As he refers to the ghouls of Underworld in this statement, though, Ahzrukhal has obviously internalized the logics of slavery and its ties to the capitalist exploitation of the body, both of which continue to dominate his understanding of his community. This becomes apparent because Ahzrukhal

[234] The names of Ahzrukhal and Charon, his slave, create intertextual links to Dante's *Divine Comedy* and angel of death figures from myth. The first set of links is suggested by the name of Ahzrukhal's bar, The Ninth Circle, which ties its residents to Dante's first work, the *Inferno* (Alighieri). Here, the ninth and final circle of hell separates Dante (appearing as a character in his poem) from Lucifer himself and is comprised of traitors, betrayers, and oath breakers. Ahzrukhal, who feeds off his kind (and betrays the player-character), certainly bears a telling name read through this intertextual link. Charon, whose immense physical strength is used by Ahzrukhal as a weapon, bears a resemblance to the captured giants present in the ninth circle, one of which carries Dante to the end of his journey (see kitsuneona). This highlights the second set of intertextual relations: Charon's name also refers to the ferryman of the Greek underworld, carrying the souls of the deceased across the rivers Acheron and Styx, which is significant in that the ghoul works as a contract killer. Along similar lines, Ahzrukhal, whose name resembles Azrael, connects to the Christian and Islamic myth of an angel of death, further describing the ghoul as a figure of death (pointing to the ghoul as both undead and a bringer of death).

actually owns a slave, another ghoul named Charon, who is bound by contract to protect his owner and his business.



Fig. 39. Ahzrukhal's reply when asked whether Charon is his slave.

Though Ahzrukhal rejects slavery on the surface (fig. 39), the conversation with him reveals that he applies the laws of an unchecked capitalist desire for surplus that benefits from Charon's traumatic past:

> I hold his contract, which makes me his employer. He will do what I ask when I ask, without question. You see, Charon grew up around a very interesting group of individuals. They... well, I guess you could say that they brainwashed him. He is absolutely loyal to whomever holds his contract. Unfailing, unflinching, until the day that employment ends. Don't get me wrong, I have no doubt that he holds no end of animosity towards me. But so long as he is my employee, he is as gentle as a teddy bear.

Charon resembles the mindless modern capitalist zombie but also harks back to the Haitian zombi who is manipulated into serving a particular master (positioning Ahzrukhal as *bokor*). At the same time, however, the double imaginary figure of the early pre-19th century submissive zombi and the slave revolt leader Zombi also resurface with Charon as the player can buy the contract from Ahzrukhal, who then immediately gets shot by Charon. Problematically, Charon then follows the player as a companion, and there is no option of releasing or firing him from his contract. On the level of play, the companion mechanic, which allows the player to bind an NPC as a fighting companion, in this regard, utterly clashes with the narrative power of the pair of ghoul NPCs and may serve as a first major example of ludo-narrative dissonance in the *Fallout* series.

In sum, Ahzrukhal exemplifies the inheritance of a colonial past and shows how the ghoul, even if freed from slavery, continues to be affected by the capitalist, extractivist, and dehumanizing practices he does not cease to carry. The same is, however, true of the player,

who, akin to Ahzrukhal, is constantly in danger of being colonized by the game's options of becoming a colonizer herself. Most encounters with ghouls in the game offer racist and violent options of interaction, and both racism and colonialism thus remain potential play partners whose affective capacities depend on the player.[235]

Finally, besides the colonial and racist elements of *Fallout 3*'s architectonics of play, the city of Underworld offers another imaginary of play – the player as a tourist of exotic Otherness. Willow, the guardian of the city, tells the player: "Come on! Here you are in the mall of our nation's fine capital, taking in the sights, visiting the monuments! Face it. You're a tourist." Here, *Fallout*'s narration exceeds the two previous elements discussed so far: the marginalization and segregation, which secure the ghoul's distance and invisibility as a social agent and drive them to Underworld in the first place, and the widespread prejudices proliferated in such hegemonic places as the Tenpenny Tower. In addition to these, the consumption of the invisibilized and glossed-over Other as an exotic commodity fundamentally complicates the possibility of an authentic encounter of the human and the ghoul in the wasteland. These three elements together constitute what Achille Mbembe has described as the threefold "logic of French racial ascription" ("Die Logik der französischen Rassenzuschreibung"; my trans.; 131), irrevocably making the ghoul a carrier of practices of racialization.[236] However, the game also explicitly addresses and positions the player, who visits the city literally placed in a museum, as a carrier of these logics. The use of the term *tourist* in this regard is more than metaphoric in that the player is, indeed, a paying visitor. Here, the self-referentiality of the medium points to the ghoul as an object for the *exotic* desires of the player, who, as Leonhard has pointed out, can derive "pleasure [. . .] from visiting and becoming the racialized other" ("Live" 4). Thinking with *Fallout 3*'s imaginary of play, which the game only begins to reflect critically in a few moments, play offers non-innocent encounters that always remain at risk of taking part in the Othering practices, which critical play might seek to

[235] The following interaction tree with Winthrop, the caretaker of Underworld, may serve as an example of the violent options against ghouls in the game, which usually come at the cost of karma points (an in-game resource representing the player as an ethical actor). When a trading deal is considered, the player can threaten Winthrop and the entire group of residents: "[player] I have a better idea. How about I do nothing and you give me what you have? [Winthrop] What? What are you talking about? Do nothing? [player] Yes. As in: I won't shoot your face off and dance in your brains. [Winthrop] You... you wouldn't dare. I've got... I mean... I'll call for help. [player] Go ahead and yell. I'll kill every last one of you."

[236] Mbembe emphasizes the same three logics the analysis has described in the game: "The logic of French racial ascription is characterized in several respects by three features. The first – and obviously the most important – is the refusal to look, i.e., the practice of obscuring and denying. The second is the practice of masking and disguising, and the third is the complex of frivolity and exoticism" ("Die Logik der französischen Rassenzuschreibung ist in mehrfacher Hinsicht durch drei Merkmale gekennzeichnet. Das erste – und offensichtlich wichtigste – ist die Weigerung hinzuschauen, also die Praxis des Verdunkelns und Verleugnens. Das zweite ist die Praxis des Übertünchens und Verkleidens, das dritte schließlich ist der Komplex aus Frivolität und Exotizismus"; my trans.; 131).

oppose/expose. The “lone traveler,” as *Fallout 3* addresses the player-character, is understood better when one reminds oneself that tourism is a business and the Other (i.e. the ghoul) is embedded in an economy of perception across games, that is carried by the entire game industry, which feeds off the very desires, through which it affects and positions the player.

As a third and final case from *Fallout 3*, the Oasis quest adds to the figure of the ghoul. In a secluded village surrounded by impenetrable thicket and trees, the player-character can find a religious sect, the Treeminders, who worship a large tree-deity growing in their midst. Though the group opposes technology and war, even this peaceful group testifies to the ant/agonistic character of the U.S. postapocalyptic landscape: “the Wasteland is a hostile place” says spiritual leader Treefather Birch, “is it so strange to care for one's home and keep it safe from those who would seek to exploit it?”

After an initiation ritual, the player-character learns about the reason the group depends on her: the deity of the cult wishes to speak to an outsider. Approaching the tree in the midst of the village, the player realizes that (unbeknownst to the cult) the “Great One” is actually a ghoul named Harold, whose body is part of a large tree, named Bob but Harold sometimes calls Herbert (fig. 40). Harold tells the player that Bob initially grew within him, then out of his head to the point at which he outgrew, surrounded, and incorporated him. As this has led Harold to be stuck in the same place and, on top of that, together with the Treeminders who “listen” when he talks but “don’t hear,” Harold wishes for his life to end and asks the player to assist him. In the course of the quest, the player can either comply with Harold’s method by piercing his heart underground, burn him, which Harold fears, stop the growth of the tree, or extend its growth into the rest of the wasteland.



Fig. 40. Harold/Bob/Herbert/The Great One asking the player to end their life.

Though Harold is not too easily read on a metaphorical level, this version of the ghoul figure certainly maintains an existence literally rooted in a colonial constellation again. In accordance with the Haitian zonbi astral, Harold is not in control of his entire body (though of what is often framed as the soul). Contrary to the many other enslaved ghouls, Harold's body is neither controlled from the outside nor the inside but assimilated into another. The truly post-human and hybrid being thus emerging, through a fundamental (indeed violent) misreading of its colonial genesis and ontology, is, strikingly, celebrated as the very epitome of nature – to the point of being deemed a deity. Worshipped for an identity he is completely out of touch with, Harold lives in a state of colonial and existential alienation that cannot be remedied while the interests of the colonizing party (Bob) are left untouched.

The level of metaphor and narration adds to play (which can only *analytically* be separated from the former in the first place) the intertwined questions for the nature and quality of life of the colonized body and that of the pragmatics of transcending a colonial state. For the player, the quest offers postcoloniality as an uneasy play partner that entails yet another micro-ethical dilemma in which the interests of the region (Bob could help repopulate the barren wasteland), of the ghoul (as a colonial body caught in a violent situation), of a religious group (whose dogma can be interpreted in various ways), and those of the player herself all weave a complex, challenging and ant/agonistic ecology of relations.

4.5.2. *Fallout: New Vegas* (2010)

Fallout: New Vegas, a spin-off of *Fallout 3* using the same game engine, is set four years after its predecessor and shifts the setting to the Mojave Desert surrounding the postapocalyptic version of Las Vegas, called "New Vegas" in the game. In the title, several rivaling factions, among them the New California Republic, Caesar's Legion, and Mr. House's robot army, fight for control over the source of energy in the region, the Hoover Dam.[237] The ant/agonistic setting of *Fallout: New Vegas*, as McClancy's work details, is once more tied to American history and identity, whereas the title focuses specifically on the American West "echo[ing] the myth of the Frontier that has been defined as foundational to American-ness since at least Frederick Jackson Turner's address to the World's Columbian Exhibition in 1893, in the process challenging the glamorization of individualism central to that myth. [. . .] Its conflicts between local tribes and expanding nations seem to refight the American Indian Wars" (McClancy).

Among the many smaller settlements, quests, and larger conflicts of the title, the ghoul continues *Fallout 3*'s exploration of marginalization. Though the game also continues to exploit the figure of the feral ghoul as a main enemy encountered in the wasteland, there are several additional non-feral ghouls in the game. Appearing mostly as struggling figures, they live lives marginalized within but, contrary to the segregation of *Fallout 3*'s ghoul city Underworld, placed among other (non-ghoul) human settlements (fig. 41). The run-down glamor of New Vegas is inhabited by figures like the struggling comedian Hadrian, whose "fame is fleeting" and who is bound to his employer by contract once more adding to the notion of the ghoul body bound by capitalism. Rotface lives as a beggar who will share his substantial knowledge about the social relations and the history of the city with the player in exchange for coins. Beatrix Russell initially works as a gun-for-hire for a medical humanitarian organization and, in the course of a quest, can be convinced to work as a sex worker/dominatrix (she accepts because she is thus able to continue her drinking habit on the job). Both Hadrian and Beatrix tie into *Fallout 3*'s framing of the ghoul as a figure that is not merely bound by capitalism but consumed as a direct object of desire. Through Beatrix, the player-tourist can become a sex tourist as she is among the NPCs the player-character can sleep with.

[237] The NCR appears as a militaristic faction striving towards a new state, propagating pre-war values of democracy, personal liberty, and the rule of law. Ceasar's legion is an association of several violent tribes united by slave-trade, expansion, and an organizational and visual resemblance to the Roman army. Mr. House, finally, is the media and business tycoon of the city New Vegas – despite holding the monopoly over the casinos, much of his plans and interests are hidden.



Fig. 41. Ghouls in New Vegas: the comedian Hadrian (top left), the beggar Rotface (top right), and Beatrix Russel as gun-for-hire (bottom left) and sex worker (bottom right still).

Beyond these marginal figures, it is Raul Tejada and Jason Bright who add novel meanings to the conceptual positioning of the ghoul. While many of the previous encounters with ghouls in *Fallout 3* carried memories of U.S. slavery and thus African-American experiences, Raul imbues the figure of the ghoul with a different history. Raul Tejada, voiced by Danny Trejo, is of Mexican origin; he survived the Great War at a safe distance from Mexico City but lost his family in the violent events that followed, and slowly turned into a ghoul. During the quest "Crazy, Crazy, Crazy," the player-character can find him imprisoned by a group of mutants who keep him as a slave because he is a skilled mechanic. Upon freeing him, Raul can become a companion, a special NPC whose procedural logics will have him follow and fight alongside the player-character. During the unmarked quest (i.e., not appearing in the list of quests) "Old School Ghoul," the player gets to know Raul's backstory and influences his character arc. The narrative framing portrays Raul as having been driven by revenge for the murder of his sister, who lived with him as a scavenger among the ruins of Mexico City. "I would have died, I think, if I wasn't so full of rage," Raul says to the player. While he was hunting down her murderers, he was known for his vaquero outfit, a costume Raul had initially worn to make his sister smile during their grim time in the wasteland (fig. 42). Later, he put revenge and the costume aside and wore a repairman jumpsuit instead to give weight to his change of way of life. Through the dialogue interaction, the player can influence which outfit and corresponding way of life Raul chooses for himself. In short, the character shares a personal

micro-narrative, making the ghoul appear as a strong but tragic anti-hero without getting rid of the dialectics of enslavement and freedom; once more, it is the player who has to confront the decision on how to deal with the ghoul's traumatic past to go on.



Fig. 42. Raul Tejada as companion with mechanic (top) and vaquero outfit (bottom still).

Finally, a quest called "Come Fly With Me" addresses the ghoul as a *social group* again. At the REPCONN test site near Novac, a voice from the intercom addresses the player and asks her to come to the higher floors of the building. Once she has found her way, the voice turns out to belong to a ghoul (fig. 43) who introduces the player to his community: "I am Jason Bright[238], the prophet of the Great Journey. All the ghouls you see here are members of my flock."

[238] Jason's last name Bright points to the fact that he is literally glowing due to the radiation that is part of his body. Though there are various so-called "glowing ones" (a strong kind of feral ghoul serving as boss enemy) wandering the wasteland, Jason is unique in that only parts of his body are bioluminescent and he has not turned feral.

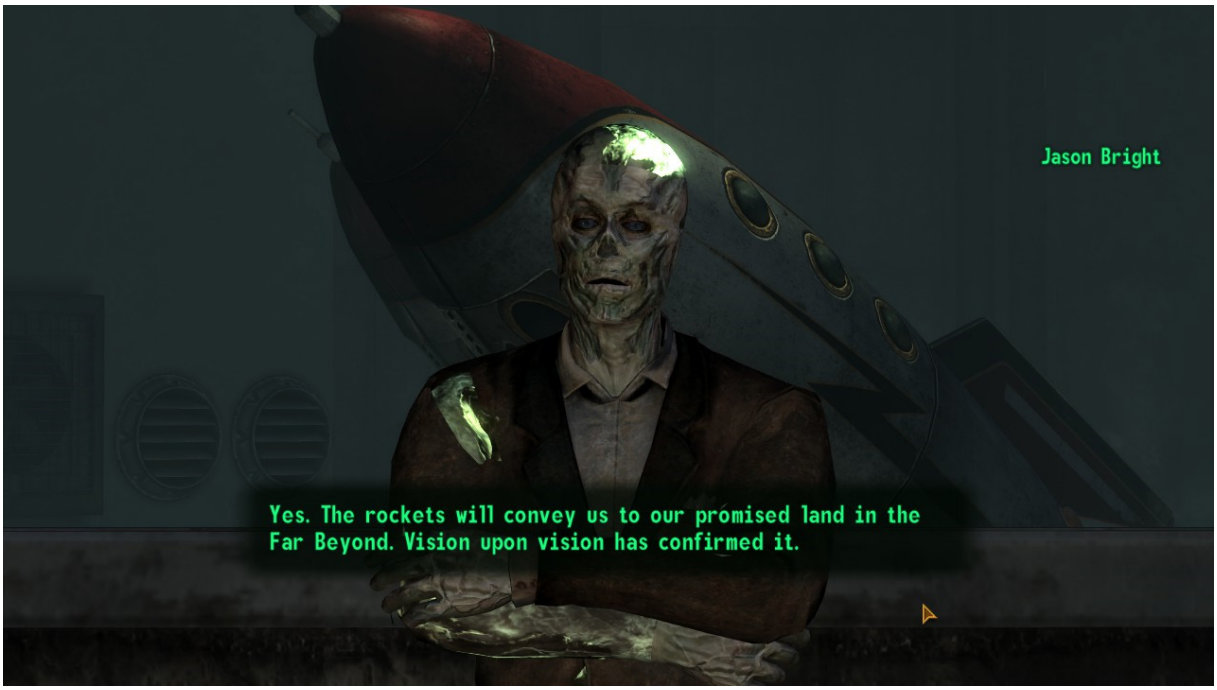


Fig. 43. Jason Bright, spiritual leader of a separatist community of ghouls at REPCON.

The group Jason leads is based on the intertwined concepts of race and religion – Jason's dogma of the "Great Journey" is founded on the persecuted position and the history of the ghoul and offers a solution in the form of a biblical promised land trope: "We wish to escape the barbarity of the wasteland, especially the violence and bigotry of its human inhabitants. The creator has promised to my flock a new land: a place of safety and healing... a paradise in the Far Beyond." Rewriting the wasteland as a spiritual diaspora, Jason acts like a savior figure, combining a non-violent activism approach (which in the U.S. imaginary of anti-racial struggle is linked to Martin Luther King) with religious escapism and separatism (the latter of which is reminiscent of Malcolm X's approach to racial justice). The pacifist approach makes Jason the foil of Roy Phillips, the ghoul leader from the Tenpenny Tower quest. The separatism, however, searches for an ultimate retreat as the plan of the group literally involves leaving the planet via three rockets, which would take the ghouls to space. For the player, the quest involves the challenge of clearing the basement of the Nightskin, a group of super mutants themselves searching for a piece of technology (once more, there are agonistic and antagonistic, i.e., violent and non-violent approaches open to the player). Then, two components required for the take-off need to be found. Before the take-off, the player gets the chance to betray the group and manipulate the endeavor once more, repeating the availability of violent (egoistic but also potentially racist) actions against ghouls. When the player helps the group, only two of the three rockets successfully start, and the fate of the group is left open.

Beyond the repetition of a counter-hegemonic group of ghouls grappling with their subjugated position and the anti-racist leader figure, the quest offers a further twist on ghoulism: the human character Chris Haversam (i.e., his graphical character model is that of a human) identifies as a ghoul but is not identified as one by Jason and his group (fig. 44).

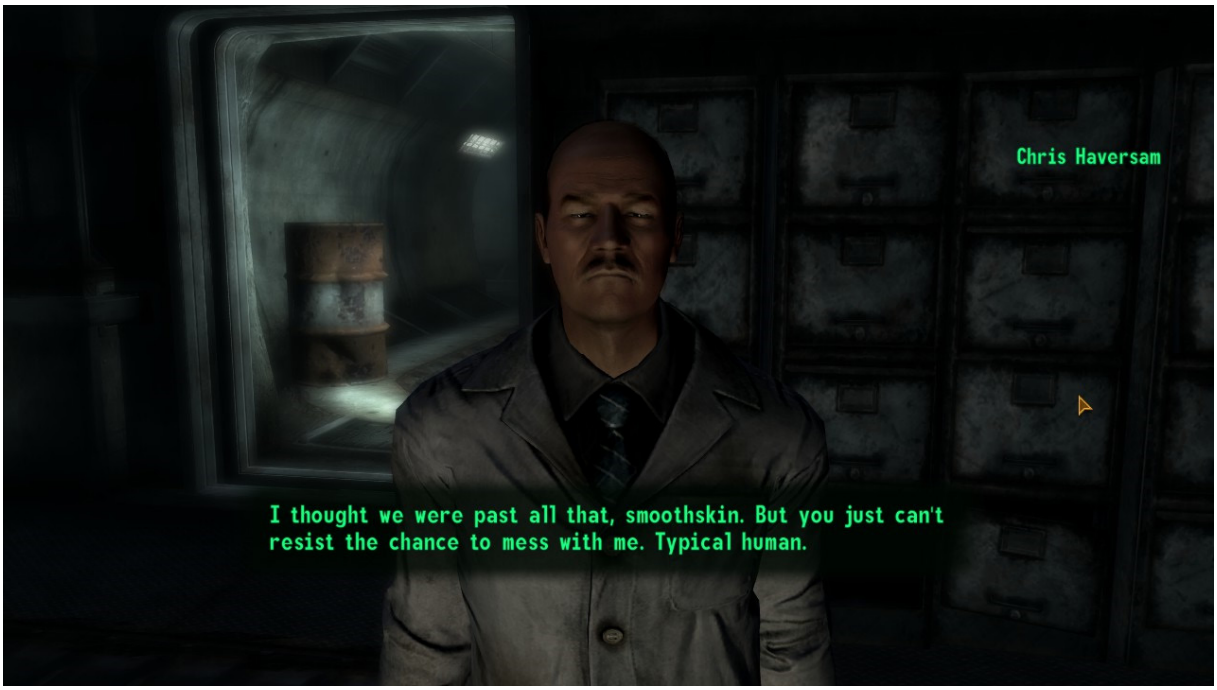


Fig. 44. Chris Haversam, a mechanic at the REPCOM test site, who identifies as a ghoul.

For Jason, Chris's humanity is a simple fact of being rather than a matter of identification or inner feeling: "I doubt you had much luck if you tried telling him that he's human. We had the same discussions when he first appeared, and the same lack of success. He believes he is one of us." Furthermore, Jason considers the difference at hand in the context of an agonistic model of race, which can only be overcome by a divine plan: "Equally clear was that Chris should labor in blessed ignorance of his humanity, and his inability to make the journey himself. It is no coincidence that two humans have been vital to the success of the Great Journey. It is my belief that the creator sent you and Chris to expiate the sins of your kind against mine." Jason's reference to two different "kinds" repeats the element of an essential biological difference between Chris and the group and excludes him from the promise of salvation (- there is no malice in this exclusion though as Jason refers to the high levels of radiation as deadly for humans but not for ghouls).

Finally, Chris's own psychic dynamic links ghoulism again to the experience of marginalization as he struggled to fit into the community of Vault 34, where he grew up. While the vault dwellers called him "neurotic," he became convinced that his hair falling out during

his time as a technician maintaining the vault reactor was the first sign of turning into a ghoul. Thinking of himself as "a monster" unable to fit in, he left the vault and joined Jason's group. Beyond this link of the ghoul and the experience of "not fitting in," Chris's identification with the ghoul is noteworthy as a performance. Contrary to the idea that ghoulism is a phenomenon grounded in biology, Chris is doing being a ghoul in that he, for example, speaks with a distinct gravelly voice. Like Gob, he refers to the player-character as a "smoothskin," which appears as a performative social demarcation rather than an expression of a preexisting biological difference. Chris even expresses a reversed kind of disgust reminiscent of the distinct abjective-affective schema that ghouls are met with (though, of course, it remains open whether there really is such an affective response being expressed): "God, but are you ugly! Get upstairs and talk to Jason before I throw up just from looking at you." In sum, Chris's performance of ghoulism disrupts the biological essentialism meant to ground the concept of race and reveals that social habitus is a fundamental part of the being of a ghoul. Despite not finally passing as a ghoul, he still de-racializes the figure of the ghoul in this sense.

4.5.3. *Fallout 4* (2015)

After *Fallout: New Vegas*'s shift to the west coast of the U.S., *Fallout 4* (2015) returns to the east again: set in Boston and the surrounding coastal and rural areas ten years after the setting of *Fallout 3*, the game opens once more with the same words all titles begin: "War…war never changes." Taking as its main theme the slavery and rebellion of the android (or "synth" in the game), *Fallout 4* repeats the ant/agonistic encounter of various opposing factions between which the player must choose (the "Brotherhood of Steel" returns alongside other groups, e.g., the "Railroad," an underground organization seeking to free androids, or the "Minutemen," a civil militia trying to protect the common people in the wasteland).

The first notable change to the figure of the ghoul is a visual one – the graphical models for the ghoul in the game differ substantially from the earlier ones in that the ghoul appears with a lighter tone of skin, a prominent nasal disfigurement, and (usually) black eyes (fig. 45). Through these changes, the face of the ghoul is much less grotesque and recalls burn injuries rather than open wounds and necrotic tissues as in the previous titles. The overall visual effect is that ghouls appear closer to the human character models again and, as a group, less heterogeneous.



Fig. 45. The character Bobbi No-Nose, whose name references the graphical reimagination of the ghoul in *Fallout 4* (2015).

The recurring and dominant trope of the ghoul in *Fallout 4* remains the *social and spatial marginalization* of the figure: the main settlement, Diamond City, a place set in the remains of Boston's football stadium, does not allow ghouls inside its fortified and guarded walls. At his inauguration, the major McDonough (fig. 46, top right sill) created an executive order referred to as the "anti-ghoul decree of 2282" that forcibly removed all ghouls from the city. McDonough's brother, the ghoul leader Hancock (fig. 46, top left still), reads the right-wing politics of the major as rooted in a populist strategy rather than McDonough's actual sentiments.[239] The major's words to the player leave no doubt that the institutionalized racist framing of the ghoul as an Other is part of a political strategy that benefits from the people's separation from the object of their fear: "When you build up a scapegoat, you need them to remain distant and scary."

[239] See the following transcript from a dialogue with Hancock that also hints at the possibility of McDonough having been replaced by a synth: "There'd always been a pretty big gulf between the folks living in the stands and folks down on the field. McDonough ran on it because he thought enough of those Upper Stands assholes would vote for him. Guess he was right. I remember storming into his office above the stands after the inauguration speech. He was just standing there, staring out the window, watching as the city turned on the Ghouls. He didn't even look at me, just said: 'I did it, John. It's finally mine.' Should have killed him right there, but I don't think it would have changed anything. Instead, I pleaded with him, begged him to call it off. He said he couldn't. He had nothing against the Ghouls. He was just carrying out the will of the people. And he couldn't betray the voters. And then he smiled. That hideous, fucking mile-long smile. He never smiled like that when we were kids. I didn't even recognize him."



Fig. 46. Hancock (top left), McDonough (top right), and residents of Goodneighbor listening to Hancock speaking (bottom still).

McDonough's brother Hancock, who became a ghoul after taking a contaminated drug, is the founder of one of two ghoul settlements akin to *Fallout 3*'s Underworld. "Goodneighbor" is a secret base for mobsters and criminals, but also a place where ghouls live alongside non-ghoul humans and robots (fig. 46, bottom still). Hancock's description of the place as "from the people for the people" links it to Lincoln's famous Gettysburg address and thus mirrors Underworld's role as a carrier of a forgotten history of the U.S. that offers an alternative imaginary opposing the "bigotry" the ghoul continues to be met with. An establishment called the Memory Den, located at Goodneighbor, enables the reliving of pre-war memories, once more adding to the notion of the ghoul as a carrier of practices of remembering constitutive moments of U.S. history.

In comparison to the previous titles, the figure of Hancock reimagines the ghoul as an independent, strong leader-type character, slightly shady and yet eloquent with a strong sense of humor. *As Fallout 4* refines the companion mechanic from the previous titles, Hancock, who can join the player-character after completing a quest, can become a continuous play partner in that he offers commentary on the game world and the actions by the player. Approaching a bar,

Hancock might, for example, say, “Wanna see if they’ll serve a Ghoul here?” As the procedural logics of the companion mechanic communicate whether a character (dis)likes player decisions, Hancock adds a novel dynamic to the processual unfolding of play and ongoingly affects the decisions of the player.



Fig. 47. Wiseman, founder of the Slog (left), and two ghouls working at the plantation (right still).

The second ghoul settlement is called “The Slog” and positions the ghoul as an equally self-determined and autonomous but honest and hard-working laborer. Founded by a character named Wiseman (fig. 47, left still), the settlement has a shared basis in economics, demarginalization, and representation:

> Working here’s like a slog through the mud. It’s tough going and you’ll get dirty doing it, but at the end of the day, it’s worth it. You've probably noticed it’s only ghouls around here. I used to live in Diamond City, until that rat bastard mayor threw me and all the other ghouls out. I decided that we ghouls should have a place where we could feel

> welcome, and that's mainly why I started up this farm. What if this place could be more than just a refuge for ghouls who aren't welcome elsewhere? What if it could also be an example of what we can do when we put our minds to something and work together? We want this to be a place that everyone looks forward to visiting, with smiling faces, good bargains and great produce. Maybe we can make people take a second look, you know? Maybe then they'd see that we're not monsters.

Run as a collective plantation (fig. 47, right still), The Slog produces tarberries (a consumable item) in a former swimming pool and serves as a trading post. In spite of its peacefulness and role model function, however, the procedural logics of the place submit it to the control of the player as it is part of the so-called settlement mechanic. The latter makes the place available to the player as a site for building, decoration, crafting, and production. As a settlement, The Slog is frequently under attack from enemy parties and thus a site of constant reterritorialization in a colonial and antagonistic architectonics of play that relates to places primarily via conquest and defense, exploitation and bordering, which are at odds with the narrative framing.

Regarding smaller side quests, two further characters are noteworthy as they reimagine the figure of the ghoul further. The first is the Chinese captain Zao, the only non-American ghoul character in the series (fig. 48). His atomic submarine Yangtze-31 can be discovered in Boston's harbor, where it has sunk during its mission of firing nuclear missiles at U.S. targets during the great war. As the only non-feral survivor of his crew, Zao is haunted by guilt and asks the player to help him return home. The figure is interesting as a cultural outsider in that he does not carry any of the ghoul tropes of the series. Though clearly based on a stereotype (e.g., in how he mixes English with incoherently worded Mandarin or how he calls the player a "capitalist"), Zao neither refers to the player as "smoothskin" nor brings up inter-group relations between ghouls and humans in the manner that all other ghoul characters do. In this sense, Zao de-racializes the ghoul and shows many facets of what being a ghoul entails as socio-cultural in character, i.e., like Chris from *Fallout New Vegas*, he points to a doing being a ghoul that is socio-culturally mediated rather than biologically grounded.



Fig. 48. The ghoul as cultural Other: the Chinese captain Zao at the Yangtze-31.

The second figure prepares a further reimagination of the ghoul – for the first time, the ghoul appears as a child (fig. 49, top left still). The player meets Billy Peabody as the child is alone in the wasteland, trapped in a fridge where he survived the nuclear war but turned into a ghoul (fig. 49, top right still). Upon discovery, the player can escort Billy to his old home, where his parents are found to be alive, having themselves turned into ghouls as well (fig. 49, bottom still).



Fig. 49. The ghoul as a child: close-up of Billy Peabody (top left), Billy in front of his fridge (top right), and the reunion of the Peabody family (bottom still).

In opposition to the earlier efforts to establish the ghoul as an affective and conceptual Other to the nuclear family, *Fallout 4* reimagines the figure less in tension with but in symmetry to the triangular family with the Peabodys. Contrary to Gob and his same-sex foster parents, the ghoul here re-embodies the genetic foundation of the family. Matt, the father figure, explicitly points to "something in both our genes" that predetermined that the family would be "some of the lucky ones" to turn into ghouls rather than die from radiation. Turned on its head (in relation to the previous titles), ghoulism here appears as a means to secure the persistence of the nuclear family (in fact, both meanings of *nuclear* become compatible) rather than an outside threat to it or a sardonic marker of its fictionality. The Peabodys show that the ghoul in *Fallout 4* is just another human, a narrative arc that comes at the risk of ceasing to question this very humanity.

Finally, *Fallout 4* pushes the series closer to the action genre (and, particularly, survival horror) compared to its predecessors and, hence, heavily relies on the role of the feral ghoul again. The feral ones in the title come close to Romero's reimagination of the zombie in 60s U.S. cinema as they add to the survival aspect and the antagonistic setting: appearing in larger groups and moving in quick sprints and heaps into critical distance to the player-character, the feral ghouls as play partners add the element of fear via a proximity of uncertainty to the place of play.[240] Often engaging the player out of nowhere as a glistening mass of dark and growling bodies in pitch-black night, the ghoul serves once more as a death race – bringing death to the player and asking for it in return (fig. 50).



Fig. 50. The ghoul as death race: a group of feral ghouls leaping towards the player-character.

The figure of Oswald the Outrageous is an explicit thematization of this framing of the feral ghoul. Oswald can be met in the region of Nuka-World, a fun park available with an add-on. Like Jason Bright, he is a glowing one, who has not turned feral but refers to the countless feral ghouls in his castle as his "friends." Together with his wife, who later left to find a cure for ghoulism, Oswald worked as "an entertainer until the bombs fell" and he decided to make the place his "home." As the leader of the ghouls at Nuka-world, Oswald accuses the player of breaking into their home and slaughtering his fellow ghouls: "We've defended this place for

[240] Compare how in his essay "Distance and Fear. Defining the Play Space," Sebastian Möring draws from Heidegger to emphasize the elements of uncertainty and distance for the creation of fear in play: "Fear is at play if the harmful object is at an approachable distance from where it can be harmful or not. Heidegger calls this a 'threat'. The emerging uncertainty – whether the approaching harmful object(s) will finally be harmful or not – is fundamental of fear." (235).

over 200 years. Do you think you're the first outsider I've met that's chosen to brand 'feral' ghouls as monsters? How many of them have you needlessly slaughtered while ignorantly thinking you're doing the world a favor?! I'm not going to let you kill any more of my friends. This is our home, not yours." Oswald's framing of the ghoul is once more a biological one, which thinks of the ghoul as sick rather than feral: "It's an illness that affects the brain," he says (fig. 51). As a moment of self-referentiality, Oswald's message clearly speaks to the ant/agonistic spatiality and territoriality of the game world, constructed via the figure of the feral ghoul. Since the game's procedural preconfigurations have always already positioned the feral ghoul as an enemy attacking the player on sight, the criticism is another prime example of ludo-narrative dissonance between *Fallout 4*'s attempts of re-narrating the ghoul and its reliance on the figure as an enemy while simultaneously abandoning many of the more complex and uneasy ethical dimensions of the previous titles.

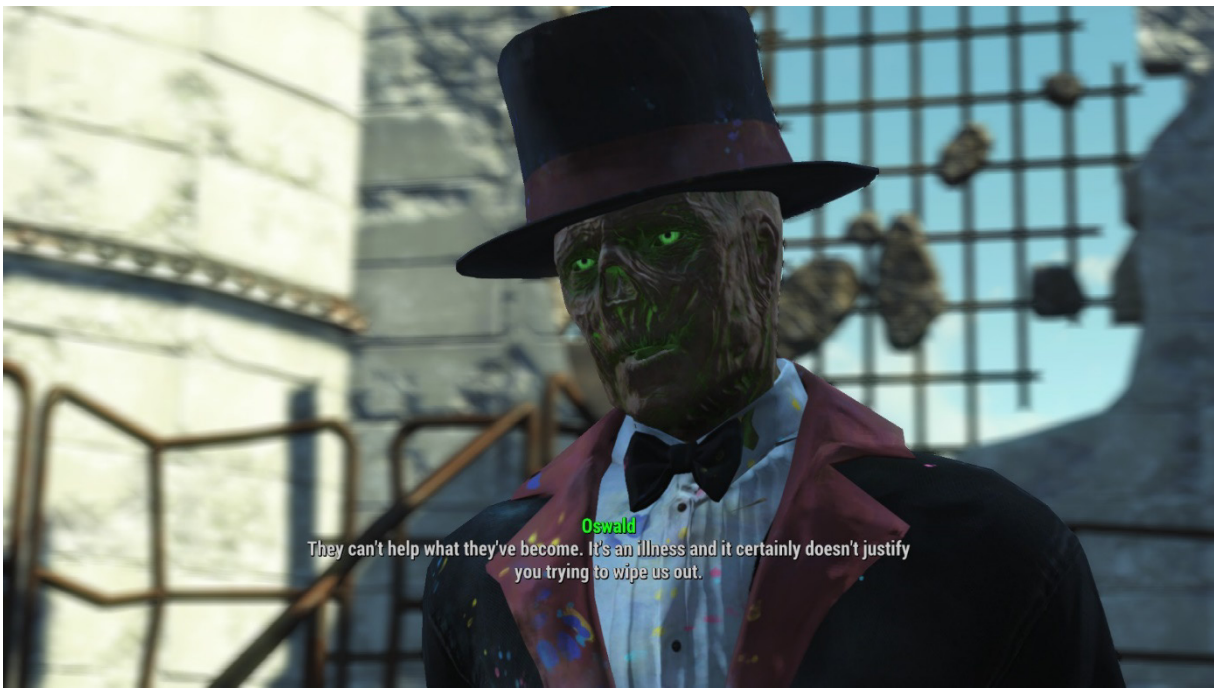


Fig. 51. Oswald accuses the player-character of needless killing.

Tied to this explicit thematization of the ghoul, Oswald's role as a performer furthermore harks back to the professions of Hadrian and Beatrix in *Fallout: New Vegas* and *Fallout 3*'s notion of the player as a tourist. When Oswald resurrects his ghouls to attack the player (his seemingly supernatural power is simply described as a consequence of radiation), he announces, "Up up, performers! It's time for another show!" In between dialogues, he says that "the show must go on" and as the player takes too long choosing between dialogue options, he interrupts with "Really now, you're holding up the show!" These short interceptions both refer to the setting but also break the fourth wall and once more refer to an imaginary of play

in which the player is simultaneously assigned the roles of audience and performer, making play a performance and a spectacle.

Tying the above notions together, *Fallout 4* offers a series of reimaginations of the figure of the ghoul across which, contrary to the earlier dominant themes of the *Fallout* titles, the ghoul is no longer primarily a body tied to colonialism. Though continuing to be a marginalized figure, the ghoul is moved away from the topics of racialization and slavery and towards a reimagined strong and predominantly male figure (the only exception from this schema is Billy Peabody, who is immediately threatened by a slaver upon emerging from his fridge). The colonial past of the ghoul, which the zombie/ghoul carries, is generally (re)suppressed in *Fallout 4* in favor of a new conceptual and visual trend of equating or parallelizing the human and the ghoul, which unfortunately robs the latter of some of the figure's potentials for questioning affective, racial, and ethical dynamics of Othering.

4.5.4. *Fallout 76* (2018)

With *Fallout 76*, Bethesda continued the series with an action-MMORPG and thus moved the franchise further away from its distinguishing features of complex storytelling and ethically challenging single-player role-playing. As an online game, an initial beta version of the title was released in 2018 and received several updates and overhauls, adding further content, large amounts of which Bethesda chose to monetize. *Fallout 76* offers a large open world set in the region of Appalachia, inspired by the current West Virginia, and the year 2102 (i.e., only 12 years after the great war), making the game a prequel to the previous *Fallout* titles. It positions the players as members of Vault 76, who, upon its opening in 2076 (a celebration of the 300th anniversary of American independence), are charged with the task of recolonizing the surrounding region.

As the first version of the game, tellingly, featured no human NPCs at all, the game concept offers little space for the figure of the non-feral ghoul. The antagonistic design of the title relies on many of the enemy types known from the previous games, and thus particularly the feral ghoul. Having made her first steps out of Vault 76, the player is immediately attacked by low-level representatives (the "weak feral ghouls") of this ubiquitous and omnipresent enemy type and, akin to the use of the zombie in current shooters, the ghoul continues to be

among the most prevalent shooting targets emerging from among the ruins to charge the player one-on-one or as a horde (fig. 52).



Fig. 52. Feral ghouls attack the player in *Fallout 76* (2018).

The figure of the non-feral ghoul remains largely an empty repetition of tropes from earlier titles. The majority of non-feral ghoul NPCs was added to the sparsely populated map with the Wastelanders update. While some of them are involved in quests or initiate them, the quests themselves do not explore the figure of the ghoul further. To accompany the curiosity of new players, it remains an option with most ghoul characters to directly address their existence: not just in the encounter with Mordecai McCoy, the first ghoul met in the game, the player can ask "What's it like being a Ghoul?" (fig. 53, top left still). A few rudimentary core notions of the figure remain: 1) ghouls continue to be linked to the past, nostalgia, and the task of working through past conflicts and relationships, for example, with Frida Mandani or Betty Hill (fig. 53, top right still, where the character says "Hard not to be nostalgic for a glitzy past when you have to carry on looking like I do"), 2) anti-ghoul prejudices and violence are mentioned but

not thematized further in the game,[241] 3) Frida, Mordecai, and Lucky Lou all address the fear of "turning feral" in various ways, and 4) with Gunther Jenkins and Betty who work at an amusement park (fig. 53, bottom still), the link between ghouls and the entertainment business (albeit without any further deeper commentary) is recycled from the former titles.



Fig. 53. Mordecai McCoy's dialogue options (top left), Frida Mandani on nostalgia (top right), and Gunther Jenkins at the Wild West Showdown attraction (bottom still).

Overall, the figure of the ghoul loses any racial notions and serves as merely another type of NPC (rather than an Other) in the wasteland of *Fallout 76*. Though most of his lines are

[241] Frida Mandani tells the player that "you're never given the benefit of the doubt. Somethings stolen? Instant suspect. I guess it's hard to keep an open mind about someone that looks like they'd eat you at the first opportunity, but it's still frustrating" while Eugenie recalls "hiding from people that would kill us on sight just for being who we are." A note written by Lucie Harwick, a ghoul already dead at the time of the plot, mirrors Underworld's message to visitors: "If you're reading this, then you've become one of the Changed. People call you hateful things like 'monsters' and 'ghouls.' The truth is you're no different than they are, they're simply scared of their own possible future. Nature has decided this is what's to become of you, therefore it was meant to be. I wanted you to know that despite the hatred, there is a home for you. It's a place where you can gather with others like yourself to weather this storm. Find us at the Valley Galleria ruins in Appalachia. We promise to welcome you with open arms, and more importantly, open hearts."

conveyed humorously, it is fitting that Mordecai calls ghoulism a "lifestyle" choice, since it is not treated as anything more than that by the writing of the title.

4.6. Conclusion: The Ghoul and U.S. Race Relations

So far, the present account has offered an analysis of the figure of the ghoul/zombie in the *Fallout* series. To sum the results up, much of the initial abjective power of ghoulification/zombification allows the ghoul to bear, explore, and criticize practices of de/racialization. In *Fallout 3*, the tension between the feral and the non-feral ghoul calls into question the role of the concept of race in the construction of social ant/agonistic space (while relying on the latter itself for its worldbuilding). Racial prejudices and pseudo-scientific attempts to naturalize race are thematized as well as criticized through the figure. As carriers of traumatic (post)colonial pasts and practices of slavery, ghouls are complex figures and refuse to be framed solely as perpetrators or victims. Through its uncanny Otherness, the ghoul thus serves as a foil and non-racially grounded alternative to the 50s' idea of the nuclear family. *Fallout 3's* architectonics of play offer conflicting options to the player: she can explore the ghoul's capacity to undo and expose racism or indulge in racist, colonialist, and extractivist practices of play adding to the (partially) self-referential commentary of the game, which addresses the player as a tourist of the exotic and the grotesque. *Fallout: New Vegas* positions the ghoul among mixed social groups where it is objectified as a commodity or stands on the margin as a strong anti-hero haunted by the power of the past (which the figure also personified). As part of its own in-group, the ghoul struggles for a place of healing and, on a more subtle note, it is linked to social performativity and experiences of (not) passing. *Fallout 4* continues to represent the ghoul as socially marginalized but starts to severely sediment the racial and colonial notions of the figure. Not only visually appearing closer to the (White and male) human body, the ghoul is reimagined as a strong and independent figure that, however, continues to offer an alternative imaginary for the postapocalyptic U.S. De-racialized (in part to critical effect and in part to the point of interchangeability with the nuclear family), the ghoul tends to be treated as just another human, while the death race of the feral ghoul continues to serve as docile and perfect enemy type in ant/agonistic imaginaries of play. The latter trend thus proves to be the only consistent tendency of the series with *Fallout 76*, which silences most of the conflicting notions of the ghoul and deracializes the non-feral type further until only a shadow of anti-ghoul bigotry traces the themes of the previous titles. Along these lines, the

ghoul can now be said to have moved from an uneasy ant/agonistic spatiality (in which the option of fetishizing the antagonistic is inseparable from a crucial disruptive and revealing potential) to a predominantly agonistic figure much less capable of (rendering the player capable of) questioning its (and her) own role in the construction of self/Other distinctions.

In a final step, this development of the ghoul across the ten years spanning the releases of the *Fallout* titles will be contextualized against the race relations of American politics to make visible the capacity of digital games (and, in particular, as it is tied to the figure of the American zombie/ghoul) to reflect or contradict the broader discursive shifts they are embedded in. The ten years from the release of *Fallout 3* in 2008 to that of *Fallout 76* in 2018 have witnessed three distinct presidents (George W. Bush, 2001-2009; Barack Obama, 2009-2017; Donald J. Trump 2017-2021) each offering fundamentally differing approaches to American racial relations and practices of de/racialization. As the titles were released in four different presidential terms each, the figure of the ghoul in the *Fallout* series can be read in different historical contexts (table 1).

Table 1

Fallout titles and their corresponding U.S. presidential terms

game title	president	years
Fallout 3 (2008)	George W. Bush	2001 - 2009
Fallout: New Vegas (2010)	Barack Obama	2009 - 2013
Fallout 4 (2015)	Barack Obama	2013 - 2017
Fallout 76 (2018)	Donald J. Trump	2017 - 2021

Fallout 3 was released in 2008 when George W. Bush's presidential term was coming to an end and the U.S. elected his successor, Barack Obama. Bush's term was characterized by American nationalism and exceptionalism[242], the global (so-called) War on Terror, and the inner institutionalization of the anti-terrorist agenda in the form of a security state (see De Genova "Antiterrorism"). Capitalizing on the anxieties around 9/11, Bush's rhetoric frequently used the term *evil* in an antagonistic placing of America in the world, conjuring a personified and racialized Muslim Other.[243] American exceptionalism, as Nayak and Malone argue in this

[242] Nayak and Malone define *American exceptionalism* as a fundamental concept formative of American identity: "Exceptionalism, as America's foundational narrative, holds that the United States has a unique place in history, differing fundamentally and qualitatively from all other countries; it also emphasizes a 'God-given destiny' to guide the rest of the world according to the mainstream US political, social, and economic worldview" (254).
[243] In June 2003 alone, for example, Bush used the word *evil* in 319 speeches and in 83% of them as a noun (Singer 2).

regard, is tied to the epistemic dynamic of the larger project of American Orientalism: "Orientalism and Exceptionalism share in common the discursive deployment of ontological difference and epistemological claims underlying the American providential mission to provide order to the world, the justification for conquering and occupying territories, and the racial hierarchy that prioritizes Anglo-Saxons" (Nayak and Malone 254). Far from an expression of the dissolution of said racial hierarchy, Obama's election in 2008 is read by De Genova as a manifestation of "a historical moment of *racial crisis*, situated within the larger, more extended, and distinctly amorphous racial crisis of the so-called War on Terror itself" ("'War on Terror'" 246).

Against this context, *Fallout 3*'s post-apocalyptic imaginary of the U.S. expresses the antagonistic worldview of America's War on Terror contemporary to the game's release. The violent raider faction or Caesar's legion's tactics of brutally crucifying and exposing their victims clearly exemplify practices of terrorism. Though it is not surprising that the abjective figure of the ghoul populates this wasteland of terrorism, the title's positioning of the ghoul as a bearer of the concept of race is all the more crucial. While the zombie/ghoul combines the colonial history of American race relations with their reimaginations through Orientalist readings of Islam's adaptation of the ghoul, the figure does not representationally but conceptually index Otherness and explores practices of racialization, deracialization, doing and undoing racism and "bigotry" (as *Fallout 3* refers to these phenomena by linking them to the non-feral ghoul). In that *Fallout 3*'s American ghoul questions the racial construction of the antagonistic, the figure expresses what De Genova has called a "racial crisis." By further conjuring the nation's own colonial past, the ghoul – as slaver and enslaved – furthermore links the making of Otherness and its Orientalist consumption to American history and exposes the preoccupation with race as a fundamental cornerstone of the making of America itself. By offering a sarcastic criticism of the 1950s idea of the nuclear family, the radiated figure of the ghoul (embodying its Other, a non-White, and, speaking with Agamben again, "bare" life) also sheds light on its racial construction that ties the War on Terror closer to the post-coloniality of the U.S.

Fallout: New Vegas, Bethesda's second *Fallout* title, came out in 2010 and thus during Obama's first term, which has often been described in terms of its *post-racial* rhetoric. Inheriting Bush's claim to American exceptionalism and the problem of its racial foundation, his victory speech held that "the true genius of America [is] that America can change." While Obama became a president of hope, particularly for American race relations, the reality of his

approach clashed with the expectations of many.[244] In De Genova's reading, Obama "compulsively deracialize[d]" his election in favor of "a precisely American exceptionalist gesture of patriotic *post*-racialism" ("'War on Terror'" 254). In this context, the emergence of the current Black Lives Matter Movement (in 2012) offered an unexpected confrontational politics precisely when post-raciality failed to address the reality of many Black lives (see Dennis and Dennis).

In the first Obama term (2009 – 2013), *Fallout: New Vegas* directly continued *Fallout 3*'s voicing and exploration of questions of race and hence opposed the post-racial rhetorics of the early Obama era. Highlighting both the marginalization and separatist tendencies of the ghoul as a carrier of the concept of race, both titles address rather than silence ongoing social issues. Both titles can thus be regarded as exceptions to what Higgin has described as the "disappearance of race" in games as the "reflection of the cultural politics of contemporary [i.e., 2009] America" (23) in the context of post-racial politics. Though not exactly utopian figures, the ghouls of the two games prominently carve out niches in ant/agonistic social environments, which never finally dominate the struggling characters, and thus are themselves allowed to become matters of concern for the player.

The 2015 *Fallout 4* was released in Obama's second term (2013 – 2017) during which the frustration with post-raciality had grown substantially: 69% of adult Americans stated in a 2016 survey that race relations were generally bad (Russonello). As Gray and Seltzer's empirically grounded analysis puts it, "the growing optimism on race relations felt prior to Obama taking office waned over time as both Black and White people realized the reality of social barriers to racial transcendence" (241). Reed calls the sentiment "a broadly shared disillusionment with post-racialism": "While pundits, Democratic functionaries, and a stratum of middle-class African American professionals celebrated the election of the nation's first Black president as a transformative moment in American race relations, Obama's presidency did little to directly address racial disparities" (Reed 9). Jordan Peele's 2017 *Get Out* elegantly uses the themes of zombification and the coloniality of the body to expose the fundamental failure of post-raciality to address racism and its dangerous complicity with it: During a cocktail party, the White patriarch of a colonial upper-class mansion tells the Black main character "By the way, I would have voted for Obama for a third term if I could" before holding a literal slave auction to determine whose brain will be implanted into his guest's body.

[244] A survey shortly after Obama's election aptly captured this hopeful spirit as 67% of Americans gave a positive answer to the question of whether "a solution to relations between blacks and whites will eventually be worked out" (Newport). The item scored the highest rate of affirmation ever measured on this question.

Contrary to its predecessors, *Fallout 4* sediments the racial and colonial notions of the rich conceptual history of the ghoul in Obama's second term. Though the ghoul continues to appear as a figure threatened by marginalization, it is fundamentally reimagined as strong and independent, akin to a ghoul identity politics that positions it closer to the concept of the human, whose construction, in turn, is less and less called into question. Hence, the game's capacity to question the racial construction of hierarchies is limited, and, plays into a post-racial rhetoric. *Fallout 4* de-racializes the ghoul, which subtracts from its critical modality in the ant/agonistic settings it helps to construct.

After Obama, Trump's presidency (2017 – 2021) was marked by a resurgence of populist and antagonistic racial politics, racist and xenophobic anti-immigration policies, paranoid fears of others, and the undermining of the concept of *truth* in a political landscape of post-facts and fake news. Constructing a populist narrative of crisis, an "American carnage," Trump's inaugural address promised to "make America great again," continued Bush's themes of American exceptionalism ("America first") and the Muslim Other ("radical Islamic terrorism") while everywhere installing the spatial antagonistics of America's "borders" and simultaneously denying the reality of race and racism ("We all enjoy the same glorious freedoms"). Gray and Seltzer summarize post-Obama Trumpism as follows:

> America experienced a political climate in the post-Obama/Trump era fueled by high racial tensions, overt racism and intra-group animosity. Events, such as the January 6th takeover of the Capitol Building, increased hate crimes targeting racial minorities, the 2017 Unite the Right rally in Charlottesville, Virginia, ongoing racist rhetoric spewed on social media by Donald Trump and other political leaders both during his presidency and thereafter, Muslim bans and other racially motivated immigration policies signaled a downward turn for race relations in the United States. (234)

Trump, however, did not fundamentally reinvent American politics but rather continued a Manichean worldview preexisting him: Stone and Rizova point out that in many ways Trumpism "fits well into a similar template of earlier types of populism" and is, in this sense, a continuation of what they call with Hofstadter the "paranoid style of American politics" (37). De Genova has shown how Trump's populist strategy of creating fears of Others is tied to White supremacism, racial conflict, and fascist projects: "By conjuring a terrifying spectral world of 'illegals,' 'criminals,' 'terrorists' - in short, by invoking impending mayhem and the cataclysmic prospect of a kind of racial Armageddon - for which 'the Democrat Party' are made to serve as the convenient proxy, Trump converts his nightmarish world of *ghoulish* enemies

into political currency" ("'Everything'"; my emphasis; see Pei). As Sugino has argued, Trump's rhetoric is dangerous and effective because it is both overtly racist but also constructs a particular vision of "the American people" that "harmonizes his white racial fantasy with a denial of his racism." In this sense, Trump does not just oppose post-raciality but also continues some of its problematic multicultural rhetorics that deny the reality of race.[245] Particularly among White working-class voters, Trump's racial resentment, rather than his economic policies, was decisive for securing his presidency.[246]

Though Trump-era America was (and is) full of anti-ghoul sentiments, as the telling wording of De Genova's quote has implied, the non-feral ghoul continues to be de-racialized and ceases to question racism in *Fallout 76*. At the same time, however, the de-racialization of the figure itself, which has become apparent in the present analysis, points to a crucial decision in game design. Both the zombie/ghoul in U.S. popular culture and the ghoul in the *Fallout* series have carried, questioned, and marked practices of racialization, notions and histories of the post/colonial U.S., and ongoing racial tensions in American culture. While the simplification and the silencing of the ghoul substantially subtract from the complexity of the series' imaginary, it is in line with ongoing attempts to make racism invisible and replace the reality of bodies and voices with an unmarked positionality that is not meant to be questioned or addressed. While the non-feral ghoul in *Fallout 76* tends to become just another human in this sense, the death race of feral ghouls drifts further into abject and utter objectification, akin to an imaginary of ghoulish masses allegedly invading the American but also the European borders.

[245] The reality of race, of course, includes structural racism and oppression but also an American demographics that is more diverse than ever: from 2010 to 2020, the chance that two randomly chosen people are of different race (i.e., the government diversity index) has increased from 54.9 to 61.1% according to a government report (Jensen et al.).

[246] Abramowitz and McCoy's empirical data have testified to the influences of economic discontent, racial resentment, and the revolt of the white working class in the 2016 presidential campaign. Their analysis points to a rise of negative partisanship, i.e., voting based on hostility toward the opposing party. A study by Jardina, furthermore, adds to the influence of white out-group racial resentment and white in-group racial identity on candidate evaluations. Finally, Reny and colleagues examined the case of white voters switching votes and found that the switching was more associated with racial and immigration attitudes than economic factors.

Fallout 3 players discussing the initial Tenpenny Tower quest years after the release of the title on the platform *9gag* strongly suggest this reading of the ghoul. A post in the style of a 4chan greentext recently received more than 9100 upvotes (fig. 54).[247] Titled "What do you mean Todd" (a reference to the writer and game developer Todd Howard with Bethesda), the post takes up the antagonistic placing of the ghoul in opposition to the human. Neither differentiating between the feral ghoul and the non-feral ghoul nor mentioning the crucial aspect of racism among the Tenpenny Tower residents, the post suggests reading the quest in a xenophobic manner as a parable of immigration. The most upvoted comment (at 4.500 likes), "Gouls [sic] only take up 13% of the hotel rooms but," is a White supremacist reference and immediately adds to the racist tone of the post.[248] The second comment says "i will never forget how i entered the ghoul base and killed all of them" while further down the line, participants write "it's about that group we don't like isn't it?," post a Black-faced SpongeBob meme saying "ight imma steal that" or "Ghouls = rapefugees." While some thus read the post and the ghoul as referencing the U.S. context, others position it in the context of Europe's borders – common to either reading is the practice of racializing the ghoul and, in turn, dehumanizing an Other that, once more, is deemed killable.



Fig. 54. A *9gag* post titled "What do you mean Todd" referencing the Tenpenny Tower quest (etr1uss).

[247] Note that the precise date of the (re)post is not visible, but the original 4chan text dates to July 10th 2023.
[248] The comment refers to the white supremacist trope of using the number 13 with the number 52 (or sometimes 90) as a racist propaganda claim that holds that African-Americans, accounting for 13% of the overall U.S. population, are responsible for 52% of crimes or homicides. If the number 90 is used, the reference is made with regard to inter-racial murders.

The 9gag post, which has spawned many reposts and further proud manifestations of explicit racism and White supremacy, details that the meaning of games and play is not reducible to the kind of reading the present analysis has offered. It is in play, in re-play, in reimaginations and memories of play, in articles, in game design, in procedural logics, in narrative practices, in unconscious twists of the body, and in conscious interpretative work and writing that meaning is negotiated with the medium. "[T]o play *Fallout* is to make history," in Cutterham's words (312). Beyond this, however, the post also gives insight into one of the dominant spatial imaginaries of games, persisting in practices of both game design and play. Quiroga, drawing from historian Slotkin, has called this a "white mythic space" as "a historical or fictional [. . .] setting that has been re-imagined as a racially homogenous space which consequently is considered to be the authentic representation of that setting" (4). Tenpenny Tower in the game, as the present reading has held, indeed constructs a White American space but shows the racial logics of its defenders to be idiotic. The 9gag participants, however, in their reimagination of the game space construct a White mythic space tied to an antagonistic and racist worldview that reappropriates the preconfigurations of the medium and highlights the close ties between racial and antagonistic logics within and beyond digital games.

Summing up the present chapter, the U.S. ghoul in *Fallout* continues to be reimagined as an Other and yet marks practices of de/racialization, giving insight into how games and players engage in racial and procedural logics to construct and negotiate ant/agonistic spatiality. The present reading of the *Fallout* series has shown that games may oppose as well as comply with broader racial and political discourses. At any rate, the "game world is not simply a sandbox where entirely new sociopolitical situations are designed and enacted and then exported into the physical world," as Higgin argues, but "[g]ames are also necessitated and deeply informed by the epistemic contours of contemporaneous American culture and its history" (23). However, as the ghoul in the *Fallout* series remains an affective and enabling play partner depending on each playful entanglement yet to come, it exceeds its history, and continues to matter in that it might once more enable the player to find herself compelled to "think racially" speaking with Omi and Winant, because "opposing racism requires that we notice race… that we afford it the recognition it deserves and the subtlety it embodies" (159).

5. Farming Practices and Extractivist Architectonics of Play

The purpose of this chapter is to explore farming practices and the extractivist spatiality they relate to. While the terms "goldfarming" (Dyer-Witheford and de Peuter) or "farming games" (Chang) have resonated through key publications from the field of game studies, there is a severe gap between these conceptual terms and what players describe as *farming* (across various games and beyond real money trading) as a practice of play. Hence, the present chapter first develops a conceptual framework for the analysis of farming practices. Then, it questions games' extractivist architectonics of play and their negotiation in lived play – a comparative approach brings together the 2017 survival-action RPG *Conan Exiles* and the 2020 social simulation game *Animal Crossing: New Horizons*, each respectively exemplifying the colonialist and neoliberal-capitalist underpinnings of many AAA-games as play partners. As the lens on farming practices makes visible, both titles share decisive elements in their preconfigurations of play despite their vast differences in game type, themes, and narratives.

Keywords: farming, extractivism, colonialism, neoliberal capitalism, repetition, resource logics

5.1. Extractivism and Games: *Goldfarming* and *Farm Games*

After the previous examination of the ant/agonistic and its ties to the concept of race, the purpose of this chapter is to explore a second interrelated dimension of hegemonic play, which can also be described as a dominant spatiality through various designed play ensembles: *extractivism*. While early game studies were obsessed with games as economic models and artifacts of capitalism (see Giddings) on the one hand and an initial neglect of their post/colonial dimensions has been addressed increasingly (e.g., Euteneuer; Jiwandono; Lammes, "Postcolonial Playgrounds" and "Spatial Regimes"; Magnet; Mukherjee) on the other, there is a curious absence of contributions that thematize extractivism in spite of its potential as conceptual and practical link between these two research interests.

The greatest efforts for the conceptualization of *extractivism* (or *extractivismo*) come from the Spanish-speaking Latin American context at the beginning of the 21st century. Chagnon and colleagues' recent comprehensive and yet detailed conceptual paper approaches extractivism as "a complex ensemble of self-reinforcing practices, mentalities, and power differentials underwriting and rationalizing socio-ecologically destructive modes of organizing life through subjugation, violence, depletion, and non-reciprocity" (760). As an increasingly prominent modality of capital accumulation (though not synonymous with global capitalism), extractivism qua its socio-ecological destructiveness and non-reciprocity is "diametrically opposed to the concept and practices of sustainability (including ecological, social, and economic)" (762). Notably, the claim of the numerous authors of the article is that "there has been a shift towards increasing extractivism(s) on world scale" (762), which is why *global extractivism* has become "a way of world-making determining, and making demands on most aspects of modern societies, and on the overall organization of the world system and its dynamics" (761).

Hence, from a socio-cultural perspective as the one permeating through the present work, there is increasing relevance for the question of current cultures of extractivism(s) (which exceeds the focus on the purely economic). In this regard, it is necessary that extractivism is conceptually tied to practices but also to their imaginaries: Anna Willow's *Understanding ExtrACTIVISM*, for example, contends that extractivism needs to be seen as "a mindset" as much as "a pattern of resource procurement" (2). According to Willow, "[c]ontemporary extractivism springs from a neoliberal, late-capitalist outlook associated [. . .] with an inherently

unsustainable single-mindedness" (2).[249] Beyond a way of (ab)using the Earth and its resources, extractivism thus is also "a way of thinking" and "a way of being in the world, a way of positioning ourselves in relation to the natural realms we occupy. [. . .] Extractivism is necessarily an environmental as well as a political project, simultaneously a social and an ecological debacle" (2).

For the present account invested in the spatial aspects of play and games, the phenomenon of *farming* is a prime site for a joined analysis of play and extractivism since it shifts the question of extractivism's "organization of life" (Chagnon et al. 760) to that of its organization of play. Where scholarly work has contended that games do and extend the cultural-ideological work of capitalism and colonialism, the neglected concept of extractivism may explore common threads in current imaginaries of play. Therefore, it is the purpose of the present chapter to examine farming practices in the context of extractivist architectonics of play, paying particular attention to extractivism's ties to the imaginaries of neoliberal capitalism and colonialism exemplified by two recent games.

What, however, is farming in the context of digital games, and how has previous research thought of this phenomenon? Two strands of research are relevant in this regard. They can both be linked to highly influential monographs in the field, the first of which is *Games of Empire* by Dyer-Witheford and de Peuter, and the second *Playing Nature* by Alenda Chang.

Dyer-Witheford and de Peuter's 2009 *Games of Empire* was a landmark for early game studies with its claim that "video games are a paradigmatic media of Empire – planetary, militarized hypercapitalism – and of some of the forces currently challenging it" (xv). Drawing from Hardt and Negri's postulation of a global biopolitical system without outside,[250] the

[249] Willow's emphasis on *neoliberalism* is decisive for her approach to extractivism. She defines the former as "a political and economic framework that places the utmost value on private property, free markets, and free trade, while at the same time advocating 'the financialization of everything'" (2). She argues that "[c]ontemporary extractivism is a quintessentially neoliberal relationship to natural resources" (2).

[250] Via the concept of "network power" (167), Hardt and Negri argue that imperialist processes at the beginning of the 21st century are no longer bound to a state but to the global market including networks of nations and multinational corporations beyond previous geographical scale or social scope. The concept of *Empire* claims that the economic/military/administrative/communicative complex is now a biopolitical system without outside, "a decentered and deterritorializing apparatus of rule that progressively incorporates the entire global realm within its open, expanding frontiers" (xii). As Dyer-Witheford and de Peuter link games to immaterial labor, they reformulate the concept of Empire in the course of their project (nine years later) as "the global capitalist ascendancy of the early twenty-first century, a system administered and policed by a consortium of competitively collaborative neoliberal states, among whom the United States still clings, by virtue of its military might, to an increasingly dubious preeminence. This is a regime of biopower based on corporate exploitation of myriad types of labor, paid and unpaid, for the continuous enrichment of a planetary plutocracy. Among these many toils, immaterial labor in informational and communication systems, such as the media, is not necessarily most important. But it clearly occupies a strategic position because of its role in intellectually and affectively shaping subjectivities throughout other parts of the system" (xxiii).

authors argue that digital games "are media constitutive of twenty-first-century global hypercapitalism and, perhaps, also lines of exodus from it" (xxiv). Describing games and play in terms of global biopolitical production, Dyer-Witheford and de Peuter put emphasis on Hardt and Negri's concept of *immaterial labor*.[251] In their reading, digital games "simulate identities as citizen-soldiers, free-agent workers, cyborg adventurers, and corporate criminals: virtual play trains flexible personalities for flexible jobs, shapes subjects for militarized markets, and makes becoming a neoliberal subject fun" (xxix-xxx).

Within its economic framing of games and play, *Games of Empire* engages with the concept of farming not as the literal activity of growing crops and raising livestock. On the one hand, the authors contend through Deleuze and Guattari's concept of *machinic surplus value* that the gamer is exploited as part of an audience (rather than as a worker) simply by biding her time playing games and adopting ways of feeling and perceiving (77-80). On the other hand, however, one of the authors' case studies focuses on the extraction of monetizable value from games, which they describe as *goldfarming*.[252] In the context of some of the early large MMOs, *Lineage* (1998), *EverQuest* (1999), and *World of Warcraft* (2004), the authors describe how "[v]irtual trading – or RMT (real money trading) – seems to have begun with individual, ad hoc transactions on eBay and other online auctions. Soon, however, gamers playing for profit, known as 'farmers,' were systemically harvesting games for real cash resale" (138). This use of *farming*, as the authors point out, perpetuated the racist concept of "Chinese goldfarmers" (142) and aimed at the exploitative and often sweatshop-style formation of "transnationally organized commercial game-farming enterprises" (138).

This first conceptualization of farming as the exploitative extraction of real profit from games via (in-game) items or characters has, furthermore, resonated through various other publications: Dibbell's earlier book *Play Money* from 2006, Goggin's 2011 article on "Playbour, farming, and labour," and two more recent publications by Liboriussen (2017) and Chew (2022), both in the influential journal *Games and Culture*, could serve as further examples. Finally, a paper by Gago and Mezzadra (2017) has used the term *farming* in this meaning in 2017 to describe novel forms of extractivism itself (outside of game studies). What all these scholarly endeavors have in common is a general framing of farming interested in the

[251] Consider their following argument: "The role of industrial factory labor has been reduced and priority given instead to communicative, cooperative, and affective labor. In the postmodernization of the global economy, the creation of wealth tends ever more toward what we will call biopolitical production, the production of social life itself, in which the economic, the political, and the cultural increasingly overlap and invest one another" (Hardt and Negri xiii).

[252] Note that Dyer-Witheford and de Peuter do not use the term *extraction* or *extractivism*; neither of the two existing notions of farming in the literature directly links their respective phenomena to this concept.

links between what Giddings has called "endogenous (internal to the game system) and exogenous (external to games) ludic economies" (765). Though one of the merits of the concept of immaterial labour could be to problematize the very distinction between these two economies, the concept of farming shared by this first branch of research tends to highlight something in games that goes beyond supposedly usual play and requires attention due to its difference from what game designers have intended.

A second notion of farming stems from the 2019 *Playing Nature* by Alenda Chang, whose work offers many aspects that could be argued to remedy some of the blind spots of *Games of Empire*. The earlier 2011 essay "Games as Environmental Texts" already gave insight into the tendency of games of "relegating environment to background scenery, relying on stereotyped landscapes, and predicating player success on extraction and use of natural resources" (58). While Chang's work cares for the medium's potential for a different or more promising representation of nature and ecology, her critical reading of games summarizes that they tend to "oblige players to enter into a player-environment relationship based almost wholly on extraction and utilization of natural resources, which are often effectively infinite" (72).

In the fourth chapter of *Playing Nature*, published ten years after *Games of Empire*, Chang develops a notion of farming that is tied to what she calls "farm games." Contrary to the first conceptualization of farming, her notion does not aim at a particular action by the player but at both levels of game design and narrative: "farming has emerged as both a preeminent theme and set of game mechanics" (160). Sticking more closely to the literal meaning of farming, Chang describes "agriculture-themed games" (171) offering "digital back-to-the-land fantasies" (163) such as the *FarmVille* (2009) or the *Harvest Moon* (2014-2023) and *Farming Simulator* series (2008-2023) as farm games. In her analysis, these games "imitate the artificially closed systems of classical economics" (171) offering "bucolic paradises where the use of machinery and intensive agricultural methods never leads to environmental degradation, where animals may be harvested for their products without coming to noticeable harm, and where key natural resources like clean water and nutrient-rich soil are always available and never subject to competition" (172). Moreover, farm games "unfold within a game environment that is largely static, rather than homeostatic" (177) and offer the player effective "mastery over their cultivated landscapes" (172).

Chang's framing of farm games is exemplary of a broader second conceptualization that ties farming to genre classifications. Sutherland's 2020 essay on the "desk-chair countryside," for example, analyzes *Stardew Valley* (2016) as a "farming computer game" along similar lines

– here, farming is linked to the "representation of farming practices as leisure activities in popular media" as well as the "notion of the rural idyll" (350).

As both previous concepts, goldfarming and farm(ing) games, are tied to particular projects and different phenomena the respective authors engage with, they are not easily integrated. While the first term aims at an economic dimension of player actions facilitated by a game model (and a capitalist market that extends into it, despite an alleged magic circle), the second highlights the imaginaries of nature many games embody but a range of particular games focuses on in particular. Concerning the limits of the two notions, the first is not apt to describe how repetitive actions beyond monetization and RMT have been extending and proliferating in and beyond MMOs since the publication of *Games of Empire*; the second is in danger of missing how farming mechanics today are relevant beyond what farming games depict on a narrative level – how such ubiquitous resources like gold and experience but also items such as weapons, potions, and armor, or abstract entities like sympathy or gratitude can be farmed for in many of today's games, too.

Most critically, however, both conceptualizations have equally lost touch with the rather precise way gamers use the term *farming* today in various contexts and with various games. This neglect is all the more severe if recurring claims by gamers are taken seriously, according to which the extent of farming practices in today's game play has long been on the rise. To tackle this research gap on farming in the literature and to examine how farming practices crystallize rampant extractivism (rather than pastoral and rural identities), which continues to give rise to capitalist, ant/agonistic, and colonialist spatialities in play, a novel take on farming is required.

5.2. *Farming* as a Spatial Practice of Play

Current praxeological conceptualizations by gamers engaging in farming are exceptionally relevant to regard farming as a phenomenon of lived and everyday play (rather than a fringe phenomenon of RMT or game design). Hence, the present section draws from a set of emic discussions and arguments that have emerged within the field and that were taken up in a mixed quantitative and qualitative study conducted by the author in 2023 (a detailed report of the results and statistical methods used is presented in Appendix A to this work).

Where, for the preceding scholarly perspectives detailed above, farming was either an organized form of real-money-trading around MMOs or a particular theme and mechanic, qualifying some games as representatives of a new agriculture-based set of farm games, current praxeological perspectives on farming regard it rather as a practice of play. A perspective on farming as a historically contingent phenomenon needs to remain open enough to account for a myriad of forms, as, currently, farming appears as a much more generalized phenomenon in gaming and play practices, potentially tying together a rather diverse plurality of various games as well as players and platforms, as the examples quoted in the survey revealed.[253] The games currently involved in farming are well beyond the earlier focus on multiplayer titles, and more than 90% of survey participants were of the explicit opinion that farming relates to more than multiplayer games alone. At the same time, gamers convincingly argued that farming depends on the individual game but also that the expression may involve reference to a "style of play" as much as to a "style of design." One participant voiced this as follows: "Whether or not grinding or farming are an inherent part of the game or a strategy by the developers depends on the game, and sometimes it is neither, but rather a player strategy."

Drawing from these insights, it seems fruitful to conceptualize farming more explicitly as a set of practices within the context of play. Farming practices, it needs to be argued, offer particular solutions to the question of how to organize play. Insofar as play requires the embodiment and intra-action with ludic elements in space and their imaginaries of space, farming is a *spatial* practice. As the above comments imply, farming is always a joint accomplishment of a body at play and a game-as-play-partner, both of which receive particular spatio-affective relationships through their processual entanglement. According to one gamer's comment, farming (or a "farm") is an inherently spatio-practical concept, a way of practicing place/space: "a farm is both a location within the game where farming happens, and the act of benefitting from or setting in motion that farm." Thus, farming as a spatial practice ties together (game-)space and its production, whereas the relationship between player/game appears as a spatial phenomenon and, yet, the phenomenon of game space retains a strong sense of agency despite it being produced. In the words of the same gamer, "farming is always at least partly

[253] To offer a short glimpse on the games referred to in the study participants' comments on farming, the examples ranged from the landmark of MMOs and RPGs, *World of Warcraft* from 2004, the *Borderlands* (2009-2019) series, which combines shooter and RPG elements in Western/sci-fi open world settings, and the open-world action-adventure *The Legend of Zelda: Tears of the Kingdom* (2023) for the Nintendo Switch, to the medieval action RPGs of the *Dark Souls* series (2011-2016), famous for their difficulty, the cozy social simulation titles of the *Animal Crossing* (2001-2020) series, and even the augmented-reality mobile game *Pokémon Go* (2016). The titles thus span many different topics (beyond Chang's emphasis on agriculture-based games) and mechanics (literal farming, but also combat and the exploitation of more general reward structures such as quests or glitches).

automatic," hence, a shared accomplishment of practitioners and material arrangements: bodies and procedural logics at play.

The joint accomplishments of farming, however, need to be detached from the concept of *intentionality* by both player and designer: on the one hand, not all players necessarily think of their involvement as one in farming. Additionally, gamers conceptualize farming in part as a design strategy to *play the player* and keep them hooked and going. On the other hand, a particularly promising farm may depend on glitches and exploits (and thus transcend the way a game was intended to be played), as some respondents to the study pointed out. Therefore, two notions of the previous accounts of farming need to be integrated: while Chang looked at particular games through the way they enabled players to farm, Dyer-Witheford and de Peuter looked at the economically intentional and motivated actions of gamers and organizations who (ab)used the design of a game. To re-link player and game and to highlight their processual/procedural interdependencies, an open conceptualization of farming can benefit from the already mentioned terms *intra-activity* and *intra-passivity*. The range from intra-activity to intra-passivity the relational ensemble of play partners may go through is reflected in the various terms farming is linked to (both metaphorically and practically): gamers refer to active collection of items or combat to "trigger drops" with meticulous planning-ahead and precision on the one, and to passive "planting" which is rather defined by a relaxing experience of a gap after having set the farm up.[254]

Overall, farming as a spatial practice of play has several peculiarities, as reflected by the praxeological conceptualizations of gamers: its crucial elements are approached through the concepts of a) *repetition*, b) *rewards*, and c) *instrumentality* in the following. These three elements are not apt to form a closed conceptual definition or identity outside of historical space-time but provide a flexible and yet productive knot of ideas that may guide explorations of farming in that these ideas direct a set of empirically grounded questions to an individual and unique moment or instance of gaming, in which the terms can be actualized in differential relations peculiar and idiosyncratic to said moment.

a) *Repetition* was among the core ideas of most gamers' conceptualizations. A typical example would be: "'farming' just means performing repetitive or multiple actions to acquire something." As the example highlights, a farm can be repetitively engaged in

[254] One respondent frames the role of the gap even as the definitive feature of *farming*: "you do some things to set the task in motion (till ground, plant crops, water crops) and then you can leave and do other things and the crops will continue to grow. when you return later, they are ready for harvest. this inactive stage where the player's actions are not necessary is the defining point of farming" (see again the discussion of *Tappy Tree* in microsite VII, included in Chapter 3 of this work).

the same location or is reiterated in different in-game locations depending on the affordances of player(s) and game. According to the opinions voiced, most gamers hold that farming is easy and does not require specific skills, which reflects the way current game design may explicitly aim to facilitate the element of repetition of the practice. Productive questions in this context might, for instance, ask when repetition starts or is broken up, or which kinds of mobility and rhythm it enables or forbids. How do player and game synchronize, create impulses for each other, and how is repetition their joint and meaningful effort?

b) *Rewards/gains* render farming a somewhat object-centered practice whereas the objects in question tend to be digital in-game items like material resources (wood, stone, iron, water, or consumables like plants, food, potions, drugs), currencies (coins, gold, etc.) and equipment (like weapons, armor, clothing) but can be almost any item (e.g., furniture in the *Animal Crossing* [2001-2020] or scrap in the *Red Faction* games [2001-2018]) including abstract ones (e.g., reputation in *RuneScape* [2001] or karma in the *Fallout* games [1997-2018]). A recurring metaphorical trope of farming in this regard is the harvesting of items (as opposed to the raising of level and abilities in the context of grindy progression logics). Crucially, games are not equivalent to mere Skinner boxes in which player behavior and reactions are shaped according to game design's operant conditioning – the study conducted for this chapter has clearly shown that the prominence of rewards is not met by an equally strong or one-dimensional "feeling of reward" (as the item in question was worded). Farming can be accompanied by a multiplicity of various affects, cognitions, and feelings from monotony and boredom, stress and challenge to reward, relaxation, and fun. Gamers have generally thought of farming as rather optional but also displayed a critical attitude towards how some games are designed in a way that relies too heavily on the reward structures of farming. Overall, an important question regarding any instance of farming thus aims at its affective and emotional dynamic and how it relates to the reward, or how rewards change and shape play. Finally, if rewards are not merely dictated by a game, how is the valuation of rewards a joint accomplishment of game/player(s) (i.e., what qualifies a reward as a reward in an ensemble of play)?

c) *Instrumentality* is the third element linking the two previous elements together for many instances of farming: the study results indicate a strong "goal-orientedness" on the side of the player, which somewhat contradicts the recurring framing of play as a non-telic or para-telic activity.[255] As the item used referred to "having a goal in mind" during farming, goal and reward are not necessarily the same, however, and raising the question of goals does not have to be equivalent to installing an intentional subject at the core of a theorization of farming. Hence, the term *instrumentality* seems to be preferable over *goal-orientedness* or *telic structure*. As a perspective of instrumentality makes visible, farming might involve a cornucopia of different in-game activities: from sowing, waiting, reaping, and fighting NPCs or other players, doing repeatable and pre-scripted quests over and over again, creating potions, plucking fruit, or cutting down trees to

[255] For instance, see again the structural phenomenologists' idea of "metamotivational states" (Apter 16), which argues that play is different from other activities precisely because of the para- or non-telic frames (see Apter 15-16).

respawning in the same spot, resetting a part of the game world, time-travelling, or changing multiplayer servers repeatedly. Instrumentality further details how several different practices or goals may be aligned, or conflict or necessitate each other in chains of practices. While the previous element of rewards makes visible the dynamic, instrumentality makes visible the actions of farming and the procedural logics involved: whether items are farmed as singles or multiples or in the same or different spots, for instance, depends on the randomness of rewards accomplished by chance logics, which regulate the frequency of drops, as well as resource logics, which enable quantification.[256] Instrumentality also facilitates further questions on the context of farming, which older perspectives on gold-farming in MMOs capitalized on. Finally, it channels critical questions on game design (which the gamers in the study also raised – most blatantly, why is farming a part of this game?) and the role of farming within the larger set of p/re/con/figurations of play and a game's spatial architectonics.

In the following case studies, the present perspective on farming is brought in resonance and communication with two games that suggest themselves as suitable sites, the 2018 *Conan Exiles* for PC, PlayStation 4, and Xbox One and the 2020 *Animal Crossing: New Horizons* for the Nintendo Switch.[257] While the initial conceptualization of farming practices contributes vital analytical categories, the analysis is specifically interested in the relationship between farming and extractivism to question the latter's role in the context of digital games.

5.3. Farming with *Animal Crossing: New Horizons* (2020) and *Conan Exiles* (2018/2023)

At first glance, there could be no two games that offer more dissimilar worlds than *Animal Crossing: New Horizons* (2020) and *Conan Exiles* (2017/2023).[258] One is famous for its cute, innocent, and relaxing island communities, the other for its premise of a masculinist, power-obsessed, and unforgivingly brutal mix of conquest, territoriality, and slavery. Despite their differences, however, both games can be described as prime sites of farming practices,

[256] See also the following comment by a respondent: "'Farming' often has either an element of randomness or operates on a large scale (there may be a low chance that an enemy drops an item, so you farm them to get the item. Or maybe they drop it frequently, but you need multiple/many, so you farm to build up your stock)."
[257] Note that both games have received add-ons in the time after their releases, with the *Isle of Siptah* (2021) adding an entirely new map to *CE* and the *Happy Home Paradise* (2021) giving the player-character of *ACNH* a job. Though these add-ons will not be discussed separately in the following, the gameplay described may include reference to them.
[258] The original base game of *Conan Exiles* entered an early access phase in 2017 and was officially released in May 2018, but has since received numerous small and large updates, patches, and overhauls. The most recent series of updates, by the time of writing, was the 2023 "Age of War: Chapter 2" update (on September 21st), which only introduced some of the mechanics discussed in the analysis, such as the changed purge mechanic in the state described in 5.3.2.

which urge a closer look at the titles. Particularly in the ways the games (together with their players) necessitate farming, *Animal Crossing: New Horizons* and *Conan Exiles* (in the following: *ACNH* and *CE*) may in the upcoming analysis further give insight into two extractivist systems of thought and practices, which are thematized by as well as resonate through the game worlds: neoliberal capitalism (primarily relating to ACNH) and colonialism (primarily relating to CE). The two titles/sites thus make possible a comparative approach, which examines farming practices together with two different sets of conceptual contexts, narrative worlds, and procedural architectures and architectonics. The previously established line of questioning farming practices, focusing on repetition, rewards, and instrumentality, will guide the analysis.

Three sections will dissect the neoliberal-capitalist world of *ACNH* and the colonialist world of *CE* vis-à-vis. First, the two titles will briefly be introduced to establish a contextual and conceptual frame for the analysis. Here, a first focus will be on how the two games thematically highlight as well as analytically require the frameworks of neoliberal capitalism and (post)colonialism. Then, the various ways the two games necessitate, enable, and participate in farming practices will be explored in depth, highlighting game mechanics, procedural logics, and their respective affordances. To further make visible the lived aspects of play, i.e., dynamics, intensities, rhythms, and other affective and experiential qualities, a third section will engage with an exemplary set of single instances of farming in a postphenomenological reading before, finally, a conclusion on farming and extractivism can be given.

5.3.1. Two Different Worlds?

The very first few seconds of *ACNH* and *CE* are each emblematic of the theme and mood of the worlds the games present the player with. The clash between the two narrative experiences could not be larger as in *ACNH*, the player is greeted politely by two employees at a bright reception counter; in *CE*, she is crucified in the desert (fig. 55).

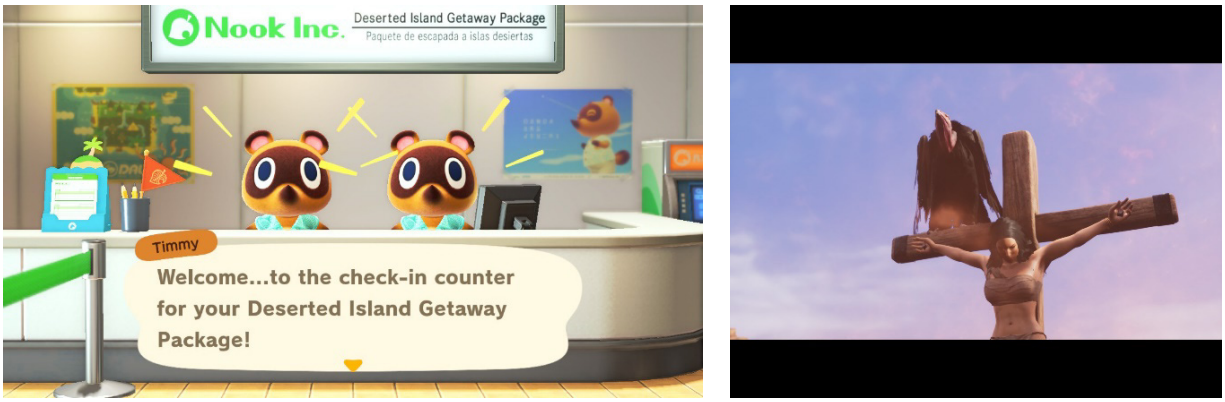


Fig. 55. Stills from the first moments of *ACNH* (left) and *CE* (right still).

Both games thus draw the player into processes of subjection in spatial initiation scenes that create particular forms of agency: in the case of *ACNH*, the player is afforded the role of a customer and enters a primarily economic situation while in *CE*, her character is violently and existentially subjected and cast out, expelled from any form of social contract as an "exile" only to be saved and released from the cross by the title-giving figure of Conan the Barbarian.[259] Both games play with power imbalances and hyperfetishize them, albeit with fundamentally different tones. Both entangle the player within forms of subjection and subject/objectification specific to two of their respective themes: neoliberal capitalism and colonialism, which, at first sight, offer useful frames for differentiating the games.

ACNH, on the one hand, is often described as a social life-simulation game. The simple narrative of the title affords the player the role of a customizable character who moves to a remote and pristine island to found a small community with several anthropomorphic animals as NPCs and fellow island dwellers. The gameplay is open-ended, and the premise is that the player can spend her time on the island exactly as she likes, from idle conversations with the villagers, seasonal events, fishing, gardening, or swimming in the ocean to decorating, designing, and terraforming her surroundings.

Though many different interpretations of the game may highlight its complex and intercultural intertextuality,[260] an overarching and recurring theme in *ACNH* is a neoliberal capitalist outlook on (social) life, labor, and nature. In his book *Ideology and the Virtual City:*

[259] Conan the Barbarian is a character from the fantasy worlds of Robert E. Howard. Conan was adapted into a comic book series in the 1970s and a film series with Arnold Schwarzenegger, who starred as the name-giving, ridiculously buff hero in the 1980s. Though many of the visual elements of the game (e.g., the so-called wheel of pain that Schwarzenegger pushes for the entire first half of Conan's life in the movie and the corresponding masculinist and hyperreal character models of the game) are thus based on previous images and imaginations, this aspect will have to escape the following analysis, which cannot do it justice.

[260] Naomi Clark's historical reading of Tom Nook, for instance, links the figure to the concept of communal debt in 18th-century Japanese villages (see *Naomi Clark*).

Videogames, Power Fantasies And Neoliberalism, Jon Bailes conceptualizes neoliberalism in reference to the economic school of thought associated with the names of Friedrich Hayek and Milton Friedman; he frames neoliberalism as follows:

> [A] kind of cultural paradigm that has emerged from the rise into orthodoxy of this doctrine, especially since the 1980s. Capitalism is still at the core of this paradigm, of course, and specifically a form which promotes economic growth through business investment and job creation in a heavily deregulated global market. As the theory goes, individuals pursue their economic self-interest in a competitive environment that raises the standards of living for everyone, or at least everyone who is willing to participate. The result in terms of ideology is that this focus on competition and individualism valorizes self-reliance and the notion that each of us is responsible for our own financial circumstances, which we should naturally aspire to improve. (13)

Bailes' argument is that neoliberalism does not offer a clear cultural set of ideals but a condition in which "we are bombarded from all sides by countless demands from different sources, such as the state, the workplace, our social circles and the media, with no unifying ideals to harmonize them" (14). He goes on:

> If anything, perhaps the sheer bewildering weight and incompatibility of these simultaneous demands to work hard, be politically active, invest responsibly, socialize regularly, stay healthy and keep up with cultural trends is the quintessential modern cultural condition to which we respond. But there is also a certain logic that connects these disparate injunctions: a kind of instrumentalism that converts all aspects of life into calculable values, and speaks to the individual as a consumer who can define his/her own life through hundreds of micro choices. In a sense, everything from politics to personal relationships is subject to this logic, as each decision apparently counts towards an individualized and commodified ideal of success and satisfaction. As such, it is not that there is no systemic logic, but that the logic itself creates a sense of both freedom and chaos, with a singular demand for individual fulfilment that is full of contradiction in practice. (14)

ACNH both repeats and reacts to the demands Bailes speaks of: a daily trip to the local shop, keeping up with (culturally generalized) seasonal events such as Turkey Day or Toy Day (akin to the U.S. holidays of Thanksgiving and Christmas, respectively), socializing with the villagers through conversation, by returning their lost items, or defusing arguments, slowly paying off mortgages, receiving the daily reward for using the ATM, investing in the turnip

market (the in-game equivalent of the stock market), or taking part in public rituals such as listening to Isabelle's daily announcements at Resident Services – the activities open to the player are on the verge of the mundane and border on late capitalist trivial busywork. However, they also enable the player to experience a relaxed kind of boredom, which was crucial for the title's rise to prominence in collaboration with the 2020 COVID-19 virus. Amidst the pandemic, which took a heavy toll on many people's daily lives, *ACNH* was hailed as the game allowing them to reclaim everydayness (see Roth).[261]

Key to the title's ambiguous role of repeating and responding to neoliberal capitalism is thus its "soft" (see Quirk) and "cozy" (Smith, A. 129) style.[262] Bogost's reading of the game, hence, argues that it is not simply an escapist retreat but "a political hypothesis about how a different kind of world might work—one with no losers." ("The Quiet"). In response to Bogost, Seller's reading insightfully situates *ACNH* not in a pandemic break with neoliberal capitalist demands and organization of life but as an expression of an ongoing condition of "ever-lockdown" (see 101-5) – marked by continuities in neoliberalism's alienation, isolation, and hyperconnected domestic digital labor. He suggests that "ACNH provides the player with a place in which to dwell and exorcise negative affects while ambivalently resisting the creep of neoliberalism through boredom and interpassivity" (101). Seller's reading hence testifies to the dominant role neoliberal capitalism holds in the game's imaginary of the everyday, which ambivalently embodies current social-cultural trends.

The figure of Tom Nook, founder and CEO of Nook Inc., the in-game company that offers the player her "Island Getaway Package," best personifies many of the game's explicit ties to a soft neoliberal capitalism.[263] Beyond this strong role in the tutorial section, Nook remains a tutor with benefits throughout the entire game. He introduces the player to key

[261] Lewis and colleagues have further examined *ACNH*'s role as a coping mechanism during the pandemic and report that increased gaming and related activities were predictive of higher anxiety and related to increased loneliness during the pandemic. A later study conducted by the author showed that escapism among *ACNH* players was related to problematic use of the medium (see Wischert-Zielke and Barke).

[262] The idea of *cozy* games has recently found wider resonance among scholarly perspectives in game studies through the work of Waszkiewicz and Bacun, who coined the term, drawing from Cook. They point to (1) a sense of security provided by low difficulty, lack of threats, and the inability to lose progress or die; 2) abundance of resources, and 3) softness of audiovisual style of a game (e.g., bright colors and calm music). ACNH easily speaks to all three of these elements.

[263] The character of Tom Nook is based on the traditional Japanese figure of the *Tanuki* (たぬき), a racoon dog (which is a poor English translation for a dog resembling a racoon) trickster with magical (often shapeshifting) abilities, mischievous or dignified intentions and schemes, and sharp intelligence. Like Tom Nook, tanuki are associated with prosperity. Prior to the *New Leaf* title from the *AC* series (2012) for the Nintendo 3DS, Tom Nook used to be the owner of the shop while in *ACNH*, his nephews Timmy and Tommy take over and Nook himself takes on the role of a travel agent and CEO with ties to real estate, construction, and about everything else the player is offered (e.g. event management in the subplot with K.K. Slider, a famous musician who visits the player's island).

gameplay mechanics such as the ubiquitous possibility to either monetize each and every in-game item via an own island currency, bells (fig. 56, top left still), or sell and buy items via the shop, which ties the secluded community to a mass market (fig. 56, bottom left still). He makes most major decisions about the island, from opening up a shop and updating the player's tent to a spacious mansion to building public (infra)structures (e.g., bridges) and offering further real estate on the island to NPCs. The ambiguous utopian side of Nook's business lies in "zero-interest financing" and an "extremely lax repayment plan" (fig. 56, top right still). As the player is never evicted even if she does not pay her loans back, many came to perceive *ACNH* as "a version of capitalism devoid of consequences" (Temperton).



Fig. 56. Scenes with Tom Nook in *ACNH*: He introduces the currency (top left), the loan system (top right), the catalog (bottom left), and the NookPhone (bottom right still) to the player.

Nook's business model could be described as total in that it encompasses real estate, mobility (every island has an own airport), social life, and the media: many of the game's themes and mechanics come together in the NookPhone (fig. 56, bottom right still), which renders the game's suggested options for play accessible and without alternative. With Nook as well being in a position to bestow the player the role of "Resident Representative," he occupies an executive position resembling the power of the state, but, as a private/corporate actor, not identical to state power. Though Nook once makes a point in stressing the "democratic" nature of administrative procedures relating to the island, the state itself remains absent, and the island appears as subject to a diffuse territorial assemblage of options provided exclusively by Nook's company, which constantly positions the player in the role of a paying customer. Beyond a mere

deregulation of the market, the Hawaiian shirt-wearing tanuki is an emblematic personification of a softened corporate power that sells life as a commodity.

CE, on the other hand, is often described as an action-survival RPG with adventure elements. It is set in a fictive prehistoric time period called the "Hyborian Age" originally envisioned in the fantasy works of Robert E. Howard.[264] The game affords the player the role of an "exile" and thus capitalizes on the colonial theme of starting a new life in a spatially secluded and allegedly raw land, which *ACNH* heavily relies on, too. In *CE*'s initial crucifixion scene, however, the player is violently cast out as a convict and the story thus severs any ties to a possible homeland to effect a zero hour of civilization in the "Exiled Lands," in which barbarism reigns, as the game never tires to emphasize. While barbarism is not simply universally celebrated in all its brutal aspects in the game, the ant/agonistic and violent premise is still framed to be without alternatives and serves as a simple narrative justification for many of the game's colonial[265] fantasies.

While *CE* does not directly refer to and thematize colonial history in the same way as strategy games such as the influential *Age of Empires* (1997-2023; see Lammes "Postcolonial Playgrounds") and *Civilization* series (1991-2016; see Carpenter), or other adventure games set in postcolonial societies and cultures (see Jiwandono), it requires a postcolonial game studies perspective[266] in that it exemplifies vividly how games, in the words of Lammes, "translate

[264] Robert Ervin Howard (1906-1936) was an American writer of fantasy, historical adventure, Western, and horror stories and novels. He created the character Conan the Barbarian and developed what is today known as the *sword and sorcery* subgenre of fantasy, as his narratives often rely on strong male heroes and combine fantasy, romance, and violence with elements of magic and the supernatural (for further information on his world-building, see Howard). In *CE*, the supernatural is present in the many tribal Gods (whose avatars can be summoned to fight other clans in multiplayer) and the sorcery mechanic (compared to other games, however, sorcery takes the role of carefully prepared rituals rather than combat attacks that can be repeated quickly).

[265] To give a first useful, if simplified and somewhat decontextualized, definition of *colonialism*, it can be described as the "settlement of territory, the exploitation or development of resources, and the attempt to govern the indigenous inhabitants of occupied lands, often by force" (Boehmer 2). The very framing of coloniality, however, immediately draws the speaking subject into tensions of colonialist constructions of history and postcolonial de- and reconstructions (which are furthermore not simply distributable within a dichotomic matrix of colonizer and colonized). Francophone Martinican poet and politician Aimé Césaire, for example, answers the question of colonization as follows: "what, fundamentally, is colonization? To agree on what it is not: neither evangelization, nor a philanthropic enterprise, nor a desire to push back the frontiers of ignorance, disease, and tyranny, nor a project undertaken for the greater glory of God, nor an attempt to extend the rule of law. To admit once and for all, without flinching at the consequences, that the decisive actors here are the adventurer and the pirate, the wholesale grocer and the ship owner, the gold digger and the merchant, appetite and force, and behind them, the baleful projected shadow of a form of civilization which, at a certain point in its history, finds itself obliged, for internal reasons, to extend to a world scale the competition of its antagonistic economies" (10-11). Note here, how Césaire in countering the colonial macro-narrative of a secretly hierarchical and racist humanism also fundamentally links coloniality to economics and their "antagonistic" form under capitalism.

[266] With the works of Breger, Carpenter, Euteneuer, Harrer, Jiwandono, Lammes, Langer, Magnet, Mukherjee, Soraya Murray, and others, many postcolonial perspectives, voices, and projects in the field of game studies refer to scholars such as Homi Bhabha, Edward Said, or Gayatri Chakravorty Spivak to question what the present work

spatial hegemonies into play" ("Postcolonial Playgrounds" 4). This becomes evident already with a glance at *CE*'s map (fig. 57).



Fig. 57. The topography of *Conan Exiles* (2018): a collage of the game's map and corresponding in-game regions.

After being released from the cross in the large and barren desert, located at the most Southern part of the map, the player is necessarily driven northward in search of food and water. Though she will only slowly be able to increase her mobility via leveling up (in this regard, *CE* is certainly a grindy game) since the overall hostility of the landscape (and its fauna) increases

would call *colonialist imaginaries* and *colonialist architectonics of play*, i.e., in particular, how games and players thematize, consume, critically or indulgingly engage with and negotiate (post)colonial, racist, and Orientalist practices of Othering, economic exploitation, and socio-cultural hierarchization. Harrer calls this lingering and self-perpetuating complex of neocolonial power and perspectives "casual empire" (23) and convincingly argues that, to critically engage with casual empire, game studies need to approach all three dimensions of design, play, and academia itself.

further with movement into the North, there are several different regions to explore and conquer. Notably, though the map does not resemble the dominant and distortive Mercator map projection of our world, it still resembles the Eurocentrism and Orientalist fantasies of its topography: in its midst, there is a tropical region akin to an exotic Caribbean with palm trees and crocodiles followed by an African steppe, featuring elephants and lions and populated by the dark-skinned race of Darfar.[267] The only larger city and supposedly civilized human settlement (not counting the numerous small tribes that all attack the player on sight or the central Unnamed City, a ruin where hostile skeletons dwell) is, of course, found in the West. The East is comprised of rainforest and sunken Maya-style ruins, which offer valuable resources to the player and are populated by exotic birds, panthers, tigers, and ape-men. In the North, where a giant volcano serves as a site for the challenging end-game content, a frozen landscape with sabercats and mammoths bears the most precious and sought-after resources, allowing for the best weapons and armor of the game.

Where *ACNH* specifically counters the competitive side to both neoliberalism and current architectonics of play, *CE* explodes the latter's ant/agonistic and combat-oriented parts. In doing so, it creates an imperative of colonialism and violence, which the player can hardly negotiate unless she simply chooses to starve in the desert. The hypermasculinist and sexist bodybuilder character models as well as the unrelenting survival mechanics of thirst and hunger could not offer a greater contrast to the cute and cozy atmospheres of *ACNH*. However, with sufficient engagement in *CE*'s schemes of domination, there come more relaxed moments of affective dwelling, building, and self-absorbed tinkering. The greatest contrast to *ACNH*, nevertheless, lies with the antagonistic positioning of self and Other, which the analysis shall return to.

In the context of fantasy RPGs, Langer has pointed to "distinctions between civilized and savage, self and other, and center and periphery" that stem from "Western colonial ideologies" (87-8). These distinctions, as, for example, the map's Orientalist opposition between East and West detailed above shows, are indeed spatialized in *CE*'s game world. The latter, however, needs to be thought of in terms of a "gamescape" (Magnet 143), which does not just represent coloniality but engages the player in it.[268] The player, as a closer look at the

[267] The name stems from Howard's fiction and refers to the region of Darfur, Sudan, in North-Central Africa.
[268] Magnet, drawing from a discussion of the *Tropico* series, is interested in how a game "interpellates its players through the twin discourses of capitalism and colonialism" (143) and, hence, akin to the present account's focus on architectonics of play, conceptualizes the term *gamescape* in analogy to the concept of *landscape*: "the term gamescape offers a way of thinking about the implications of the way in which landscape is actively constructed within video games—one that highlights how the gamespace works to shape a player's particular understanding

game's mechanics and logics will further develop in the next section, is engaged by the game to enact and participate in what Breger has called "the imperialist logic of penetration and appropriation" (53). It is essential to mention, however, that *CE* lacks two crucial allies of colonialism: the nation and global capital. As an "exile," the player-character is neither a representative of a kind of nation-state (hence, she is not a national imperialist) nor does she have access to a mass market as in *ACNH* (hence, she is also not an imperial capitalist).

Considering these initial remarks on the differences between the two titles, it may seem that the two games carry entirely different imaginaries and practices of play. *ACNH*'s cute and cozy islands on the one side create a relaxed and soft atmosphere in which neoliberal capitalist logics can be experienced as peaceful triviality. *CE*'s antagonistic state of barbarism, on the other side, suggests and enables the player to colonial expansion across and appropriation of an exoticized set of biomes. However, I have omitted one particular idea that the marketing designs of both titles emphasize and share: the concept of a *sandbox game*.[269]

Sandbox games are often framed as specific cases highlighting the possibility and dynamics of free play. Ocio and Brugos, for example, describe them as "systems that allow players to do whatever they want, without having to follow a strict linear story" (70). Tornqvist points out that they exhibit emergent gameplay, i.e., their procedural logics allow novel combinations and thus offer "a vast possibility space." Play scholar Sicart, diving into the metaphor of the playground, holds sandbox games to be "both game spaces and play spaces" (*Play Matters* 51). He goes on to say that "their design is the digital implementation of the idea of a space open for appropriation yet populated by props that help steer predetermined activities" (56).

To put it exaggeratedly, a common idea among these lines of thinking about sandbox games is the concept of an independent player subject exercising free will and mentally projecting goals into a detached spatial environment. At the same time, ideas as play partners, which sandbox games and play certainly highlight, receive an ascribed authorship (with regard to either the game or the player). One major conceptual argument established by the present

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of a larger set of spatial ideologies inherent to the game. I also use the term gamescape to underline the fact that the virtual landscapes found in video games are not static objects 'to-be-looked-at' but are dynamic and require the active involvement of the player in their construction" (143).

[269] An entire history of the sandbox game would certainly hijack the present chapter beyond its already ambitious mix of methods and themes, but it is instructive to point to the way the places for play changed in the late 1970s when gaming moved from the arcade hall (in which time was money and play necessarily had to be frantic) to the living room. Adventure games like *Adventure* (1978), *Rogue* (1980), or *Ultima* (1980) were released, which can retrospectively be described as the predecessors of sandbox games due to the open world design the player could explore (for a short history of the sandbox genre's influences, see Breslin).

approach to be drawn from in the upcoming analysis is that this misses how architectures of games need to be scrutinized together with the question of games' architectonics of play, which are always embodied and thus negotiated, but make many spatial practices almost inevitable. Through the concept of farming established here, one question aimed at *ACNH* and *CE* can now ask for the titles' solutions for the concept of the sandbox, i.e., their practices of *sandboxing play* (without presupposing the conceptual baggage of the metaphor of the child in the sandbox). How do the titles conceptualize and form player agency? How do they make farming possible, necessary, inevitable, meaningful, or optional, together with the player? Finally, the two games will, at the same time, be approached as sites of extractivist imaginaries of play, which can give insight into common spatial philosophies of neoliberal capitalism and colonialism in the context of digital games. To tackle these questions, the upcoming section explores the titles' procedural logics and how they (together with the player) afford farming, while the following one examines six examples via a postphenomenological perspective to highlight different affective dynamics evolving from the processual embodiment of extractivist architectonics of play.

5.3.2. Farming Practices and Extractivist Architectonics of Play in *ACNH* and *CE*

Farming practices play key roles in how *ACNH* and *CE* conceptualize sandbox play. The upcoming five sections, therefore, explore farming as a repetitive and yet *meaningful* practice of play in the context of various procedural logics and mechanics.

The first section will draw up initial examples and question the way the body is trained and made to incorporate procedural logics. In the second and third sections, these logics themselves are examined more closely; first, by focusing on the core enabling elements of the procedural architectures involved in farming to highlight how neoliberal and colonialist extractivisms preconfigure play and find expressions in it; secondly, this micro-perspective is linked to the broader ecologies of sandbox mechanics to ask how farming becomes a necessary and meaningful way of organizing play. Adding to this, the following section examines the element of valuation to highlight farming as a shared accomplishment of games, players, media platforms, and player bases. Finally, the role of the Other is considered to ask how extractivism affects the titles' imaginaries of the socio-cultural.

5.3.2.1. In-habiting Farming

The centrality of farming practices in both *ACNH* and *CE* immediately becomes apparent with the first instructive elements of the titles. After the aforementioned spatial initiation scenes, tutorial elements guide the embodiment of controls and mechanics. As Cao and Liu's recent literature review has detailed, tutorial sections are successful when they effectively "help players understand particular game mechanics or teach them to trigger certain behaviour in the game world" (2). Notably, farming mechanics in both titles appear just as integral as the very basic movement mechanics.

At Timmy and Tommy's reception counter in *ACNH*, the player sets the name, the birthdate, and the appearance of her player-character before choosing one island from a selection of four mini-maps. After these dialogue and menu sections, she meets Tom Nook and receives her very first quest: the player is charged with placing her tent and those of her two villagers. Besides initiating the player as a settler with a colonial land claim, the quest teaches the player's body to move the character by tilting the left stick on the Nintendo Switch with the left thumb and how to open her inventory by pressing the X-button with the right. The second quest immediately follows on from this and testifies to the role of farming as a core activity in the gameplay: for an island welcoming party, Tom Nook requires the player to farm for the first time (fig. 58). "I think roughly 10 tree branches should do the trick. You can find them scattered about the island. So when you find one lying on the ground, just press Y to pick it up!" he exclaims and thus engages in a recurring instructive rhetoric, which breaks the fourth wall by referring explicitly to the controls themselves rather than merely the narrated in-game action. With the player's attention now shifted to the things lying around on the ground, a different value grid emerges in practice; a novel kind of nomadic mobility accompanies the new rhythm of doing the same thing over ten times: walk around, spot the branch, move



Fig. 58. Tom Nook instructing the player to farm.

character to it, use the slightly janky[270] controls to face it by only *slightly* tilting the left stick, press Y: an entity state logic communicates that the player-character is bowing down to pick up the branch and a bright, squeaky sound communicates the action and rewards the player, the stick disappears and can be found in the inventory. Upon returning to Nook with ten branches, the player is praised as a "hard worker" for getting the "job" done. Then, however, Nook wants six apples for the celebration.[271] Again, the player darts off, this time to shake trees pressing A, which triggers three apples to drop to the ground. Pressing Y will again move the apples to the inventory and, when six apples are returned, the game triggers a further cut-scene and the player can ceremoniously name her island.

ACNH's three initial tasks narratively spell out the game's most basic and yet core mechanics; they physically train the player's body to perform particular movements in predetermined series to ensure farming as a successful joint accomplishment. While the first quest introduces the inventory and movement mechanics, the second combines the two and introduces the archetypical action of moving something from the game world into the inventory space of the player. Farming with *ACNH* fundamentally relies on this link between a game space, which can be farmed, and an inventory space, which can be farmed into. Then, the third quest introduces the player to a further resource and adds an intermediary action to the micro-procedure in that the apple must first be shaken from the tree before being harvested. Whereas the second quest requires the player to move to spot the location of the branch, the third requires her to previously set up the farm, in addition. Hence, the possibility for further intermediary steps mediates the instrumentality of the action taken and sorts the performance of controls into a series of repetitions: the procedural logics that enable farming can easily be recombined and chained as the player's body is effectively trained and quickly *in-habits* the procedural logics in a joint skillful and yet flexible performance.

[270] Schmalzer's article on *ACNH* aptly describes the game's controls as "janky" (i.e., imprecise and not entirely predictable). In the context of farming stone, for instance, the jankiness of controls may add to the complexity and challenge of the repetition as the player needs to make sure not to dig into the wrong spot on the ground due to the spot aimed at not being directly represented on the level of visual graphics beforehand.
[271] Note that every island has a random native fruit that may vary; hence, the objects in question could as well be peaches, cherries, oranges, or pears instead of apples.



Fig. 59. First steps in *CE*: the player-character picks up plant fieber.

After *CE*'s initial cut-scene with the titular character Conan, the player is left alone in the desert. While characters and the use of the Nook Phone heavily narrativize the skillful training of the player's body in *ACNH*, this is not the case in *CE*. Here, it is the HUD[272] that adds an instructional layer to the graphical presentation of the game world (fig. 59). The controls are boldly relayed at the bottom right corner of the screen; at the top right corner, a "journey system" presents core activities of the game as "steps" beginning with the most basic one, the journey of the "survivor." It consists of 25 steps, which are automatically ticked off once the player fulfils the requirements in the right sequence. The first one, "Take your first steps," requires the player to merely press the W-key on the keyboard to move the character. The second step, "Investigate the smoke nearby," leads the player to a chest where she can find an initial set of supplies. This directly mirrors *ACNH*'s first two quests, which as well introduce the inventory. After eating and drinking by using the items in the inventory (or pressing the corresponding hot keys), the player receives the instruction to "Gather plant fieber." Approaching one of the few bushes in the desert region, the player finds out (through experimenting with the world) that she receives the resource plant fieber by pressing the E-key repeatedly. Every instance of pressing the key induces an entity state logic that shows the character model reaching out with their hand. In the middle right section of the screen, the game

[272] In the context of games, *HUD* stands for *heads-up-display*, a design method for game interfaces that use "transparences to avoid obstructing what is happening" and offer "permanent type of information [. . .] to the player" (Zammitto 268) such as health status, available weapons, armor, or resources (see Caroux and Isbister).

communicates “PLANT FIEBER +1” (fig 6.6.). Doing this repeatedly will eventually exhaust the source, and the bush falls apart. During the activity, the player (unconsciously) realizes that the next press of the button needs to be timed together with the character animation for the next instance of harvesting to trigger. Two possibilities open up: the player is either aiming to perfectly align with the animation, pressing the button right on time, or she relies on wild and constant button mashing, which requires less focus and more strength of the fingers, but gets the job done easily as well.

In comparison, the tutorial section of *ACNH* is implemented in the form of a linear, necessary, and unskippable quest – the game asks the player to farm directly and refuses to progress otherwise. Working from a discourse semantics approach, Wildfeuer and Stamenković have pointed to this kind of tutorial implementation as a “result relation” that redirects the subordinate task back into the main narrative structure thus “allow[ing] for progression that makes the game go forward” (45).[273] *CE*, on the contrary, conceptualizes its sandbox play as only cued by the game – the player can simply ignore the instructions of the HUD and experiment with the game world. She might soon be building a palace or exploring the jungle, never having fulfilled the “survivor journey” in the required sequence of steps.[274]

Despite taking different routes in design, both titles engage in the element of repetition and require the player to perform actions in recursive series. Take the example of *ACNH*’s branch quest again: Even within the first set of ten repetitions, the body acquires a level of agency that neither requires nor relies on thetic consciousness[275] for the greater part: the left thumb knows how to move the character and when to let go of the left stick so the right thumb can pick up the desired resource. The eyes spot the visual clue, and the ear acknowledges the rewarding sonic feedback, which the sensitivity of the game allows. What is experienced as the player’s attention only glimpses shifts in intensities, realizes only anchor points of the practice (Oh, a branch appears at the left side of the screen!) or contradictions between the processual

[273] More explicitly, the authors’ 2022 study used a multimodal discourse semantics approach to describe tutorial sections qualitatively. Wildfeuer and Stamenković describe the purpose of the discursive *result-relation* as “(re-)embedding the subordinated structures into the main narrative structure” (45). This particular relation, they go on, “forms a recurring structure when it comes to the free play part of the game, as there is a pattern in which performing certain actions in accordance with the provided information and instructions leads us to the next bit of each game” (45).

[274] The differences between the two tutorials mirror Andersen and colleagues’ multivariate study of over 45.000 players. Writing in 2012, the authors suggest that, particularly for more complex games, investment in tutorials may not be justified for mechanics that can be discovered through experimentation. At the same time, mirroring the different anticipated player bases between a survival adventure game and a cozy life simulation game, Cao and Liu’s 2022 study holds that implicit tutorials are especially beneficial for players more experienced in gaming.

[275] To repeat, with Merleau-Ponty and Sartre, we can describe the *pre-thetic* as the impersonal realm of being that only enables us to refer to our selves in the thetic form of an *I* (see Longuenesse 44-70).

unfolding of play and the procedure prescribed by the game (Oh no, I have missed the mark and need to adjust my character!).

In sum, both titles train the body as a skillful performer and carrier of farming practices. In part, it is immediate repetition that allows the body to in-habit the logics at hand. Equally important, however, is the low skill level required. The imaginaries of sandbox play at the heart of the two titles take efforts (in particular, visual and sonic feedback, and, despite their jankiness in *ACNH*, very rudimentary controls) to make farming an easily performed practice that is intelligible and meaningful and that can readily be varied and chained in repetitive sequences as well as narratively framed in different ways (preparations for a party or existential survival).

Though *ACNH* and *CE* thus explicitly assign farming a key role in their architectonics of play, instances of farming that go beyond their explicit conceptualization may still abound. Hence, it is crucial to, for example, point to the widespread practice of repetitively starting *ACNH* over again with the goal of accessing a greater range of virtualities for play than that preconfigured and allowed for by the game in a single start. Gaining a new set of four island maps over and over may come at the arduous cost of having to sit through the intro section and enter the character's name a dozen or so times, but it may also satisfy the player's desire for what is deemed a better island, eventually.[276] Likewise, repetitively killing one of the bosses in the hidden dungeons spread across *CE*'s map to cause a particular sword or axe to drop with a small probability could also be labeled *farming*.[277] In both examples, however, the game does not explicitly cue or communicate the practices. Farming, then, relies on game design and its embodiment and negotiation in play. The two titles as play partners thus enable and preconfigure farming in ways not reducible to intentionality as part of the procedural design, and yet, the procedures and logics at hand are vital. In the next section, it will be asked more exactly what is embodied and how farming becomes a meaningful part of play.

[276] Of course, what a better island amounts to is subjective to a large extent, but many players refer to similar aspects of relevance that cannot be changed later on in the game. A *YouTube* guide on how to choose the perfect map by user Cinnamilla, for instance, refers to the location and color of the airport, the native fruit and flower, the location of the Resident Services building, the location of the river mounds, and the rocks at the beach (see *How to*).

[277] The example also shows that farming is not necessarily a low-skill practice in every instance. The farming of end-game weapons may require a fully leveled character, mastery of the fighting mechanics, a particular knowledge of the attack sequences of the boss, crucial inventory management, the previous farming of herbs for the creation of a reliable stack of healing potions, exact organizing of the farm or run (the scheduling of the session together with fellow players), the balancing of skills and strategies among the characters in the player's clan, etc.

5.3.2.2. An Extractivist Micro-Politics: Resource, Space, and Property

To approach the question of what is inhabited in farming and how this contributes meaning to play, it seems apt to zoom in further at this point: the previous examples have already pointed to resources, game space, and the player's inventory as crucial elements of farming. A micro-perspective may now question the set of relations and ideas at the core of farming, crystallized in the very moment of extracting and thus appropriating an in-game object. Since the previous analysis has already emphasized the side of controls and their embodiment, the focus of the present section will be on the procedural logics and how they contribute to the formation of meaning in play.



Fig. 60. Farming wood in *ACNH* (top) and *CE* (bottom still).

If not with an archetype, let the analysis begin with an example: Take an instance of farming that proceeds hauntingly similarly in *ACNH* and *CE*: the player uses an axe to receive wood from a tree in the game world. Having equipped her axe, the *ACNH* player approaches a tree and strikes it repeatedly: a maximum of three pieces of wood appear and jump into one of the empty spaces around the trunk from where they can be picked up into the inventory (fig. 60, top still). In *CE*, farming wood happens in the same way, except the pieces gained are immediately transferred to the player's inventory and the player receives (randomly) six or

seven pieces (when using the standard stone axe) for a maximum of five to eight extractions each (the number depends on the tree) (fig. 60, bottom still).

Several procedural logics (all related by linking logics) work together to make farming possible and intelligible, thus creating what Wardrip-Fruin calls a "playable model of space" (120). Camera logics in both titles are of the third person kind; in the case of *ACNH*, the camera cannot be turned (only moved in or out on a fixed grid of three camera levels akin to a crane shot in film) while in *CE*, the camera is rotatable in a 360° radius around the avatar. Nevertheless, both camera logics position their avatars as well as their in-game objects in game space, akin to a Euclidean model of container space. This model becomes more obvious to the *ACNH* player because of the way objects are always positioned at the center of predetermined squares (consider again how the piece of wood aligns with the stick in figure 65 and how both form a right-angled triangle with the tree).

In the moment the player uses the axe to farm, an entity-state logic communicates the motion visually on screen: the avatar is no longer standing or running but swings the axe in a predetermined, stereotypical, and uniform motion in either game. With both titles, the player engages in a selection logic to align the avatar and the point she is aiming for, while a pattern recognition logic detects whether a correct match is found for a harvestable source, in this case, a tree. If a correct match is detected, a sound is given in both games, and a resource logic is activated. Once the pool has been exhausted and nothing more can be extracted, a persistence logic determines that the tree disappears in *CE* (it will grow back after a while) while it remains intact in *ACNH*.

According to Wardrip-Fruin, the abstract procedure operating a resource logic "creates, destroys, and moves discrete quantities of tangible or intangible resources [. . .] between concrete or abstract locations, on demand or over time" (56).[278] In *CE*, it directly adds a determined amount of a quantifiable entity labeled "wood" to the player's inventory. In *ACNH*, a further step is necessary, as was outlined above. In either case, the entity added was, however, not present on the map prior to establishing the farm. Hence, the trees in the games act as harvestable sources or nodes of resources but require a particular process, the coming together of axe, avatar, and the player's body to trigger the extraction (procedurally enacted by the resource logic), to be transformed into resources. What remains at the end is a quantifiable amount of a peculiar object that can only be described as a *type*. As a resource, wood is a de-

[278] Note that Wardrip-Fruin writes of an "abstract process" (56) in the quoted section. Here, I use *procedure* as not to equate procedurality with processuality and suppose to read him as clearly pointing to the former rather than the latter.

individualized and de-actualized type rather than an individual object, the work of farming crystallized into an abstract thing. *CE* clearly shows this abstraction: when the player drops any kind of resource to the ground, it turns into a small bundle, itself a container that will disappear after some time. Once harvested, a resource is eternally bound to container spaces or inventories, where it stacks as a quantifiable, abstracted type. Hence, it is, from the moment of farming on, removed from the natural world of the game space (it can only be nested in it). The curious object ontology of resources in either game is inherently tied to the micro-procedure of extraction and points to the difference between game space and container space, which sediments and yet fundamentally constructs a crucial idea to both neoliberal capitalism and colonialism, the idea of *property*.

In the following, the concepts from the two games, i.e., the object ontology of resources, game space, and inventory, which, as I will argue, together carry an extractivist imaginary of *nature* and *property* will be contextualized through a reading of one of the major texts of the theory of liberalism, John Locke's second part of *Two Treatises on Government*[279], focusing on chapter five "Of Property." As the reading will stress, besides offering a theory of modern civilization and the social contract, the text also constructs an extractivist imaginary of nature and property as part of its spatial philosophy, which has to be regarded as a fundamental justification for colonial practices and colonial rule in spite of Locke's explicit arguments against slavery[280].[281] As the text thus links neoliberal capitalism and colonialism (historically and conceptually), it offers a fruitful lens on the underlying discursive and procedural underpinnings of the two games that both heavily rely on a Lockean concept of property.

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[279] In this work, Locke argues that once humans leave what is imagined as their *natural state* to form societies, lawful government can only be legitimized by a group of free individuals capable of forming a majority and thus a consensual society. The first part of his 1689 *Two Treatises of Government* consists of a direct response and refusal of Robert Filmer's *Patriarcha* (1680), which defended the divine rule of the monarch by aligning the king directly with the figure of the biblical patriarch whose power is given by God. The second part quoted here is often viewed as a manifesto of liberal society and capitalism and was of great importance for the Glorious Revolution of 1688/1689, the American Constitution of 1787, and the French Revolution of 1789.

[280] On an explicit level, Locke argues against slavery, albeit having in mind English slavery. He holds that "a man, not having the power of his own life, cannot, by compact, or his own consent, enslave himself to any one, nor put himself under the absolute, arbitrary power of another, to take away his life, when he pleases" (Sect. 23). He thus contends that the "condition of slavery [. . .] is nothing else, but the state of war continued" (Sect. 24) and, hence, discards it. At the same time, however, Locke was an investor of the Royal African Company and had over a decade of service in colonial administration, which clearly shows that his motive was that of a negotiation of the kind of colonialism and its measures. Barbara Arneil argues in this context that "Locke, in his economic writings and in chapter sixteen of the Second Treatise, hoped to provide a new and seemingly 'strange' model of colonization that better suited to the English disposition" ("Trade" 606).

[281] This critical reading of Locke, not just in the context of neoliberal politics but also English foreign policy and colonial rule, is still severely neglected in the literature. Barbara Arneil's work, in particular, has emphasized Locke's close biographical ties to colonial institutions as well as the colonial goals of his work as an author (see "Trade"; "John Locke"). In contrast to her readings, which use a perspective of the History of Ideas, my reading looks more closely at extractivism, though, of course, it is much more limited in scope.

After having systematically rejected the absolute monarch qua the divine right of kings together with the patriarchy of Adam in his first treatise, Locke's second book aims to construct an alternative power in its place: the civil society based on the social contract. He begins his arguments with a hypothetical "state of nature," which is a "state of absolute freedom" and "equality" (Sect. 4). The "natural state," Locke argues, is not equivalent with Hobbes' state of war (indeed, it is a "state of peace" [Sect. 19]) because "reason" serves as "natural law" between "men" (Sect. 6). Crucially, though Locke aims to dethrone the divine monarch, his argumentative starting point is clearly not outside of the discourse of myth when he asserts "God, who hath given the world to men in common, hath also given them reason" (Sect. 26). However, the shared custodianship of all "men" (in place of patriarchal ownership) bears the danger of the state of war and Locke's "Man" consents to being governed in a civil society for the very reason that the "property he has in this state is very unsafe, very unsecure" (Sect. 123).

For the present purpose, Locke's concept of *private property* is particularly interesting for its genesis. Regarding "the earth, and all that is therein," he writes, "being given for the use of men, there must of necessity be a means to appropriate them some way or other, before they can be of any use, or at all beneficial to any particular man" (Sect. 26). This "means of appropriation," as section 27 establishes, is *labor* as the foundation of private property:

> Though the earth, and all inferior creatures, be common to all men, yet every man has a property in his own person: this no body has any right to but himself. The labour of his body, and the work of his hands, we may say, are properly his. Whatsoever then he removes out of the state that nature hath provided, and left it in, he hath mixed his labour with, and joined to it something that is his own, and thereby makes it his property. It being by him removed from the common state nature hath placed it in, it hath by this labour something annexed to it, that excludes the common right of other men: for this labour being the unquestionable property of the labourer, no man but he can have a right to what that is once joined to, at least where there is enough, and as good, left in common for others.

It is human labor, according to Locke, that transforms things into property. Things or resources (which Locke frames primarily in terms of nourishment, i.e., fruit, crops, etc.) are, in the natural state, "produced by the spontaneous hand of nature" (Sect. 26). They have an "intrinsic value," which depends "only on their usefulness to the life of man" (Sect. 37). Yet, it is labor which "makes the far greater part of the value" (Sect. 40) once appropriated. Moreover, it is of paramount importance that Locke extends his idea of property from "the fruits of the earth" to

"the earth itself": "As much land as a man tills, plants, improves, cultivates, and can use the product of, so much is his property. He by his labour does, as it were, inclose it from the common" (Sect. 32).

Hence, via his concept of rationality, which, as needs to be emphasized again, bears no foundation outside of the discourse of creationism and, hence, myth, Locke arrives at a legitimization not just of private property and land ownership but of colonial resource appropriation and thus spatial extractivism. His concept of a "greater good" discloses this project: "he who appropriates land to himself by his labour, does not lessen, but increase the common stock of mankind: for the provisions serving to the support of human life, produced by one acre of inclosed and cultivated land, are [. . .] ten times more than those which are yielded by an acre of land of an equal richness lying waste in common" (Sect. 37).[282] Tying the "greater good" of the "human" to the economic ideas of progress, efficiency, and quantification, he asks polemically "whether in the wild woods and uncultivated waste of America, left to nature, without any improvement, tillage or husbandry, a thousand acres yield the needy and wretched inhabitants as many conveniencies of life, as ten acres of equally fertile land do in Devonshire, where they are well cultivated?" (Sect. 37). The statement makes visible an English colonial subject at the heart of Locke's humanism. The former is, furthermore, clearly gendered, for example in Locke's concept of nature as a "common mother of all" (Sect. 28) who does not produce anything (while man's labor produces private property, as he argues), and racialized, as his recurring references to the "wild Indian" (Sect. 26) who he does not count to "the civilized part of mankind" (Sect. 30), reveal.[283]

[282] Later in the text, he repeats the same reasoning of a justification of English settler colonialism together with a denial of Native American land claims in Section 41: "There cannot be a clearer demonstration of any thing, than several nations of the Americans are of this, who are rich in land, and poor in all the comforts of life; whom nature having furnished as liberally as any other people, with the materials of plenty, i.e. a fruitful soil, apt to produce in abundance, what might serve for food, raiment, and delight; yet for want of improving it by labour, have not one hundredth part of the conveniencies we enjoy: and a king of a large and fruitful territory there, feeds, lodges, and is clad worse than a day-labourer in England."

[283] Locke's idea of a *natural state* is thus unequally distributed in a colonial-extractivist imaginary of space. Achille Mbembe criticizes it as "the conviction [...] that the state of nature prevails beyond the European fence - a state in which neither faith nor law have their rightful place. Peace, friendship and treaties referred solely to Europe and Christian nations. Under these circumstances, every power is legitimized to pursue conquests in the distance, even at the expense of its neighbors and rivals. It is therefore taken for granted that the world order is divided into spheres that distinguish between the inside and the outside. The inner sphere is governed by law and order, prerequisites not only for life in society, but also for international life, which must be controlled, limited and cultivated. It is here, it is believed, that the ideas of property, the compensation of labor and international law developed" ("die Überzeugung [. . .], dass jenseits des europäischen Zauns der Naturzustand herrscht – ein Zustand, in dem weder Glaube noch Gesetz zu ihrem Recht kommen. Frieden, Freundschaft, und Verträge bezögen sich allein auf Europa und auf christliche Nationen. Unter diesen Umständen ist jede Macht legitimiert, in der Ferne Eroberungen zu machen, auch auf Kosten ihrer Nachbarn und Rivalen. So gilt es als ausgemacht, dass die Weltordnung in Sphären eingeteilt ist, die Innen und Außen voneinander unterscheiden. In der inneren Sphäre

As is well known, Locke's idea of private property and his spatial imaginary of a "natural state" are key ideological concepts for neoliberal capitalism, but, due to their implicit colonial positionality, which is not equally pointed out, also for advocates of colonial appropriation like Locke himself. The joined element of a potentially unfettered economic hunger, putting resource appropriation at the center of subjectification and an exclusive concept of citizenship, is an *extractivist* impulse at the core. Locke's Christian kind of extractivism justifies Man's quest to "draw from" the Earth the "greatest conveniencies of life" (Sect. 34). The "drawing" of resources in question is common to Locke's ideas, Chagnon and colleagues' definition of extractivism[284] as well as the farming practices of *ACNH* and *CE*.

At this point, the procedural logics detailed above can be read along these lines as implementing an extractivist spatial imaginary whose object ontology of things-as-resources, their coming into being through the process of work, and their transformation into private property they procedurally enact and yet sediment, akin to Locke's rhetoric of a "natural state." The object ontologies in *ACNH* and *CE* (exemplified above by the trees) constitute the thing as laying bare before the work of appropriation, i.e., the clicking of the index finger or the pressing of the thumb in conjunction with the extractivist sensitivity of the game and the so produced image of the axe swinging; it is this "labor" (as Tom Nook fittingly calls it in the quest detailed above) that teleologically and irreversibly transforms the thing and determines it to come into being as resource, the true essence of the thing in the capitalist imaginary of play. The game spaces of the two titles that display and arrange trees, stones, animals, plants, etc., each produce a Lockean natural state in which these elements cannot be used directly, are not subject to a single ecological relation, and remain inexhaustible nodes that constantly respawn. The inventory space, in contrast and opposition to the natural state of game space, constructs, repeats, spatializes, and naturalizes the concept of private property. The concept of the inventory is so ubiquitously present in games across most borders of genre that it has remained

herrschen Recht und Gesetz, Voraussetzungen nicht nur für das Leben in Gesellschaft, sondern auch für das internationale Leben, das es in Bahnen zu lenken, zu begrenzen und zu pflegen gilt. Hier, so glaubt man, entwickelten sich die Ideen des Eigentums, der Entlohnung von Arbeit und des Völkerrechts"; my trans.; 117).

[284] To repeat, Chagnon and colleagues put at the center of their definition the "appropriation of natural and human resource wealth, producing a drain that damages or depletes its source in a potentially irreversible way" (763). It is necessary to note here that Locke was conflicted about the unlimited draining of resources and added that the individual only bears a right to property "where there is enough, and as good, left in common for others" (Sect. 27). Furthermore, Locke holds that "[a]s much as any one can make use of to any advantage of life before it spoils, so much he may by his labour fix a property in: whatever is beyond this, is more than his share, and belongs to others. Nothing was made by God for man to spoil or destroy" (Sect. 31). However, the use of money under capitalism complicates this again, as it enables and justifies man, according to Locke, to keep more than is immediately needed (See: "And thus came in the use of money, some lasting thing that men might keep without spoiling, and that by mutual consent men would take in exchange for the truly useful, but perishable supports of life" [Sect. 47]). Locke here argues that by using money, "it is plain, that men have agreed to a disproportionate and unequal possession of the earth" (Sect. 50).

largely unquestioned, although and because most games feature it.[285] For the player, the inventory transforms, translates, and thus masks the responsibility of extracting behind a responsibility of having. With *CE*, the latter concerns the weight of resources as the player can easily get "over encumbered" (i.e., the movement speed is capped), while with *ACNH*, the inventory is simply limited with regard to the number of slots and the player can only carry a limited number of things. The subject position thus afforded to the player-character is that of an extracting play partner whose one-dimensional agency comes into being (and can only come into being in this way as there is no alternative) together with the appropriated resources; to a large extent, the character is what they have when meaning in play is largely derived from taking. Thus, simultaneous with the abstraction of the thing to resource, the complex process of valuation at hand, which we can only fully grasp in the upcoming section that asks for the economy of in-game things and practices, also entails a(n) (de-)individuation, and, indeed, an objectification[286] on the side of the player.

In sum, the close-reading perspective of the present section finds at the heart of farming a distinct *extractivist micro-politics* despite its atomistic procedural scope. Though the present section could be read as framing it as an archetypical structure, a moment of farming continues to be contextualized and game-, player-, and site-specific. In the next section, therefore, the perspective will have to follow its analysis up by reapproaching farming as a mechanic in relation to other mechanics.

5.3.2.3. Creating Repetition: Farming Among an Ecology of Sandbox Mechanics

In the aftermath of the tutorials discussed above, moments of farming abound in the sandbox gameplay of the two titles: they branch out, vary, and differentiate, but above all, they repeat. In *ACNH*, the player might plant rather than sell the apples harvested, arrange trees in circles or rows to farm fruit repeatedly, link her orchard and shop with Mario warp pipes[287] for quicker farming, and use time-traveling[288] to reset the farms. In *CE*, the player soon farms

[285] The only exception known to the author is a 2023 bachelor's thesis in game design, which classifies different implementations and uses of inventories, but does not discuss the idea of private property (see Glasell and Jönsson).
[286] Marx, likewise, spoke of a "personification of the thing and thingification of the persons" ("Personifizierung der Sache und Versachlichung der Personen"; my trans.; 128) in his analysis of capitalist labor.
[287] The Mario warp pipes are an intertextual link to the *Super Mario* games. If two of them are placed on separate spots on the map, the player can use them as a teleporting device in *ACNH*.
[288] Time traveling in the *AC* series negotiates temporality by changing the time on the console system so the real-time mechanic of the game moves the in-game time forward.

resources using various tools, with a torch in pitch-black nights, while being chased by dangerous creatures, or excruciatingly slowly while being over-encumbered – she automatically aims for the overlap zone of two nodes to double farm, forms the habit of hitting the tab-key between farming triggers to have an eye on the weight level, or farms resources not needed at the moment simply because her inventory still has unoccupied space to fill. In either game, a cornucopia of things presents itself to be farmed for: wood is quickly accompanied by branches, various plants, stone, and metal, but also rare and sought-after resources like gold or fragments of stars. The procedural structure of farming and its micro-politics now lay open before the analysis – the previous section has shown in depth which procedural logics make farming possible. However, the following question remains unanswered: How does repetitive farming become both *a necessary* and *meaningful* way of organizing play*?* To approach this question, the perspective has to shift again and situate farming among the wider ecology of game mechanics put forth by the two games through their respective imaginaries of sandbox play.

As outline already, a potential pitfall for the present project would be to simply accept the surface-level rhetoric of the two games that point to the sandbox as a place of free play. This would all too quickly give in to the idea of a free, and in this regard, detached subject at play, which the games themselves carry. The official web page of *ACNH*, for instance, claims that "Paradise is what you make it in Animal Crossing" (Nintendo "Animal Crossing").

The challenge, instead, is to question the specific ways the games address the idea of sandbox play. Game designer Breslin has, in this fashion, de-naturalized the sandbox by referring to what he labels the "principle design problem of sandbox-oriented gameplay":

> This principle design problem of sandbox-oriented gameplay is already subtly suggested by the sandbox metaphor itself: a child playing in a sandbox needs a lot of direction if they're going to have very much fun. They need toys first, and they need to be given ideas of things they can do with them. The parent needs to provide a meaningful framework. Just dropping a kid in a sandbox does not work. The same is true of sandbox design. If the design effort fails to produce a game rich in intriguing potential, it's very much like shipping a literal sandbox. Imagine a game-box literally filled with sand: the open-minded player might enjoy playing in the sand a bit, but the gameplay really isn't worth a lot. The necessary framework guides the presentation of the sandbox elements as the world develops and unfolds. This is often expressed as a reward system, which can involve new areas to explore and new stuff to do, more difficult gameplay structures to navigate, more story unfolding, more missions becoming available, and so on.

A sandbox, one could translate Breslin's perspective into the present project's concepts, is necessarily a combination of architecture *and* architectonics, both of which relate to the more-than-possible in play; the "direction" the quote speaks of is procedurally implemented and hence can hardly remain "open" at all. Each sandbox title takes decisions on the level of design that affords particular mechanics and their messages and ideas to the player, and, in turn, particular procedural sensitivities and ways of understanding the player's body and affects. In this light, the sandbox appears as a knot or bundle[289] of practices and mechanics[290] of play, which are meaningfully entangled, chained, aligned, and, in short, preconfigured by a game. As has been established already, resource logics and the extractivist idea of play they carry make farming possible in the first place. Tracing the relations of the resource logics to the main game mechanics of *ACNH* and *CE* may now highlight how farming is necessitated in repetitive series.

For *CE*, an ecology of game mechanics relates farming practices to the following elements:

1. *The building mechanics* in *CE,* together with ideas as play partners, enable the player to combine squares and rectangular shapes into architectural structures that serve as bases. Functional base building is inevitable in the game because inventory space is limited, the player is threatened by creatures and sandstorms out in the open, and needs a safe spawn location in case of death.[291] Furthermore, the base accomplishes centralization of resources and the infrastructural elements of the crafting system, which are immobile and hence require (at least temporary) sedentation. Having to build a base, the player is

[289] Schatzki has coined the term of the *bundle* in a similar fashion. In his work on "art bundles," where he more thoroughly pays attention to materiality compared to other works of his, Schatzki writes that "[p]ractices and material arrangements are linked in the sense that practices effect, use, react to, and give meaning to arrangements while arrangements induce, prefigure, and are essential to practices" ("Art Bundles" 19). "Practices are tied to arrangements," he goes on, "but also to one another. Arrangements, likewise, are connected with other arrangements. A bundle of practices and arrangements can embrace multiple practices and arrangements, which are linked in a myriad of ways. Practices connect to other practices through, among other things, shared ends and chains of action" (19). Though Schatzki's theorization is not without vagueness, his comments are useful for thinking about the co-configuration of several practices of play, such as combat, building, or exploration. Furthermore, his attention to materiality makes it possible to link these bundles of practices to procedural logics and mechanics, which belong to the material mediality of digital games.

[290] To repeat, *mechanics* are not equivalent to *procedural logics* in that the latter are fundamental building blocks combined by a game to construct the former as "things players can do in games—such as jumping and shooting, or harvesting and crafting" (Wardrip-Fruin, *How* xiii). The often-blurred range of meaning from player action to knots of meaningfully assembled logics, which popular as well as scholarly uses of the term *mechanics* convey, is quite welcome in this regard, as it shows the inseparability of material configurations and practices as reflected in the explicit knowledge of the practitioners. The focus on mechanics rather than logics in this section is to be understood as a deliberate zooming out of the perspective to frame farming in a larger ecology of mechanics.

[291] Though building works differently for the two sandbox titles, both games feature two poles of building that can be distinguished, although neither of them can fully be isolated from the other. There is primarily *functional* and *expressive* building. The former pole of building is marked by abstract planning, mapping, and a topology of efficiency (Where to place the market so I can access it quickly from most places on my island in *ACNH*? Where to locate my base in *CE* so I have access to the resources I need?). The latter pole is concerned with expression, role-play, storytelling, and ideas as play partners (e.g., when players model their *CE* bases or *ACNH* islands after famous buildings or movie settings). While the former tends to dominate the building mechanic in *CE*, the relationship is revised with *ACNH*.

required to gather large amounts of stone, wood, and, in case of higher building technologies (so-called "Tier 2 or 3 buildings"), higher processed materials.[292]

2. *Crafting mechanics* use resource logics, recombinatory logics, and pattern-matching logics to create new and better items from more basic materials. At the beginning of *CE*, the player crafts items in her inventory but soon places so-called crafting stations like a carpenter's bench, a tannery, or a furnace, which independently process the materials inserted. Crafting stations in *CE*, whose efficiency can be improved with thralls (abducted NPCs), are objectified representations of the black-boxed recombinatory logics any game uses to enable the crafting of items. In that they are stationary, they make centralization inevitable and serve as linking nodes between farming practices and building mechanics. Once more, crafting is necessitated, much like building, by progression logics that organize different resources hierarchically in chains of productions.[293]

   The items crafted can be consumable like food or potions, enable higher damage output or defense stats in combat, but also allow less cycles of farming since a hierarchical system of tools used by the player gradually improves the efficiency of extractions (table 2). However, better tools, weapons, and armor are subject to decay and corrosion, which once again necessitates farming via material constraints (or the notion captured by the German term *Sachzwang*).[294]

Table 2
Amount of wood extracted per click for main hatchets in *CE*

farming tool	pieces of wood
stone hatchet	6-7
iron hatchet	8-9
steel hatchet	10-11
pick axe	10-11
hardened steel hatchet	12-13
star metal hatchet	14-15

3. *Survival mechanics* in *CE* are the most basic driving force behind farming in that they create needs in the form of hunger, thirst, temperature, and corrosion (a kind of

[292] To give a simple example: for the most basic kind of closed sandstone hut (Tier 1) with a small 3x3 square foundation and two vertical layers of walls in height, one requires a total of 936 pieces of stone and 144 pieces of wood, which together make 166 extractions necessary, i.e., the player needs to seek out stones and trees and repeat the sequence described in 5.3.2.2. approximately 166 times if using the basic tools. Of course, the resulting space of 9 squares is tiny and not at all sufficient for even the very crafting stations the player soon has to place in order to craft better items.

[293] Forging a hardened steel sword, for instance, which is a higher Tier (but not an optimal end-game kind of) weapon, requires 30 hardened steel bars and four pieces of shaped wood. The latter are crafted from 40 pieces of wood in a carpenter's bench, the former are created in a furnace using 30 steel bars and 30 pieces of black ice (only available at the most Northern and dangerous section of the map). The 30 pieces of steel bars are crafted from 150 iron bars and 30 pieces of steel fire. The former, in turn, require 300 pieces of iron stone, found sporadically across the map, and wood or coal as fuel for the furnace. The 30 pieces of steel fire are crafted in a firebowl cauldron from 60 pieces of tar and 30 pieces of rare brimstone. The tar, finally, is a product of the tannery and combines 180 pieces of hide, harvested from dead animals, with bark, harvested from trees.

[294] The German notion of *Sachzwang* points to the way things and one's position among them may necessitate reproductive practices for their sake. Repairing an iron pick used for harvesting stone and ironstone requires the next-level product, iron bars, rather than the resource it extracts itself, thus necessitating new cycles of repetitive farming and crafting just to maintain the current line of production and its technological level. In practice, this can backfire for the player since using better tools during farming without a secure supply of resources to repair the tools can leave her without a means of harvesting or even defense if tools or weapons break.

impairment of constitution due to exposure to magical forces). These needs, most importantly for food and water, induce hunting, fishing, gathering, and exploration, and add meaning to these very elements through the threat of death. As the game cannot even be paused through the menu, the player can never take a moment to escape these logics. The hostile side of nature that attacks the player in the form of wild animals and dangerous sandstorms directly feeds back into and thus mutually co-constitutes its nurturing side, which is appropriated through resource acquisition.

4. The *combat mechanic* in *CE* further serves to position the player in an antagonistic world and makes the Other meaningful as an enemy. Combat both requires and enables forms of farming: on the one hand, the player must constantly strive towards the top end of the hierarchical system of weapons and armor to survive and heal after fights or ensure her mobility across the map. On the other hand, repeatedly killing one of the stronger bosses in a dungeon may give access to unique weapons and valuable resources as enemies drop loot. In fact, enemies are loot in *CE*, as their very bodies can be harvested for items such as hide, bones, or blood.
5. The *exploration mechanic*, which rewards the player for discovering new places on the map, posits a counter-pole to sedentary base-building. The exploration of the gigantic map with its biospheres, ancient traces of perished civilizations, and hidden dungeons for itself offers another less extractivist way of organizing play through imaginative curiosity and openness to surprise. However, the unequal resource distribution across the map together with the hierarchical organization of tools, weapons, and knowledge, which gradually but surely necessitate rare resources (like iron and coal early on, later sulfur and thick hide, and obsidian or star metal in the end game), give exploration an expressed economic and colonial character. Once these new resources are found on the map, the distance to the original camp may afford building an entire new base and hence necessitate new cycles of farming for resources all over again.
6. Finally, some mechanics take the shape of *farming mechanics* and highlight the game's explicit conceptualization of farming. One example of this would be the *leveling mechanic* that rewards each extraction of resources with experience points, leading to level-ups (in this regard, for *CE*, farming overlaps with grinding), and dedicates one of its six attribute paths entirely to resource extraction. The attribute "expertise" raises the weight the player-character can carry, and perks like "efficient harvest" or "hard worker" improve the resource extraction rate. As the skill thus makes farming less rather than more prevalent, farming is communicated as an essential and yet arduous task to the implied player. A second example would be the *purge mechanic*, which enables a tower-defense kind of gameplay: once a big enough amount of wealth (i.e., coins, rare metals, gems, statues, etc.) has been acquired, the player can repeatedly trigger a siege and defend the base against the attackers (fig. 61).



Fig. 61. Bird's eye view of a secured player base (left corner) and a purge camp (right).

Upon killing all approaching enemies, a loot chest with rich rewards can be accessed at the siege camp. Besides adding another purpose to base building, the purge mechanic with its linear, repeatable procedurality sets up the player's base itself as a farm, thus somewhat reversing the usual outward mobility of combat-focused farming.

The ecology of mechanics in *ACNH* relates farming practices to the following elements:

1. The *building* and *crafting mechanics* in *ACNH* again require resources as raw materials that can be farmed for. Contrary to *CE*, however, the game emphasizes the expressive rather than the functional pole of building: the recombination of natural and crafted items is opened up for storytelling, role-playing, creative affects, and atmospheric dwelling (fig. 62). Moreover, the player engages not in the designing of buildings and architectural structures but in a kind of *aesthetic landscape composition* combining the placement and coloring of items with terraforming, the shaping of the natural features of the island (such as the level of the ground or shape of rivers). Whereas *CE* strictly separates nature and culture in that the former is merely the location and material for base building, the *ACNH* player engages in a spatial arrangement in which nature is yet another aesthetic object. In its vast economy of things, farming often unlocks different kinds of items that matter for their expressive quality in larger arrangements rather than the accumulation of high amounts. Nevertheless, the crafting system necessitates various resources such as fruit, bamboo,



Fig. 62. Aesthetic landscape composition as a shared aspect of play with *ACNH*.

wood, minerals (stone, iron, clay, gold), flowers, shells, weeds, and stars. Contrary to *CE*, however, temporarily relevant recipes further require the seasonal collection, harvesting, and unlocking of special resources (such as acorns in autumn or snowflakes in winter), which necessitates and varies farming at the same time.

2. The *trading mechanic* creates a major difference between the two sandboxes by directly linking farming's extractions in *ACNH* to mercantilism. Every single item found, crafted, or gifted can be sold for the currency of bells in Nook's Cranny, the local island shop. Once an item has been owned by the player, she can, furthermore, order copies of it through the Nook Shopping app at Resident Services in exchange for Nook Miles. Nook's Cranny offers a random daily selection of a few out of the almost 2000 pieces of furniture. In this way, farming via trading increases access to items according to a progression logic that is rhizomatic rather than hierarchical or arborescent, as in *CE*. In light of the main practice of landscape composition, any thing, be it a piece of clothing, furniture, or a natural resource, bears a *use value* determined by its individual relation to the player and her practices of expression. Through the omnipresent possibility of trade, however, each thing also attains an *exchange value* and is hence a formalized carrier of a universal and stabilized capital that can always be traded for anything else.[295] It is only through this thingified relation that every extraction in *ACNH* directly leads to progression. As a side effect, trading reconfigures what I have called the player's responsibilities of having by preventing her from cluttering the inventory and island with unwanted things: if anything has an exchange value thanks to a utopian hunger of the in-game market, there is no waste. Additionally, the practice of accessing the offers in Nook's Cranny itself can become a farming activity since the chance logic offers only a gradual distribution of the new items in daily portions. Finally, farming and trading are further necessitated by the heavy narrative use of a social relation rather than a *Sachzwang* – debt. For every extension and upgrade of the player's house and its storage capacity, Tom Nook charges an increasing amount of bells starting with 98.000 and ending with 1.200.000 bells. Due to this total worth of roughly 9 million bells in advance performance by Nook, the player is never entirely out of debt. However, there is also no time limit for the repayment – the player can simply pay Nook when she has the bells at hand. A constant background task, debt as a play partner enables farming and trading to always add up to a meaningful

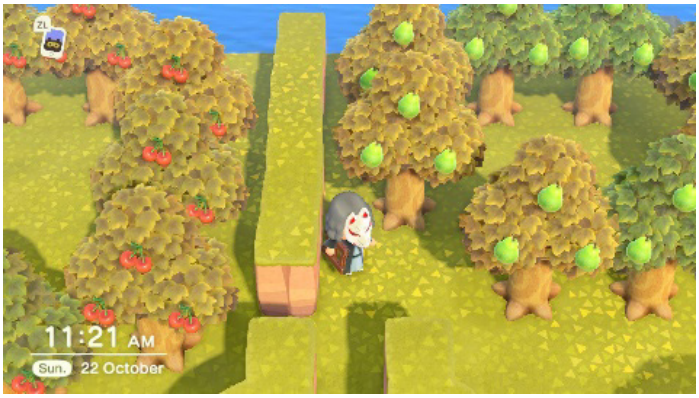


Fig. 6.10.: Farming fruit in *ACNH* (already planted in efficient arrangements) for their exchange rather than their use value.

[295] Strikingly, the game thus places the extraction that adds value to work back in nature. This location of the creation of value is a key interest of Marx's *Kapital,* in which he goes to great lengths to prove that capitalist extraction, the source of surplus value, robs the worker (rather than nature) of a part of the value of their work.

whole in a drawn-out series of progressive unlocking that yet remains optional altogether.

3. A further cornerstone of making farming meaningful and necessary in *ACNH* is the *collecting mechanic* tied to the local museum led by the owl NPC Blathers. Blathers asks the player to collect and donate bugs, fish, sea creatures, but also fossils and pieces of art/statues to document and display in the museum. To achieve this, the player must excessively engage in fishing, digging up fossils, buying art, and hunting for bugs in a way that merges both national and colonial archival practices.[296] To complete the museum, a total of 316 different in-game items have to be obtained. Nook Miles are awarded for up to 5000 extractions, if one regards the example of catching fish.[297] Once again, repetition is clearly fueled by the variability of items to be farmed for.
4. *Mechanics that thematize farming explicitly* beyond the literal harvesting of resources can be found in *ACNH* as well: balloons, accompanied by a sound indicating the whistling wind, frequently appear in the sky. Upon being noticed and located, the player can shoot them down with a slingshot and reap a random reward, such as crafting recipes or bells. The player utterly requires crafting recipes to be able to craft items and yet, they are not hierarchically organized (as the knowledge points in *CE*) but randomly distributed, which makes farming balloons always a worthwhile activity. Further examples of this establishment of small farms would be the many daily rewards the player can reap, such as looking for the golden spot on the ground that can be used to plant a money tree, finding the daily message bottle at the shore, which yields another recipe, or the sheer omnipresence of meta-rewards in the form of Nook Miles for activities that can be regarded as extractivist mechanics in themselves. This implementation of a far-reaching meta-reward system and the self-resetting incentives for repeating several small tasks on a daily basis are overarching strategies of *ACNH* to make farming both necessary and meaningful as a low-level, ritualistic form of progressing softly and very slowly without ultimately offering a meaningful ending on the horizon (hence, the widespread solution to *ACNH*'s problem of meaninglessness: starting the game over).

Beyond the shared set of procedural logics that make farming possible, *ACNH* and *CE*, it can now be summarized, feature diverging and distinct ecologies of game mechanics as architectures for their sandboxes. The exception to this are the building and crafting mechanics, which are equally linked to the accumulation of resources as raw materials in both titles. Still,

[296] In addition to the state being invisible behind Nook's corporation, the player can be said to take part in a kind of *nation-building* herself: besides shaping the landscape and infrastructure of the island, she also includes and excludes the villager-citizens, composes a national anthem, and chooses the island name and its flag. The museum with its vision of a local history strongly ties into this construction of "an imagined political community -and imagined as both inherently limited and sovereign." (Anderson, B. 6). At the same time, however, the island community imagined and the player's archival practice rely on settler-colonialism, its political and economic logics of appropriation, territorialization, and exoticization of an allegedly wild and uncivilized space (for a conceptual and historical overview over the colonial, imperialist, and white supremacist impulses behind archival practices, see Ghaddar and Caswell).

[297] To be exact, the player must collect 80 bugs, 80 fish, 40 sea creatures, 73 fossils, and obtain 43 pieces of art. Most of the time, frustratingly, she will receive mostly duplicates, as during the process of fishing, for instance, it is not transparent which fish is being caught until the extraction is completed. Crucially, many of the animals are only available in particular seasons.

the differences between the mechanics clearly outweigh this, and *CE*'s procedural and narrative focus on survival, combat, and base defense mechanics is not met by *ACNH*'s cozy and soft prompts for dwelling, atmospheric expression, excessive and omnipresent trading, and collecting (notwithstanding the shared colonial and extractivist elements).

Nevertheless, the two sandboxes meet eye to eye in the way they entangle, align, and configure mechanics and their afforded practices *instrumentally*, which can only become visible from a perspective that regards mechanics together. Concerning *ACNH*, Bogost's analysis has described this kind of instrumental design as follows: "One completed task just spawns another in its place. Players are motivated to do specific things for extrinsic rewards rather than doing whatever they like for the sake of intrinsic pleasure, and knowing it will be valued" ("Quiet Revolution"). Hence, instrumentality, which was shown to play a role in the micro-structure of farming itself, is repeated on a larger design level to give persistent meaning to the practice of play. A dominant procedural logic recurring through all the mechanics, it was shown in this regard, is *progression*. Whether organizing items and resources through linearity (telos), effectiveness, and hierarchy as in *CE*, or through chance, variability, and reproducibility as in *ACNH*, progression logics moderate the position farming occupies among the other mechanics. In either game, progression can be described as *ergodic*[298] in that it depends not just on moving forward but on a work-like and instrumental repetition of steps. Curiously, both titles lack an ending, which once more adds to the shared aim to enable continuous and unending gameplay by offering a set of meaningfully entangled things to do.[299] In the organized sandboxes thus emerging, both titles, through their explicit and implicit designs, allocate farming as well as extractivism a key role in their architectonics of play.

[298] Aarseth famously coined the term *ergodic literature* in his *Cybertext: Perspectives on Ergodic Literature* as early as 1997. In his work, "ergodic" aims at the way "nontrivial effort is required to allow the reader to traverse the text" (1). In my use of the term here, I tap into the Greek word *ergon* for *work*, which Aarseth combines with *hodos* for *path*. While the kind of work in question can be framed as play, its repetitive element also bears an instrumental relation that can be at odds with playful experimentation in which every part of the process remains a hypothesis.

[299] To be exact, *CE* does have an ending, though not a very fulfilling one: upon obtaining six keys from boss monsters and taking them to a particular location, the player-character leaves behind the bracelet given to her as an "exile," which had up to this point prevented her from leaving the map. Free to exit the Exiled Lands, the player leaves the map behind, and the character (with all its progress) is deleted after a short cut-scene.

5.3.2.4. Re/valuation: Negotiation and Rewards as Joint Accomplishments in Farming

Issues of value and valuation have resurfaced numerous times and at multiple levels at this point in the analysis. In Locke's extractivist imaginary of nature and space, the natural thing has an "intrinsic value" depending on its "usefulness to the life of man" (Sect. 37). Through labor, which appropriates the thing as property, however, the "far greater part of the value" (Sect. 40) is created. In close resonance with Locke's theory of property, the procedural resource and inventory logics that make farming possible in *ACNH* and *CE* have pointed to an element of valuation in the very moment of extraction: through an instrumental work, a resource or thing emerges from a farm as property of the player who, in turn, emerges as a legitimized owner and co-creator of the thing and its value. Here, value was an ephemeral and yet solidified relation of the player and the thing. In the larger ecologies of game mechanics, valuation was furthermore shown to play a role in how, for example, trading mechanics in *ACNH* and the building and combat-orientedness of *CE* render farming necessary and meaningful.

Whereas up to this point, the procedural side of the place of play has been the focus, this section aims to once more highlight that valuation is an ongoing processual accomplishment by the entire ensemble of play partners. It is subject to the processual fluidity of play that, at any point, may enter new series and cycles of re/valuation. Two cases of re/valuations with *ACNH* are addressed as examples in the following: the practice of exploiting the turnip market to make large profits and the practice of real-world trading using the website *Nookazon.com,* both of which negotiate but also extend the valuations preconfigured by the game.



Fig. 63. Daisy Mae, the turnip selling NPC in *ACNH*, on the purpose of her trade.

The turnip market in *ACNH* is a special part of the larger trading mechanic since turnips are the only commodity to independently change its value over time. The character Daisy Mae sells them at a price of about 90 to 110 bells every Sunday on the player's island (fig. 63). Turnips spoil exactly after one week but can be sold at the local store for a fluctuating price between fifteen and several hundred bells before they rot. A playful allusion to the stock market, the turnip market allows for speculation and both large gains and losses depending on when the player holds on to or sells her supply. For the individual player, the price on her island fluctuates twice every day (in the morning and the afternoon) according to procedurally generated dynamics

that the player base sorts into four categories.[300] The player can either systematically detect the patterns and the sequences of their successions or abuse the possibility of selling turnips on another player's island via multiplayer mode.

Beyond the design of the game, the player base has created *Discord* servers, *ACNH* forums, and various *Facebook* groups for the sake of connecting islands and players, offering promising price rates and ambitious investors: once a player has a good turnip price, she invites other players via a channel of her choice to visit her island, make a profit, and leave a small tip or gift.[301] This organized economic tourism uses the mechanics made available, but so-to-speak breaks them through a socially organized negotiation and reappropriation of the way the mechanic works.

Due to their special persistence logics, which will cause turnips to rot if left on the ground, players use tables to store more turnips than the inventory space can contain (fig. 64, top still). Hence, repeated visits back and forth between the buyer's and the host's islands become possible and necessary. If successfully repeated several times, both players receive large amounts of bells (fig. 64, bottom still). The visiting player benefits from selling her turnips on a foreign market at an optimal price, while the receiving player benefits from accumulating gifts from the many players coming in (which she can use to easily access various desired items via the trading mechanic).

[300] The patterns are described by players as 1) decreasing, 2) random, 3) small spike, and 4) large spike (see Frushtick). The large spike pattern is the most promising, whereas at least small gains can be made in any except for the decreasing pattern.
[301] Inviting other players in *ACNH* uses an individual identifier, the so-called Dodo code of an island, which others can use at the in-game airport to visit their game session. However, a special monetized subscription is required by Nintendo.



Fig. 64. Setting up a turnip farm in *ACNH* (top) for game-changing rewards (bottom still).

Strikingly, via the disproportionality of the rewards gained and the transferability of the value created, the practice of turnip trading calls into question the very meaning and practical relevance of other kinds of farming. If the player can get up to several dozen million in a single play session, why would she go on to repeatedly harvest and sell fruit? At least in the case of the author, farming (together with the many parts of the island dedicated to it) immediately lost the previously held affective power and meaning in play. Turnip trading, in this regard, fundamentally renegotiates the affective qualities of the thing as a resource and carrier of value; by redistributing the accessibility of any item together with the very scale of valuation itself, it strips the thing back to its expressive use-value while its other capitalist relation to the player, that of its promise of carrying the flexible and enduring exchange value, drowns in the quantitative rise of the general scale shift and its consequential qualitative negation of many of the progress logics. With the idea of progress suspended as a play partner, the body is no longer affected to farm: farming loses its necessity and meaning through a negotiation of the element of valuation, which appears as a joint accomplishment by player and game.

A second example of a practice to negotiate valuation and the accessibility of items with *ACNH* is trading with the help of the website *Nookazon.com* (see Luu "Nookazon"). This fan-made website, whose name blends Tom Nook's last name with the company *Amazon*, creates the very market only hinted at in *ACNH*'s neoliberal capitalist world by actually linking the supply and demand of any in-game item among players. Not unlike the system of *Ebay*, players can advertise requests, sought-after items, and offers, and engage in "listings" or "auctions" (see fig. 65 for a "listing" of the item Castle Tower). Once another player is interested, makes an offer, and a deal is made, the practice once more uses Dodo codes to allow the two trading players to meet in-game.

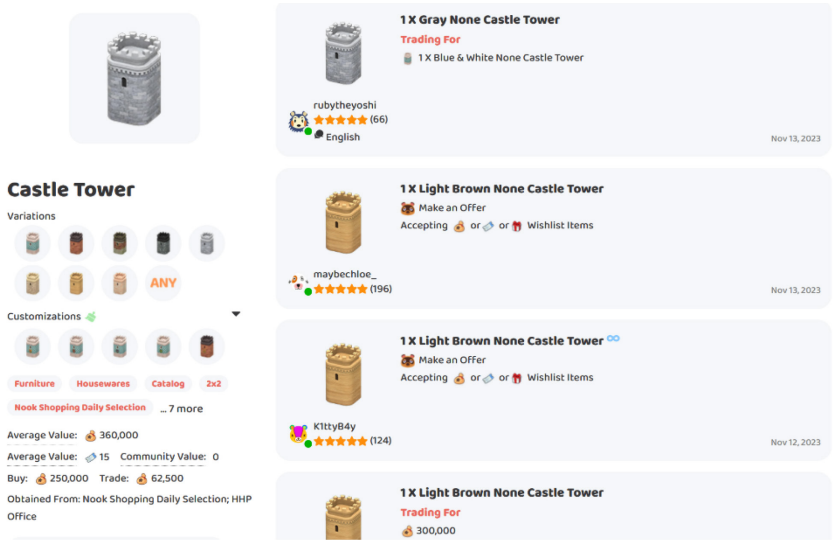


Fig. 65. Screenshot of the website *Nookazon.com* showing the listings for the Caste Tower item (Luu, "Castle Tower").

Though the currency of bells is stable for the *ACNH* solo player, it is bound to fluctuate where multiplayer practices such as the above-described turnip trading may create value according to appropriations of chance logics. Hence, *Nookazon.com* lists the "average value" price for any item available. Moreover, price proposals use Nook Mile Tickets (NMTs) as a second, stable currency alongside bells. The *Nookazon* "trading guidelines" bear the following comment on NMTs: "There is no set bell value on these, as value is dictated by the market" (Luu, "Trade"). The "market" in question, however, is a construction of the very practice of multiplayer trading rather than the in-game economy that originally introduces but never relates the two currencies.

Furthermore, the mechanic of trading in-game relates to most items except the villager-NPCs, who visit the player's island by chance. Trading via *Nookazon*, however, also relates to the NPCs, as the game villager mechanics enable players to prompt an NPC to move between islands. Hence, the trading mechanic, which in a single game does not apply to NPCs, is extended by the players to the realm of villager mechanics. Particularly sought-after villagers such as Raymond achieve extraordinarily high prices of up to several million bells. While the website thus further extends the already dominant trading mechanic beyond its initial in-game

limits, contrary practices also become possible: while anything is monetized in *ACNH*, *Nookazon* offers a section for "free" items, which players can use to support others without expecting to be reimbursed. In this way, *Nookazon* can be regarded as an extension of the quantitative logics of capitalist valuation, which, nevertheless, also offers a means for creating alternative, more qualitative kinds of social valuation for *ACNH* players.

Summing up the insights from the two examples, it can be argued that both turnip trading and trading via *Nookazon* show that value, and hence, what may count as a reward in an instance of farming, is not merely dictated by game mechanics and logics but subject to a negotiation by the player base and *ACNH*. By linking players and their game states, a social negotiation of the turnip mechanic changes its meaning from mere speculation to a joint practice of rewiring the economic dynamics of the game, potentially breaking it and making future farming unnecessary and meaningless. By connecting for trading via *Nookazon*, the players negotiate the boundaries and extent of the in-game market but only by hyper-performing and repeating the very neoliberal mobility of capital the game mechanics and logics narrativize and require them to embody. In this regard, many cycles of negotiations and re-appropriation can only begin from a successful appropriation of the player by the game and its logics. In both cases, game logics and mechanics contribute to the productive formalization of spatiality, but the place of play ongoingly renegotiates its relationality and, hence, valuations, as joint efforts of play partners.

Finally, it needs to be emphasized that both practices require the Nintendo online subscription (and, in the case of trading via Nookazon, redistribute capital through ads). While the game mechanics are surely renegotiated, sometimes to the point where the game can be experienced as broken, this is not detrimental to the developing studio, Nintendo, which takes part in the cycle of negotiations by monetizing access to these very practices. With the two cases observed, farming and its extractivisms have to be regarded as joint accomplishments of several parties, among which real economic relations remain among the most relevant ways of shaping games and play.

5.3.2.5. Extractivism and the Other: NPCs and Mechanics of Relating

So far, the close reading of game mechanics, logics, and how they are negotiated has left the crucial question of the Other untouched. *ACNH*, in particular, is often framed as a social

simulation game, *CE*'s unforgiving vision of a land of the exiled seemingly excludes any institutionalized sociality from gameplay. How does extractivism relate to the two imaginaries of the social? Which implied player is addressed by the implementations of sociality and which agency does she receive by the logics that relate her to the Other? Does the extractivist micro-politics of the resource logics really leave the social relation untouched? In the following, these questions will be tackled by focusing on how the NPCs in *ACNH* and *CE* are implemented as well as how the mechanics expect and enable the implied player to interact with them.[302]

In *ACNH*, the villagers are the NPCs to embody the community aspects of island life. They consist of 413 characters, each of whom takes the shape of an anthropomorphized and speaking Other whom the player can invite as a permanent resident (up to a maximum of eight NPCs). Some of their features are unique: their look, house style (outside and interior architecture), their birthdays, and a catchphrase are individually written for each of them (e.g., Bree, a mouse, calls the player "cheeseball" while Cyrano, an anteater with a large nose makes a sneezing noise, "ah-CHOO"). Beyond this, however, all villagers can be sorted into discrete categories, including a binary concept of sex/gender, a partially gendered animal type (e.g., bird, dog, squirrel, etc.), eight gendered personality types, as well as one of several hobbies.[303] On the evidence of these design features, the Other in *ACNH* appears as a node of several differential features that construct diverging identities. At the beginning of the present analysis, Bailes was quoted on neoliberal capitalism's sociocultural focus on "competition and individualism" (13). While *ACNH* undeniably counters and denies the first of the two concepts in its social imaginary, the latter is certainly put at the center of how villagers are made intelligible as Others. Personalities are understood as types and resemble brands of products – the very products they are being sold and traded as by players via *Nookazon*. The idea of an "individual as a consumer who can define his/her own life through hundreds of micro choices" (Bailes 14), for instance, is highlighted by the hobbies, which span the themes of fashion, fitness, music, education, play, and nature. The implied player, as the mechanics of interaction with the villagers position her, reveals the same kind of logic.

[302] Once again, a conscious choice of the analysis here is to focus on the single-player modes of the titles. For the greater part, gameplay for both multiplayer modes indeed feels quite different, but this does not counter the fact that the same mechanics of relating to the Other apply to either mode. Take the case of *ACNH*: multiplayer gameplay relies on the same kind of dwelling together, trading with each other, sharing emotes and rudimentary chat messages, or visiting, witnessing, and enjoying players' landscape compositions, as is already included in the mechanics of single-player gameplay. It certainly feels different, but on the level of mechanics, not much is added.

[303] My use of *sex/gender* here points to the difference between the U.S. and other-language versions of the game, which approach the binary visual representation of characters the player can choose from at the beginning of the game differently (to be precise, the U.S. version has switched the denominative term used to "style" in the final release version).

Besides pre-scripted events or mere dwelling, the mechanics of relating to the Other in *ACNH* can be differentiated into those few social activities that are not in every instance means of accessing, unlocking, and exchanging items, including 1) basic conversation (fig. 66), 2) the emote system, or 3) paying visits, and the many others that are, including 4) gifting, 5) returning lost items, 6) learning how to craft an item, 7) direct trading or 8) villager requests.[304] The mechanics of relating thus paint a clear picture of what Bailes calls "a kind of instrumentalism that converts all aspects of life into calculable values" (14). The Other is primarily mediated by *ACNH*'s economy of things and its progression logics both communicating "an individualized and commodified ideal of success and satisfaction" (14). Hence, sociality with *ACNH* is utterly farmable on a large scale. This becomes most obvious as the progression logic awards an "island togetherness" achievement, whose final task rewards the player with 3.000 Nook Miles once she has talked daily to all of her villagers for nothing less than 50 days (without missing a day in between).



Fig. 66. Pekoe and Cyrano engaging the player in conversation.

In *CE*, the Other appears less as an individual with a social identity rather than as a representative of a fictional and racialized cultural group placed in an antagonistic struggle for survival and dominance. Any NPC encountered in one of the fixed settlement locations on the map is a node of several categories and features: 1) a binary concept of sex,[305] 2) a joined

[304] The emote system, or so-called *reactions*, can be used to have the avatar express a stereotypical emotion or affect, from "joy," "smirking," or "sadness" to "dozing" or "sneezing." The *visiting mechanic* was only introduced in the 2.0 update and enabled villagers to periodically invite the player to visit their house or randomly visit the player's house while she is inside. The *gifting mechanic* requires the player to anticipate a pre-established match of villager and item (e.g., sporty villagers of the jock type like the so-called active style of clothes). *Lost items* can be found on the map and require the player to successively talk to every villager to find the correct owner. Concerning the *crafting mechanic*, villagers can be observed while crafting something themselves, which is one way of accessing new crafting recipes. Sometimes, the villagers express the intention to *trade* a specific item in the player's inventory. And finally, *villager requests* are recurring tasks in which the player is asked to catch a specific fish or bug.

[305] I use *sex* here, rather than *gender,* since the game clearly relies on a binary and hyperreal representation of what is constructed as natural and biological features. The sexual bimorphism of character models in *CE*, is furthermore, linked to hypermasculinity and racism, as game design scholar Chris Barney argues in his blog entry on the implementation of "penis physics" in the game (see Barney).

construct of culture, race, and religion, all three, quite problematically, equated,[306] 3) a hierarchical and antagonistic classification of body capabilities,[307] 4) an a-priori defined character type relating exclusively to economic (e.g., as tanners, carpenters, smelters, smiths) or combat-related functionality (melee or ranged combatants), and 5) the randomized items in the inventory, making the Other's loot - via their death - utterly farmable. Taken together, these elements show that the Other in *CE* is constructed as a node of resource and combat logics, literally, their very embodiment. The Other is hence not an individuum as in *ACNH* but always already divided by a racist imaginary of history and progress on the one and the capitalist logics of effectiveness (the specific field of economic operation as the fit between body and task) and efficiency (the telic, i.e., capital-driven project of minimizing costs and maximizing benefits by hierarchizing the body according to a system of capabilities) on the other. In this way, the Other in *CE* embodies the *form of subjection* specific to how Achille Mbembe describes European coloniality as "a form of exercising power whose relationship to the soil, the populations and the associated territory combines the three logics of race, bureaucracy and commerce *(commercium*) in a way hitherto unknown in human history" ("eine Form der Machtausübung, deren Verhältnis zum Boden, zu den Bevölkerungen und dem zugehörigen Territorium auf eine in der Geschichte der Menschheit bislang unbekannte Weise die drei Logiken der Rasse, der Bürokratie und des Handels [*commercium*] miteinander verbindet"; my trans.; 114-5).

The game mechanics for relating to the Other are threefold: combat itself, acquisition of the Other's knowledge, and looting and thrall-taking, relating to antagonistic, extractivist, and (settler) colonialist practices and logics. Common to all three elements are colonial degradation and objectification of the human and the social, which can be framed as *barbarism* according to the thought of Aimé Césaire in the following.

Combat mechanics invariably position the Other as an enemy; fighting and conflict are framed as the only meaningful ways of cultural encounter. Combat is fundamentally unnegotiable since any NPC will attack the player on sight, requiring her to either fight back or

[306] The essentialization of culture through a visual classification of bodies, the fictional construction of savage and mysterious religions and cults, which resemble or directly reference the works of H.P. Lovecraft (with whom the author of the fictional source material corresponded), and the identification of geographical locations as hereditary origins of cultures is, for the greater part, an adaptation from the works by Robert E. Howard, though this does not remedy its racist, homophobic, and reductionist aspects.

[307] All possible thralls are placed in a hierarchy of bodily capabilities and attributes, which spans Tier 1 to 3 and so-called "named thralls" (the highest Tier). The races of the game, too, are hierarchically related testifying to the underlying rampant racism through which the game imagines a Lockean natural state.

escape.[308] On the one side, the Other thus serves as a threat, tying into the horror-survival theme of the game - on the other, as a challenge and reason to improve and progress through the telic technology and skill systems. Two features of NPCs enable this very progress and highlight the link between antagonistic spatiality and a colonial concept of knowledge. As defeating an enemy in combat yields experience points, farming enemies leads to level-ups that enable the player to spend "knowledge points" to unlock weapons, tools, and buildings, which in turn feed the colonial desire for domination through more efficient violence.

Additionally, however, the Other is also a direct source of knowledge, as many settlements include stone tablets, diary entries, books, and scrolls, which the player can immediately appropriate. By clicking on them, she can learn how to craft and repair the native culture's set of armor or weapons, and gets to know local dishes or religious practices such as prayers. This, of course, necessitates wiping out entire villages as, again, NPCs attack the player on sight. As a source of experience points or knowledge to be taken by force, the Other hence needs to be killed and subjected to a settler colonial regime[309] that the implied player is offered and afforded as an architectonics of play. As enemies respawn and the game mechanics prevent the player from building in or too closely to NPC settlements, however, *CE* always prevents the ultimate extinction of the natives, together with the player's appropriation of the land. In this regard, it is a colonial spatiality that the game preconfigures, in which the Other occupies the double role as aggressive enemy and objectified resource.

On a first level, the very corpse of the Other can be used as a source of materials: blood, bone, and hide can be harvested just like the loot on the body. The act of turning the Other into an object is furthermore condensed in the practice of human cannibalism or anthropophagy, which the game enables and thematizes.[310] In the hostile environments of *CE*, the Other is both

[308] There are very few characters and regions on the map that form rare exceptions to the antagonistic relationality. These few NPCs are either secluded priests who teach the player their bits of knowledge willingly or merchants who trade a single rare item in exchange for gold. There are barely any features like classical quests that could be narratable as meaningful social interaction.

[309] In the context of digital games, Euteneuer has framed settler colonialism as "a distinct form of colonization in that its focus is on eliminating the indigenous in order to gain access to their land, as opposed to the focus of traditional colonialism on the extraction of resources—both natural and human, in the form of slaves" (4-5). Working with the MMO strategy game *Clash of Clans* (2012), Euteneuer has taken a critical perspective on the "normalizing and naturalizing" (9) tendencies of game mechanics. My previous discussion of Locke's legitimization of colonial practices may, in this context, be read as an extension of the link between colonial and neoliberal extractivisms and their legitimizing rhetoric. Euteneuer's work goes in the same direction in claiming that the justification of settler-colonial extractivism, as present in *Clash of Clans*, is "rooted in the idea that the land and its resources belong to those who seek to improve it" (9).

[310] The extractivist logic extends to the self as much as the Other, as both exo- and autocannibalism are possible in the moment the player respawns after death. Here, the player's own corpse, too, can be harvested for resources. As a theme, cannibalism is linked to racist practices of Othering, in that the dark-skinned race of Dafari includes a cannibal tribe, a unique thrall of which is named "Cannibal Brute."

a potential hunter and prey. Later in the game, it becomes possible to extend the objectification to the living body as well, escalating the dehumanization further. The thrall mechanic introduces the theme of systematic abduction, torture (referred to as "breaking"), and assimilation of the Other into the player's machines of production (i.e., the crafting stations) for economic extraction (fig. 67).



Fig. 67. The thrall mechanic in *CE*: the Other is abducted (left) and "broken" (right) in the Wheel of Pain.

While any NPC (as well as wild animal) in *CE* can be turned into a thrall, this literal slavery mechanic is, furthermore, not separable from the racist topography of the map. As the skill "thrall-taking" only becomes available at level ten and the so-called "lesser wheel of pain" requires 50 pieces of iron, among other things, the player must move North into the savannah and rocky area. Here, it is necessarily the Black body that is first to be beaten unconscious, abducted, tortured, and assimilated entirely into the enslaved workforces conjuring both lingering and more recent traumatic images of anti-Black violence and racism.

In these three mechanics, combat, the looting of the body, and thrall-taking, which all conjure imperial and colonial histories as gruesome realities, *CE* neither offers any kind of explicit moral compass to the player nor creates a truly critical distance between its narrative and its problematic content. In this way, it vividly shows (but, again, at the same time refraining from creating critical distance) how, as Aimé Césaire's *Discourse on Colonialism* has argued vividly, "between *colonization* and *civilization* there is an infinite distance" (11).

Countering the colonial rhetoric of a violently hypocritical "pseudo-humanism" (15), Césaire writes that "no one colonizes innocently, that no one colonizes with impunity either; that a nation which colonizes, that a civilization which justifies colonization and therefore force- is already a sick civilization, a civilization which is morally diseased, which irresistibly, progressing from one consequence to another, one denial to another, calls for its Hitler, I mean its punishment" (17-18). Turning the rhetoric of Europe's "civilizing mission" on its head,

Césaire draws a direct line from Europe's colonization of the world to the continent's own descent into fascism in the 20th century: Nazism as the "crowning barbarism" and punishment for all the "daily barbarisms" (14) Europe has turned its head from.

Slavery and dehumanization as the destructive ugly side of a Nietzschean will to power, but also as matters of play and daily barbarisms certainly find expression in *CE*, and, sometimes, in the contributions of players (fig. 68). At the same time, however, the game never offers a legitimizing narrative other than the player's potential benefit. Ultimately, the thrall mechanic remains optional for the player and may be negotiated and dismissed altogether. However, it is puzzling how easily the game affords the enslavement of the Other, and how easily stock game mechanics and logics (such as the inventory, resource logics, antagonistic combat) may lead to an expression of what Césaire calls "thingification," irreversibly affecting both the colonized and the colonizer:



Fig. 68. Screenshot from a lets-play video showing a player using the colossal Mitra avatar to stomp a swastika-shaped element in another clan's base (*Conan Exiles* - *God*).

> [C]olonization, I repeat, dehumanizes even the most civilized man; [. . .] colonial activity, colonial enterprise, colonial conquest, which is based on contempt for the native and justified by that contempt, inevitably tends to change him who undertakes it; [. . .] the colonizer, who in order to ease his conscience gets into the habit of seeing the other man as *an animal* accustoms himself to treating him like an animal, and tends objectively to transform *himself* into an animal. It is this result, this boomerang effect of colonization that I wanted to point out. [. . .] Between colonizer and colonized there is room only for forced labor, intimidation, pressure, the police, taxation, theft, rape, compulsory crops, contempt, mistrust, arrogance, self-complacency, swinishness, brainless elites, degraded masses. No human contact, but relations of domination and submission which turn the colonizing man into a classroom monitor, an army sergeant, a prison guard, a slave driver, and the indigenous man into an instrument of production. My turn to state an equation: colonization = 'thingification.' (19-21)

As a game organized by what Césaire labels "antagonistic economics" (10-11), *CE* plunges the Other but also the player herself, who is positioned as an enslaved slaver, into a colonial state of "thingification." The Wheel of Pain shown above is maybe the epitome of said thingification, a device for thrall-taking, i.e., for the enslavement of the entire human being, an idea the game owes to the mind of an American writer who committed suicide roughly 20 years before Césaire's angry poetics screamed at this "tremendous factory" for "the production of lackeys," the "prodigious mechanization, the mechanization of man; the gigantic rape of everything intimate, undamaged, undefiled that, despoiled as we are, our human spirit has still managed to the machine, [. . .] the machine for crushing, for grinding, for degrading peoples" (60). With the unmediated extension of extractivism to the body, *CE* thus acts as a socially impoverished and disabling play partner since the already lifeless and hostile NPCs on the map literally cannot be interacted with in any other way than through "relations of domination and submission."

Summing up, both imaginaries of the social and the Other are deeply affected by the extractivist logics abounding in the sandboxes of the titles. In either case, extractivism does not leave the Other and the social ecology of relating untouched. With *ACNH*, sociality is primarily shaped by economic relations and instrumentally subjugated to a logic of progression, very much in spite of its direct narrative. While the Other is thus utterly farmable, the player may still engage in her preferred few different social mechanics or simply dwell or engage in role-playing her player-character. The Other, as well as the player herself, receives a privileged neoliberal and economic position in which she may express herself through an economy of things and its logic of being through having. With *CE*, the Other is and can only be addressed through a combination of antagonistic and extractivist logics and practices. From (settler) colonial appropriation of cultural knowledge, enslavement, and the bloody competition of combat, the Other can only be related to via domination or submission. A quote attributed to Robert E. Howard, used by the marketing team of the game says "Live. Love. Burn with life. Slay and survive" (Funcom). However, the title utterly fails to offer any ways of relating even slightly reminiscent of "love" and, hence, leaves the player in a socially impoverished state of barbarism and thingification that, nevertheless, can be a starting point for negotiating and finding new ways of relating to the topics and practices of slavery and colonial violence in and beyond play.

5.3.3. Farming as a Lived Phenomenon: Three Dynamics and Their Intensities

In the wake of a final shift in perspective, the phenomenon of the lived body will animate a final re-framing of farming to make the lived dynamics, feelings, and affects of this kind of practice visible as they are part of experiences of play. The present section works with six snippets, arranged as three pairs of (re-)narrated situations of playing with *ACNH* and *CE*. They will be presented one by one in the following, before a joint discussion further reflects upon them.



Fig. 69. Triggering (top left), spotting (top right), setting up (bottom left), and benefitting (bottom right still) from a star metal farm in *CE*.

> 1. *Star metal farming for end-game items with CE*: This is it. Finally! The falling meteorites disappear behind the trees, leaving a white trail across the sky. I have spent my entire play session running in large circles across the snowy valley in the Northern region of the map in search of the star metal needed for the Silent Legion armor set. Two thralls with me, carrying explosives and tools in their inventories, I have been trying to set up the farm, but the drop has not been triggered for hours – until now. Now I keep the character still and try to determine the location of the drop with my face close to the screen (for the following sequence see fig. 69). How many meteor trails? Two or three? I lean back, simultaneously hit the W- and shift keys, and my character sprints further North, along the stony mountainsides. Yes! There's the first one, at the foot of a large stone plateau. In spite of my excitement, I remember the steps. I first use the construction hammer to build a stone foundation, then set up the explosive jar. I hit it with my weapon, move back, and the meteor explodes in a ball of fire. My middle finger automatically hits the hotkey 2, and my character equips the hardened steel pick. I move in, aim, and hit the node of star metal ore. The satisfying sound of steel on stone. Finally!

As the moment is special, I take my time aiming and start the next series of extraction exactly on time until the node disappears. Where was the next one?

2. *Farming rocks for crafting an item with ACNH:* The recipe for the stone table requires eight pieces of stone – this should be done quickly. I keep the B-key pressed, and my character darts across the grass, passes the bridge, and approaches the closest rock in this part of my island. As always, the farm is already set up: a strategically placed bench leaves exactly one square empty between the rock and itself. I let go of the B-key and move the left stick carefully with my thumb until the character faces the rock. Attention now, this part is vital! I correct my positioning/posture just slightly. The janky controls always leave a certain risk of failure, but this adds to the challenge. I start the usual series of steps: Pressing A, I hit the rock with the shovel, the character goes into its stereotypical motion backward, hits the bench, and bounces back into the same position: a piece of stone slips into one of the empty slots while I wait with widened eyes to immediately start the next one lest one of the eight possible drops is lost, now that the timed window for extractions is open. It's an intensive series of motions, all aimed at the maximum of stone. First up is a stone, then number two, as I count along. Then a piece of clay followed by another stone, that is three. A piece of iron. Stone number four and five, and, finally, another piece of iron. That is five pieces total, - three more to go. I pick up the rewards of my labor and head off to the next stone.

3. *Harvesting a new-found source of ironstone while exploring with CE*: For the first time, I am pushing North, following the western river upstream. Outrunning several crocodiles, I leave the entrance to the Unnamed City behind on my left and move landward, up into a vast canyon. To my right, I see a grey shimmer in the corner of my eye, my hand redirects the character, and I behold the largest amount of ironstone I have seen at this point in the game: several overlapping nodes of iron, glittering silver, shot through with a few brown rocks, and behind them, several further patches of multiple nodes of ironstone. An expression of astonishment escapes me, and I immediately pull out my simple stone pick to satisfy my greed. I frantically mash the left mouse button and adjust the aim with the mouse according to the sonic/visual rhythm of four extractions per node: one, two, three, four – quickly re-aim, prioritize hitting two nodes at the same time, keep mashing, one, two, three, four. Driven on by the satisfying sound of stone hitting iron, I quickly end up over-encumbered, and my character walks, no - crawls, between nodes with an excruciating slowness. There is so much iron left, however! I cannot stop now and let it go to waste…

4. *Shooting down a balloon with ACNH*: Uninspired and bored, I am sorting through my cluttered inventory as a high-pitched sound of whistling wind catches my body and immediately draws me back to the space of my island. I realize I just moved my upper body into an alert position and feel my heart beating. I listen closely: there it is



Fig. 70. Shooting down a balloon in *ACNH*.

again! A promising whistling in the distance – a balloon must have spawned! A new chance to get a new recipe? Balloons always move right to left, but where exactly is it? I give the right stick on the console two quick upward pushes, and the perspective switches to the position closest to the ground: the sky becomes visible. An edge of the balloon appears close to the upper region of the island. A window of time opens up, the hunt begins! I change the perspective back, run North, use my vaulting pole to cross a river, access the quick menu to equip the slingshot and tweak the perspective again. The balloon is slightly to my left now. I reposition my character and repeatedly hit the A-button. The camera zooms out to trace the shot: it misses (fig. 70)! The second hits the target with a loud "pop"! The balloon drops the object of my desire to the ground next to my avatar: a present! What will be inside? I eagerly pick it up and open my inventory in anticipation.

5. *Farming any-resource-whatever at the end of a CE play session*: At the end of a long play session, I find my character at my base again, the fire in the furnaces is burning with a soothing sound; iron, shaped wood, and leather are being produced on their own. It has been a satisfying session: a lot of progress! My friend has already gone to bed, I am not quite ready to call it a day. Yet, my body is tired, I can feel my back and fingers hurt slightly. My mind is full, the fun is over, the day is done. Yet, I move my character down the stairs, back into the oasis region, past it towards the sandstone mounds. I automatically go where I have been so often, and do not diverge from the already-trodden paths. I find rocks and click away. Iron, farm it. I pass some trees, equip the hatchet, and get wood and branches. Switch back from hatchet to pick: the next tree gives me bark and resin. Over-encumbered. I do not care. In fact, I appreciate the slowness, it brings me back to where I am, helps me end the session and empty my mind. A crocodile crosses my path. Disinterested button mashing: its health meter depletes rapidly. I look at my phone to check the time. The crocodile dies, and I farm hide, wild flesh, and fangs. Aloe leaves, plant fiber, seeds. More wood from trees. I turn back, time to bring it all home. Maybe one last detour to quickly get more coal?

6) *Casually plucking weeds with ACNH:* I am slowly walking along the high plateau in the very back of my island; the scenery is dipped in the purple light of an autumn evening as dawn draws nearer. A soft tune guides my steps, now gifting me a few sleepy notes, now fading away for a moment; a dreamy allusion to the main theme of the game. I pause to take a look at the horizon, where sea and sky meet, and notice a glistening on the water, far away. Then, my reflection in the handheld console screen. Yawning, I turn my character around, find nothing to do, and begin plucking weeds. My character bows towards a tuft of grass and takes it to the inventory with a smooth "woink" sound. I move, press Y, another "woink." I move on slowly, without haste, remove more weeds. They grow everywhere on this part of the island. Flat gray lichens, tall green stalks, tiny yellow blossoms, and some dense tufts of green grass. I take more of them, pulling softly, clearing the island, one patch at a time. There is no sense of control. Only its faint shadow. Not much of a reward, not much of anything, but I keep going. I do not need the weeds. I do not mind them either. They are nothing, an odd curiosity among larger and more important things. I just press Y and fall into the plucking. Is it satisfying? I do

not know for sure. I try to observe myself doing it, feel myself. I think so, I think it is satisfying.

The six examples presented not only relate six unique moments of play from the point of view of the embodied player. They also give insight into the affective dynamics of body and game as entangled play partners that together form and frame situations and ludic action creatively. How can these six dynamics be distinguished from a perspective of lived play?

One possibility is opened up by the thinking of traditional play theories, which have relied on the philosophy and language of the subject, its supposed exceptional independence, and its detached mental power of creation. Examples one and two, it could be argued, feature a telic structure, three and four are para-telic, while five and six appear as non-telic. If action is framed solely with reference to the anticipating mind, its goal-directedness, and the subject as the center and source of a movement that is, hence, utterly instrumental, then the examples can be interpreted according to a logic of a continuous percentage of agreement with subjective action.

However, this would gloss over many of the subtleties of the examples and sediment the very affordances and the agency of the situation, the affective ways the play partners enable and disable each other to be and become together. A rethinking of playfulness, which the present work has introduced in Chapter 2, can be more in tune with the relational way of processual and procedural entangling, where the entire dynamic and its intensity are given a voice. From this perspective, the examples could be read as expressions of three dynamics offering the same elements but actualizing and relating them in differing ways, creating novel experiences of play. Examples one and two repeat and vary elements present also in three and four, and another variation appears again with five and six. Along these lines, the three pairs can be approached as examples of 1) *active*, 2) *affective*, and 3) *impulsive farming*.

In all three sets, the examples differ greatly with regard to the game. In all three, there is action, which is impossible without affect, and in all three, there is something impulsive to the dynamic. However, the examples of farming star metal and stone specifically for crafting highlight the role of *action*: an incurved universe, linear time, a body fully immersed in the doing, contracting the various steps of repetition together with particular ideas as play partners that govern and affect the action. The ideas determine the start, the amount needed, and the end of farming: the ensemble of play partners is beset and pushed to action by them; the intensity of the dynamic is a function of the relations between a specific goal and its procedurally

prescribed steps, which the body surrenders to and is animated by (according to this framing, the element of instrumentality of action does not have to lead back to monolithic subjectivity).

The second set of examples highlights how new situations emerge out of preexisting ones; the interruption of an ongoing progressive verb by a simple verb form shows (on the level of grammar) how new affects build on and transform previous series and processes. The balloon mechanic of *ACNH* specifically attempts to preconfigure this emergence of the new, the promise of the unknown, the power of the more-than-possible, turning a place for play into a place of play. It is not a matter of the player's attention and its self-contained movement or direction but the grasping of it, the explosion of its multiplicity, its yanking onto a whole new level of intensity, an affective plateau. With affective farming, it is a novel, suddenly emerging situation or event that accomplishes the farm. It is the variation of repetition that makes it possible, the abrupt opening of a virtual spatiality, rich in potentials and intensities, a "pure locus of the possible" (Deleuze, *Cinema I* 109).

The two final examples again differ from either dynamics, as what drives the farming is somewhat detached from a specific, clear situation or a goal projected into the future, contained by a body. What drives the ensemble of play partners is the value of what is gained itself, but, again, transformed in another region of the pre-thetic body: an impulse, sometimes vampiric and wild, other times soft and kenotic. An excess of farming that the body gives in to at the end of a play session of *CE*, when the story or exceptional events, in short, the *new* can no longer grasp the body. Farming *any-resource-whatever* shows how the thing is reduced or abstracted to the maximum; its purest form of value appears when it disappears from the horizon of the player to emerge as its inner driving force.

Casually plucking weeds with *ACNH*, on the other hand, features an entirely different speed and rhythm: here, the impulse to repeat is kenotic, soft, and soothing; it exorcizes diffuse residual affects, submerges them in a ritualistic purging of trivialities. In the example, it is indeed an extractivist repetition targeting the only representation of nature that retains an independent and potentially chaotic agency (as weeds are the only plants in *ACNH* that spread everywhere without serving a particular need). Yet, it is not a regime of control that is worked for, but more fundamentally, *a relation to or care for the self*. However, unlike clipping toenails, combing one's hair, or daydreaming, impulsive farming rather reminds one of idiosyncrasies like ordering one's favorite tools without engaging in the hobby they are for. A care for *anything else*, an any-thing-whatever (the exact and individuated thing once again disappears in the practice as if it becomes invisible while one looks at it), that *is* a care for the self. For many

gamers, this kind of farming is experienced as relaxing, a cozy kind of busywork. Gadamer, along these lines, wrote of repetition in play: "The structure of play absorbs the player into itself, and thus *frees him from the burden of taking the initiative*, which constitutes the actual strain of existence" (105; my emphasis). The soothing or indulging intensity of impulsive farming emerges from play, as Gadamer points out, rather than from the procedurality of the game. Hence, farming, beyond the mere extractivist logics it is enabled by, once more can be shown to be a practice negotiating the mediality of games-as-play-partners. In the case of plucking weeds, it can even be described with Foucault as a practice of the *care of the self*.[311]

Summing up the present section, a final switch in perspective has added further facets of farming. As parts of embodied experiences and lived play, several moments of farming, though relying on the previously discussed set of extractivist and colonialist logics, may attain and negotiate a wide range of meanings. One way of thinking about the differences that make up examples of farming (rather than separating them), was opened up by thinking about the varying roles and meanings of action, affection, and impulse. These concepts help to pay attention to the joint accomplishments of play partners so as not to subject the spatial-relational ensemble of play to a restrictive notion of subjectivity. Rather than from the imagination of an interpretative subject, it was shown, feelings, intensities, and meaning in play emerge as joined accomplishments of play partners in unfolding relations.

5.4. Conclusion: Farming, Extractivisms, and Repetition

The present chapter has examined the role of extractivism in shaping and organizing current configurations of digital game play. Considering games as carriers of current cultures of extractivism, it has offered a novel approach to farming practices as a repetitive spatial phenomenon of play, particularly where outdated conceptualizations from the field of game studies have contributed to scholarly neglect of this widespread element of the current gaming world. Drawing from theoretical and emic-empirical impulses, the chapter has thought of farming as a spatial practice of play, highlighting its elements of repetition, rewards, and instrumentality.

[311] Foucault develops his thinking on the care of the self mainly in volumes two and three of his *History of Sexuality*. The link between play and the practices pointed out by Foucault will be allowed a reappearance and more in-depth discussion at the end of the upcoming final chapter.

ACNH and *CE* were selected as cases that differ greatly with regard to the worlds they imagine, yet feature similar architectonics of play as answers to the sandbox problem: 1) their tutorials use different strategies for the same goal, making the body repeat. The low skill level and the cueing of recursive action afford and train a habitual and practically skilled body as a communicative enabler of procedurality, allowing farming to be varied, chained, and narratively re-framed. Both titles were thus shown to explicitly conceptualize farming and assign it a key role among their imaginaries of play. 2) Several procedural logics (most importantly, resource logics) were further shown to make farming possible and meaningful. Crucially, these logics enact and sediment an extractivist micro-politics, linking the neo-liberal social contract to the concept of private property, which, as an attentive ear for the echoes of Locke's imaginary of nature and exclusive citizenship may claim, potentially extends the extraction of natural resources to the realm of the Other via a spatial legitimization of colonialism. 3) In the larger ecologies of game mechanics, which are each distinct for the cozy island life of *ACNH* and the contrasting barbaric conquest of *CE*, these logics further partake in a shared instrumental kind of game design that constantly necessitates farming and makes it meaningful among varying concepts of progress. 4) Farming mechanics and logics, as the crucial joint accomplishment of valuation has shown, are, however, not docilely embodied but negotiated in play and larger social formations of gamers, for which resistance to core valuations of a game often, paradoxically, starts from their very apotheosis as a basis of common conduct. 5) Mirroring the critical reading of Locke's socio-spatial philosophy, the strong emphasis on extractivist logics and the creation of meaning through having (with private property denoting the very amalgamation of being and having on the level of the player-character) does not leave the social relation as part of the titles' imaginaries of play untouched: the possibilities of relating to the Other are fundamentally (de)formed by capitalist materiality in *ACNH* whereas *CE* blatantly offers practices of colonial thingification of the Other and the self as ways of shaping play.

Finally, regarding farming more fully as a range of lived phenomena, i.e., relating to the lived everyday experience of a body at play, a vital plurality of meanings, arising from the playful negotiations of the games' architectonics, has become visible. Farming as greedy indulgence, kenotic closure, intra-passive and ritualistic care of the self, a way of feeling oneself intensely, of being affected and driven by an idea or phantasy, of experiencing surprise and luck, or receiving deserved rewards for arduous toiling away… Farming may be lived through in affective, active, and impulsive dynamics and their respective experiential intensities, all of which are preconfigured but never finally imposed by a game as play partner.

To further understand this rich range of results, it might be best to start with the simplest and most trivial aspect that may, nevertheless, be the most surprising: farming is a practice that hinges on and yet in many moments accomplishes making the repetition of already recursive elements *meaningful*. To simply disregard farming as a mindless triviality or a failure to enjoy or design games misses the complexity of the phenomenon. In this regard, farming relies on and negotiates not a non-design but a *particular* solution to a game's conceptualization of play (the idea of a sandbox only being one of them). Viewed in this light, farming and its experiential variability do not oppose but complicate the role of the new as a real and imagined nomadic attractor for play. Particularly where the new is challenging, farming can negotiate its challenge, prolonging, disrupting, or gradually feeding into other activities in play. Where the new is shied away from because it asks for too much, the body may be content with doing something else that is just meaningful enough in the meantime.

To come back to the emic impulses from the gamers reflecting on their own farming practices, several responses seem noteworthy. These (unexpectedly and without being cued by the open question format) point to something *unsayable* that was deemed as a common, larger aspect of farming and grinding. One respondent wrote: "Farming and grinding are both subsets of a larger idea of repetitively performing the same thing over and over [. . .] and both have the explicit end goal of increasing a resource, but I don't know what I would call the superset of farming and grinding, or if there's even a term for it.." A second gamer insisted that "Grinding and Farming are overlapping each other" in the style of a "Venn diagram" pointing as well to a common phenomenon to them. Yet another respondent struggled to explicate this further, considering farming and grinding as "a subset of a category that does not have a common name in gaming culture."

The present chapter has opened up one possible way of naming and paying attention to this larger formation influencing games, gaming, and play through the angle of *extractivism*. Extractivism can be linked to games and play in at least four ways that can ultimately not be separated and reveal the overarching scale of extractivist practices in our cultures. The first two are primarily economical, thus exceeding the present discussion, and yet are too crucial not to be pointed out at this point. They relate to both game design and play as extractivist practices, i.e., the largely unsustainable global economic *production* and *distribution* of digital games as a mass commodity (see Abraham, "How Much" and "Games"; AfterClimate Solutions; Aslan; L.; Mayers et al.), as well as overtly extractivist design practices that strictly *monetize play* (for

instance, the practices of Early Access or DLCs that can be sited with *ACNH* and *CE*)[312] on the one hand and the problematic role of *playing* digital games (relating to end-user carbon emissions), which is by far more disastrous when compared to the industry in the context of global carbon emissions (see Abraham, "Playing"; Aslan; Mills et al.), on the other. Farming practices relate to these two economic matters in that goldfarming and RMT extend the extractivism of design practices (targeting natural resources and the designer as worker) to the realm of play practices in which monetized value is generated. Moreover, as argued by the gamers surveyed for the present chapter, farming practices are linked to explicit design strategies that direct the dispersion of affect and emotional attachment to lengthen the total play time of games, which is often directly monetized, through repetitive elements that require little effort on the part of the designer.

Besides the (double) purely economic dimension of extractivism, it is the phenomenon of farming that can give insight into the larger ties of extractivism to game design and play, both of which are essential and inseparable parts not just of our extractivist economies but our *extractivist cultures*. In this regard, extractivist, anthropocentric, colonialist, capitalist, and racist game design with its nexus of ideological notions of space, property, and nature, form an overarching structure spanning through various titles, genres, and platforms, as the present chapter could detail with *CE* and *ACNH*. These extractivist architectures and architectonics of play, however, only tie into larger imaginaries of play, performatively enacted by embodied and procedural play partners alike. In addition to explicit extractivist design, farming and grinding, in this regard, also need to be considered as praxeological self-conceptualizations of practices of play, as the present chapter has shown.

On these four layers, relating to the economic and cultural extractivism of games and play, scholarship needs to link extractivism to the realm of gaming. Farming practices are a prime site for the analysis of extractivism in that they highlight that games are no exception from the "governance by global capitalism" (xx), which Dyer-Witheford and de Peuter have named "Empire." However, farming practices also call into question their distinction of "games of Empire" and "games of multitude," as they may depend on but also break with the conceptualizations of play perpetuated by games' extractivist architectonics of play. *ACNH* and

[312] The Early Access model points to the practice of releasing a game that designers have not finished working on yet, giving the developer the opportunity to release further work as monetized downloadable content, DLC (see Scales). *CE* saw Early Access in 2017, left it in 2018, and has since received several monetized DLCs offering various new building sets, armors, weapons, etc., a trend that was continued via the 2022 Battle Pass feature. Regarding *ACNH*, the multiplayer mode requires a monthly subscription fee for non-local multiplayer play and is thus required for most player-to-player trading practices.

CE are themselves both expressions of and reactions to Empire; *ACNH* in its unsuccessful attempt to think outside of capitalist logics is an exemplary case of what Mark Fisher has called *capitalist realism*;[313] *CE*, on the other hand, repeats the mundane kind of violence perpetuated by extractivist framings of nature together with the explicit colonial violence usually repressed and shied away from in Western culture, which Césaire named and re-addressed at the middle of the previous century. Farming, however, as both games have shown, again negotiates a title's mechanics, which may or may not assign farming a key role in play. In this way, farming may highlight extractivism where it is not part of the explicit design (as in farming for a specific weapon through combat) or negotiate a game's core valuations where it is (as in breaking an in-game economy thus countering a game's model of progression). Hence, farming practices promise to reveal a plurality of extractivisms as part of our places for and of play and hence can give insight into the hegemonic and counter-hegemonic forms play takes and negotiates in our cultures.

As a final thought, farming is symptomatic of extractivist practices of play precisely because it *repeats* extractivism in play, and thus sites it. Repetition may mask, but it may also distance, mock, or reject what is repeated. In playful repetition, new intimacies and modes of being may emerge on the very basis of recursion or variation. Farming, particularly as a lived part of the everyday, as the postphenomenological section of this chapter has shown, exemplifies how play partners co-become excessively, i.e., enable each other to be differently even where, seemingly, the repetition of already repetitive elements is the very vehicle of this shift. The many different shades of experience testify to the impossibility of an exact repetition. Repetition in play, in this light, far from a mechanic repetition of the same (as the present account has claimed, not even on the procedural level), is driven by differences, in which every instance is unique and yet occupies a position in a series whose elements are accentuated and differentiated by shared material-semiotic forces, dynamics, and real-and-imagined attractors. In this sense, play expresses Deleuze's concept of a "complex difference," i.e., "a concept of repetition in which physical, mechanical or bare repetitions (repetition of the Same) would find their *raison d'etre* in the more profound structures of a hidden repetition in which a 'differential' is disguised and displaced" (*Difference* xx). It is in this regard that the phenomena of farming appear as the same but, though their moments are repetitively varied, point to the structural influences that shape their movements through their identity effect. For their potential of

[313] In *Capitalist Realism*, Fisher argues that it has become a widespread sentiment of 21st-century neoliberalism that capitalism is "not only [. . .] the only viable political and economic system, but it is now impossible to even imagine a coherent alternative to it" (2).

allowing the tracing and exploding of the dormant pastiche-like potentials of the farming and extracting body at play, its excessive desires, crises, and futures, farming practices must be regarded - and not merely discarded - as *problematic*.

6. Mindspacing and Play – Indie Games as Carriers of Practices of De/Marginalization in the Context of Mental Health Discourses

With two prominent elements of hegemonic play inspected, the present and final chapter explores in detail the potential of digital games to participate in counter-narratives, turning to discursive sites of demarginalization in the context of mental health discourses. Digital games and, in particular, AAA-titles have shown expressed tendencies to exploit and marginalize themes of mental illness. Indie games, however, have offered different, complex, and sometimes more nuanced forms of narration and play in this context. Hence, the purpose of this chapter is to examine the ways indie games act as carriers of practices of de/marginalization and thematize topics of mental health and mental illness.[314] A specific focus of the analysis will be on the question of how the titles relate the elements of mind and space in their preconfigurations of play. Five indie games, *Actual Sunlight* (2014), *Shrinking Pains* (2018), *Gris* (2018), *The Longest Walk* (2022), and *The Psychotic Bathtub* (2024) were selected as sites for the analysis.

Keywords: indie games, mental health, de/marginalization, mindspaces, care of the self

[314] Note that with the topics of mental health, mental illness, and their depiction in indie games, the present chapter deals with sensitive and potentially disturbing topics such as suicide, death, grief, self-harming behavior, fear and anxiety, physical and mental illness and disability, addiction, violence, and others.

6.1. Digital Games, Mental Health, and the Role of Indie Games

More than one in five adults in the U.S. suffered from mental illness in 2022 (SAMSHA 40).[315] Ongoing issues of social stigmatization and discrimination often keep those affected from seeking help and contribute to the maintenance of symptoms. Gaming currently continues to play an ambivalent role in mental health discourses.

On the one side, there is mounting evidence for the positive aspects and effects of gaming. Studies have shown that gaming may support mental health and overall well-being (Jones et al.; Johnson et al.); particularly as social experiences, digital games allow positive interactions in which gamers may express themselves in novel ways and create meaningful emotional relationships (Bowman et al; Cole and Griffiths; Halbrook et al.; Raith et al.).[316]

On the other side, however, the medium is also frequently linked to aspects of mental health in two negative ways. First, psychological research has taken an expressed deficit-oriented turn since gaming was singled out as a potential behavioral addiction in the last decade.[317] Hence, gaming and games were predominantly framed as a potential hazard to mental health in previous research (see Granic et al.), tying into older, preexisting (and gendered) stereotypes in detrimental ways (Houe; Schiano et al.; Lopez-Fernandez et al.; Morgenroth et al.; Paaßen et al.; Kowert et al.). Secondly, games on their part have participated

[315] According to the current annual report by the Substance Abuse and Mental Health Services Administration, 23.1% of U.S. adults suffered from any mental illness in 2022 (See SAMSHA 40). Multiracial adults in the U.S. showed an even higher prevalence at 35.2%. Before the 2020 COVID pandemic, the global number of people living with mental illness was stable (despite exponential population growth) at about 13% (WHO, *World Mental Health* 40). Note, however, that the prevalence rates in the U.S. and Europe are generally higher when compared to other regions in the world.

[316] In this context, the positive effects of gaming were shown to vary with genre: Hazel and colleagues' 2022 study reports that 88.4% of participants in their sample experienced emotional benefits from gaming. The genres most strongly correlated with psychological benefits were music games, role-playing games, and survival horror games. In contrast, titles described as multiplayer online battle arena games revealed lower scores for psychological and emotional well-being.

[317] *The Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) included *Internet Gaming Disorder* (IGD) as a psychiatric disorder candidate in 2013 to pave the way for a more standardized line of clinical research (see APA). With the endorsement of the 11th version of the *International Classification of Diseases and Related Health Problems* (ICD-11) by the World Health Organization in 2019, *Gaming Disorder* became a second conceptualization of the clinical phenomenon of problematic gaming. The *DSM-5* includes nine criteria (i.e., preoccupation; withdrawal; tolerance; unsuccessful attempt to control gaming behavior; loss of interest in previous hobbies; continued excessive use of internet games despite knowledge of psychosocial problems; deceiving others regarding the amount of gaming; playing games to escape a negative mood; risking or losing significant relationships or opportunities because of playing) while the ICD-11 lists three core criteria (impaired control over gaming; increasing priority given to gaming to the extent that gaming takes precedence over other life interests and daily activities; and continuation or escalation of gaming despite the occurrence of negative consequences). As neither the official conceptualizations nor scholars in the field agree on a single set of diagnostic criteria, the two clinical categories should be regarded more as a preliminary framework for research and treatment (for more in-depth criticism on the conceptualizations, see Aarseth et al.; Nielsen).

in the discursive positioning and social imagination of mental health and mental illness in a problematic way.

Mass media, particularly entertainment media, have frequently depicted themes of mental illness, and these depictions, for the most part, have been inaccurate and unfavorable (see Wahl). Movie stereotypes, for instance, have contributed greatly to the stigmatization of people with mental illness imag(in)ing them as homicidal maniacs, narcissistic parasites, or seductresses (Hyler et al.).

In-depth research regarding the depiction of mental illness in digital games is still in its infancy. Some efforts of previous research have relied on qualitative case studies of single games: One study by Sky Anderson and a second by Schlotte and Major have, for instance, pointed to the exceptional and rare example of *Hellblade: Senua's Sacrifice* (2017), which features a main character with mental problems in a successful attempt to give insight into experiences similar to psychosis. Other study designs have looked more broadly at a larger number of titles. Shapiro and Rotter's 2016 study examined the 50 highest-selling video games in each year from 2011 to 2013 finding that 42 out of 96 games depicted at least one character with mental illness, most of them classified under the homicidal maniac stereotype also heavily featured in film. A later (2019) study by Ferrari and colleagues found that 97% of the games depicting mental illness framed it in a negative or problematic way (i.e., associating it, again, with violence, fear, insanity etc.). Finally, a recent large-scale study by Buday and colleagues approached the 30 most popular titles of every year from 2002 to 2021 (relating the popularity to the sales in the United Kingdom). The 456-title corpus thus gathered was qualitatively assessed and revealed that one in ten popular games of the last 20 years has attempted to portray symptoms of mental illness. A majority of 75% of these engaged with the topic in a negative and stereotyping way. In the context of these expressed tendencies to address but also to exploit and marginalize themes of mental illness in AAA-titles, the question arises whether indie games differ from the large studio productions.

Garda and Grabarczyk regard today's category of indie games as a subset of a larger category of *independent games*, which are marked by financial, creative, and publishing independence. The more specific and yet also more prominent term *indie game*, according to the authors, relates to a combination of several features of a game and its creation: digital distribution, experimental nature, small budget and low price, its retro style, small size, small developing team, indie mindset (marked by an alleged independence from practices and

ideologies from the game industry and an idea of the designer as closer to the player), the indie scene, and the role of middleware (i.e., accessible game engines and design tools).

Indie games have only gradually been incorporated as a focus of game studies in the latter half of the 2000s (see Parker). As the above approximation reveals, they are "not simply an experiment in artistic creation but also one of social and economic experimentation in which its participants actively interrogate their internal cultural and economic motivations, their relations to the larger community of makers and users, the sociocultural function of their texts, and their attitude toward the technological affordances available to them" (Clarke and Wang 2). According to previous research, the indie scene is made up of a diverse set of actors who actively perform indie-ness and independence, for example, via Megabooth, which serves as a section at game conventions dedicated to the promotion and display of indie games (Parker et al.).

As "a cultural phenomenon that reflects ideological tensions of our time, frictions between hegemonic culture and counter-culture, progressivism and conservatism, capitalism and anti-capitalism" (Latorre 28), indie games can be questioned as sites of discursive struggle. In this regard, previous research has pointed to indie games' potential for demarginalization via their capacity to "alter [. . .] typical gaming formats in terms of mechanics, gameplay, visual style, and theme" (Clarke and Wang 9). Studies have shown, however, that indie games continue to misrepresent racial diversity (Passmore et al.), which is tied to the prevailing and ongoing economic precarity of indie design practices (Srauy, "Precarity"). In the context of gender politics, indie game production practices have, furthermore, expressed tensions between the reification of inequalities so present in the mainstream game production industry and novel feminist impulses for community building (Harvey and Fisher).

Regarding the topic of mental health, only one study has assessed the role of indie games so far: King and colleagues' 2021 study has examined the seven games *Florence*, the *Coming Out Simulator*, *Depression Quest*, *That Dragon Cancer*, *Keep in Mind: Remastered*, *Actual Sunlight*, and *Depression*. After giving a brief overview over the titles (in the form of a table), the authors conclude that "[i]ndie games provide a rich and diverse example of the use of narrative, mechanics, and aesthetics to tell emotional stories about mental illness, trauma, grief, LGTBQ+ experiences and neurodiversity" (149). Writing from a design perspective, the authors address the games via the question of a correct or better kind of representation of mental

health experiences. [318] Therefore, their contribution already adds relevance to the role of indie games in the context of mental health discourses, but also exemplifies the hegemonic discursivity of professional perspectives in this field (those of psychologists and psychiatrists) and the equation of the psychic with the psychological with which games are confronted.

In the following, the present chapter aims to further question the role of indie games as *carriers of practices of de/marginalization*[319] in the context of mental health and mental illness. For this, it regards cases of indie games that specifically address mental health topics and assign them a center stage position in their narratives and significations. Moving away from the hegemonic question of a correct representation, which also specialists and health care professionals should hesitate to formulate in a final instance, a less normative perspective seems preferable. In moving away from this question, the focus will shift towards the respective strategies of the titles. Specifically, the question arises of how the titles conceptualize play, where trauma and taboo topics are presented. As Chapter 2 has argued, play scholars have tended to neglect forms of play that transgress the tyranny of fun. How can the architectonics of play in question be understood, and how are they negotiated in lived play?

Finally, attuning the chapter to a spatial mode of analysis, the question is raised how the *psychic* kind of spatiality of indie games can be accounted for. As the titles selected all speak to themes of mental health and mental illness, and, thus, deal with the realm of the psyche, the present account will argue that they are bound to relate two fundamental phenomena, mind and space, for the sake of mere intelligibility. Hence, a third question in the upcoming analysis links the practices of de/marginalization to the question of what will be approached as practices of *mindspacing.* The concept of mindspacing, as the next section will work out in more detail, highlights a specific accomplishment of (particularly visual) media that relate the mental and the spatial in their larger claims for intelligibility at the intersection of Western metaphysics and the body/mind relation.

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[318] Question, for instance, the explicit and implicit valuations expressed by the following quote: "Many of these games contain serious content even though they have been created outside of a research context. The examples above are by no means perfect in their portrayals of mental illness; however, their stories can help to inform designers on the creation of characters who are experiencing mental illness that are realistic, informed, humanized, and relatable" (King et al. 149).

[319] By formulating the joined interests in marginalization and demarginalization in this way, the present account engages in a thematic but open framing of indie games, which may speak to both the chances and potential neglects of these games that previous research has shown (as was summarized above). Furthermore, the term is meant to highlight issues of positionality and the ongoing potential for new forms of marginalization that may result from demarginalization (and vice versa). The author wishes to wholeheartedly thank the participants and organizers of the international DeMarg 5 conference "Tracing Forms of De/Marginalization" that he was privileged to take part in in June 2023 at the TU Dresden. The conference has since profoundly shaped the thinking that breathes life into this chapter.

6.2 Mindspacing



Fig. 71. Two shots from *Fear and Loathing in Las Vegas* (1998).

In her essay "Mindspaces - The Mind as a Visual and Ludic Artifact,"Anh-Thu Nguyen has recently propagated the concept of *mindspaces* to explore the visual depiction of mental health phenomena in digital games and film. To start with an initial example, think of Terry Gilliam's *Fear and Loathing in Las Vegas* (1971): Hunter S. Thompson's drugged-out alter ego Raoul Duke, played by Johnny Depp, is sitting at a bar and watches the peanuts on the counter in front of him suddenly turn into worms. As we see a close-up of his puzzled face (fig. 71, top still), the camera zooms out and links his reaction to the bar that has transformed into a bizarre scene of obscenely partying reptiles (fig. 71, bottom still). The space is bathed in red and blue light, surreally spinning as the camera moves out and tilts to reveal more and more creatures waving back and forth in rhythmic ecstasy. Further examples easily come to mind: think of the folding horizons of Christopher Nolan's *Inception* (2010), in which dreams turn out to be a space one can enter like a public bank. Think of the mythical fantasy world of *Pan's Labyrinth* (2006), which depicts an inner sanctum and refuge of a mind affected by fascist violence and trauma. Whether engaging in drug-induced hallucination, the sceneries of dreams and memories, or worlds of the imagination, the three examples show landscapes as much as what Nguyen calls *mindspaces*. Drawing from three sources of literary studies and the humanities (Beil; Lindemann; Slusser and Rabkin), she conceptualizes a mindspace as "a visual experience [. . .] linked to mental and emotional trauma" (54). In her analysis of the game *Persona 5* (2016), she argues that in-game locations such as "Futaba's palace specifically [address] themes such as trauma and depression as a manifestation of [a character's] mental state" (59).

However, by paying attention only to the ways mindspaces express issues of mental health through space, Nguyen's contribution is at risk of presupposing both the *mental* (or the psyche) as an inner realm requiring externalization and *space* as an outer and objective realm (or containing medium) of expression. To challenge these later presuppositions as specific

accomplishments, the present section aims to change perspective to regard *mindspacing* as a wider epistemic practice of visual media. Mindspacing, it could be argued, points to the mutual intelligibilization and co-constitution of space and mind that underpins many visual imaginations of the inner worlds of characters (how the image deals with the question of Western metaphysics of the subject), and in conjunction with this, the potential privatization and internalization of mental health phenomena, as much as the depiction of shared social spaces (how the image deals with geographical imaginaries and the fragmentation of space). Beyond merely giving "internal states–feelings and memories–a shape in landscape form" (52), all visual media (not just those explicitly depicting mental health phenomena) can be questioned for how they engage in and accomplish mindspacing, the practice of entangling, co-positioning, and imag(in)ing mind and space by relating the two in particular ways, creating narratives of mind as much as of space. Mindspacing may highlight that, to be intelligible in our current discursive configurations, the mind has to be placed as much as space has to express and address the mental aspects of life lest it becomes disembodied, alien, or abstract.

One way of grounding the practice of mindspacing in a philosophy of space is offered by Lefebvre's "unitary theory" whose self-proclaimed aim was to

> discover or construct a theoretical unity between 'fields' which are apprehended separately, just as molecular, electromagnetic and gravitational forces are in physics. The fields we are concerned with are, first, the physical – nature, the Cosmos; secondly, the mental, including logical and formal abstractions; and, thirdly, the social. In other words, we are concerned with logico-epistemological space, the space of social practice, the space occupied by sensory phenomena, including products of the imagination such as projects and projections, symbols and utopias. (11-12)

As already discussed in Chapter 2, the Lefebvrian triad of space attempts to re-relate the perceived with the conceived. To Lefebvre, "space considered in isolation is an empty abstraction" (12). His critical project points to the wrongly naturalized "distance that separates" (14) the physical from the mental: "In actuality each of these two kinds of space involves, underpins and presupposes the other" (14). Lefebvre himself was highly skeptical with regard to an inner realm (see 18-19), which is why the terms *psyche* or *mind* do not feature in his *Production of Space*. This, however, is exactly why his philosophy is valuable for a perspective that wishes to examine and defamiliarize itself with the spatialization of mind as much as the mentalization of space.

For a perspective that neither presupposes a single dimension of Lefebvre's "entirety of space – mental, physical, social" (20) nor the mind as an individual, separated, inner spatial essence, mindspacing asks for the specific ways a visual text relates the mental and the spatial, highlighting the relations between the perceived and the conceived as much as the subjective and the objective (note that this opposition is used in an epistemological way rather than presupposed as an ontic relation here). As previous work on mindspaces/mindscapes (Beil; Slusser and Rabkin) has argued, the images evoked through words or shown on screen often tend to recreate a dichotomy of space and mind, inner and outer reality, subjectivity and objectivity.[320] Such dichotomies, however, have to be questioned as specific accomplishments of texts rather than accepted as the only possible message of visual media. The authors are certainly right to claim that the majority of texts individualize, solidify, and internalize the mental, but this is not necessarily the outcome of any instance of mindspacing. At the same time, the discursive link to subjectivity, which is highlighted but not questioned in the literature, points to the omnipresence of mindspacing as a necessary and ubiquitous strategy to create intelligibility in the context of Western metaphysics.

Furthermore, mindspaces as processual/procedural practices need to be linked to their carriers: cinema audiences, viewers of streaming services, the players of a game, etc. Mindspacing, along these lines, is a material as much as an embodied practice. Lindemann's earlier work on mindscapes as unconscious strategies of reception is noteworthy in this context.[321] The lived body as a reading, watching, or playing body needs to be regarded as a

[320] Slusser and Rabkin's original 1989 anthology on mindscapes in the context of science fiction links the concept of mindspace to what the authors call the "two realities question," which, according to them, "derives, in Western culture, from the constant need for a relation between mind and some being external to mind" (x). On a general level, Slusser and Rabkin take the imagined landscapes of science fiction to be expressions of the mind. For them, the question of mindscapes concerns the relation between "mental and nonmental worlds" (xi). Though they problematically go on to contend that "the need to link inner and outer reality, mind and matter, by means of a mindscape is probably [. . .] a general human one" (x), they, nevertheless, raise an important issue that addresses Western literature as a whole, rather than merely texts that specifically address themes of mental health. By even pointing to "issues that concern all fiction, art, and technology" (x), the problem of subjectivity is raised, albeit without explicating it as a problem of space, as a Lefebvrian critic might hold. Benjamin Beil's later work on mindscapes or *Erinnerungsräume* draws from an analysis of the films *Under Suspicion* and *Millennium Actress* (or *Sennen Joyû*). Like Nguyen, he aims at "walk-in memory spaces" ("begehbare Erinnerungsräume"; my trans.; 4) created from the "interweaving of memory world and filmic reality" ("Verschachtelung von Erinnerungswelt und Filmrealität"; my trans.; 5). Like Slusser and Rabkin, Beil regards mindscapes as a "cinematic form of the representation of subjectivity" ("filmische Darstellungsform von Subjektivität"; my trans.; 7) or, short, as "subjective structure" (13; here, Beil uses the English term).

[321] For Lindemann, mindscapes relate to the reception rather than the construction of textuality. He regards a mindscape as a "cognitive system," which "activates" a "particular selection/size of knowledge" and is, hence, defined by "the particular webs of connections that hold across knowledge items" (193). His work revolves around the text "The Babysitter" by Robert Coover, which constantly shifts the core elements of its perspective (such as focalization and temporal level). Lindemann questions how any reader can accomplish the navigation and comprehension of such a text actively and yet without developing conscious strategies. Hence, he likens mindscapes to "frames, scripts, scenarios," which appear as "robust, systematic, reliable" and "predictable" to the reader (194).

vital carrier of mindspacing, whose accomplishments depend on the unconscious level of shared embodied negotiation: returning to the example of Nolan's *Inception*, the very ending scene of the film, which is often interpreted differently by different audience members, serves as a strong example of the active role of the body for mindspacing and the resulting contingency of its meaning-making. At the same time, however, the audience is constantly tasked with co-constructing intelligibility together with the film from the first scene on. In this regard, mindspacing appears as an essential and ubiquitous element of how visual media are navigated, understood, written, and related; although its accomplishments are specific, it is a vital part of visual culture due to its seeming mundanity and epistemic banality, which constantly cover its effects and dissolve its dynamics in an intelligibility that is, in most cases, immediately shared and, hence, remains unquestioned.

Before the present perspective can be connected with the medium of digital games to question the way gaming entails mindspacing in the case of indie games as part of their counter/hegemonic potential in the following, mindspacing needs to be considered in and as part of the discursive construction of *mental health* phenomena. While a comprehensive discussion is beyond the scope of this section, it is noteworthy that the twin discourses of psychology/psychiatry seem to have expressed internal unresolved crises revolving around the intertwined ideas of mind/space.

As Foucault's *Madness and Civilization* has shown, the soul as an inner realm and as a site of moral accountability only came to be knowable with the institutional rise of the asylum and modern psychology as a positivist science.[322] The anti-psychiatry movement of the last century has attempted vehement critiques of the dominant and lingering problematic relations

[322] Foucault's *Madness and Civilization* studies the evolution of the idea and treatment of madness within the broader context of social, political, and cultural changes in the West, focusing on the transition from the medieval to the modern understanding in the Classical Age (roughly from the 1660s to the ending of the 19th century). According to Foucault, in and before the Middle Ages, a "dramatic debate" with madness was possible, in which the "secret powers of the world" (xii) could be confronted. The Classical Age, however, saw a "great confinement" that "tamed" (36) and "reduced" (38) madness to silence in a reductive "image of animality" (72). As the classical image of the madman did not consider him a sick man, his condition was regarded as "psychological effect of a moral fault" and, hence, a "domain which psychology and morality would soon occupy together" (158) was opened up. In this context, Foucault describes the gradual and slow genealogy of a "distinction between the physical and the moral" that became "a practical concept in the medicine of the mind only when the problematics of madness shift[ed] to an interrogation of the subject responsible. The purely moral space, which is then defined, gives the exact measurements of that psychological inwardness where modern man seeks both his depth and his truth" (182). It was not until Freudian psychoanalysis that the possibility of a "dialogue with unreason" (198) was restored after the Classical Age. Foucault's book unravels the strong ties of the institutions of psychology as a science and psychiatry as a practice to the conceptual construction of what was first called *madness* and came to be narrowed down, objectified, and made accountable (as well as linkable to personal guilt and social shame) as *mental illness*. Hence, Foucault holds that "[w]hat we call psychiatric practice is a certain moral tactic contemporary with the end of the eighteenth century, preserved in the rites of asylum life, and overlaid by the myths of positivism" (276).

of the concepts of mind and space, which tend to place functionality within the individual.[323] Today, in light of the recent publication of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) in 2013, much of the criticism remains unresolved as mental disorders are still defined as resulting from a "dysfunction *in* the individual" (20; my emphasis).[324] Amid the present discursive constellation of clinical discourse, mindspacing is of utmost importance because the mutual co-constitution of space/mind has appeared as the very bone of contention in the clinical discourse (even if only on its margins). Harking back to Szasz, one of the more prominent voices of the anti-psychiatry movement, Thomas and Braken argue that it is "[t]his confusion between mental worlds and physical worlds [which] lies at the heart of the problem of psychiatry" (13).[325] Thus, Welwood's 1977 assertion that "the notion of psychological space has been avoided and neglected by Western psychology for the most part" (113) still holds today.

Whereas research on mental health discourses in non-clinical contexts is extremely scarce, a few initial studies have begun to show that these topics are frequently addressed but remain fixed to clinical discourse, resistance against it, as well as the self-positioning of people in relation to said topics (Anderson and Orme; Harvey; Kresovich et al.; Makita et al.; Mittal and De Choudhury; Ohlsson; Pavlova and Berkers; Price). This ongoing and growing influence

[323] The so-called *anti-psychiatry* movement emerged in the 1960s and questioned both the legitimacy of psychiatric practice and its theoretical foundations, a project which, as has been claimed, extends well into the 21st century (see Whitley). Thomas Szasz's work ("Myth," *Myth*, "50 years") is known particularly for raising the argument that the concept of mental illness is an incoherent blend of medical and psychological ideas and should be regarded as a myth, i.e., be considered real only "in the same sense in which witches existed and were 'real'" ("Myth" 117), as Szasz polemically argues.

[324] Moncrieff has recently (2022) put it as follows: "The terminology of 'mental health,' 'mental illness' and 'mental disorder' is premised on the existence of a material entity or disease, located in the individual" (2). Critical voices from the fields of psychiatry and clinical psychology have thus, albeit very late in comparison to other disciplines and scientific fields, begun to foster sociolinguistic research on mental health and its discursive maps (see Zayts-Spence et al.).

[325] Szasz's argument is that two registers of meaning are confounded in the concept of mental illness, "namely the physicochemical and the psychosocial" (*Myth* 27). He contends that "disease or illness can affect only the body. Hence, there can be no such thing as mental illness. The term 'mental illness' is a metaphor" (ix). After giving an overview of Szasz's main points of critique, most of which Thomas and Braken share, they identify as an unquestioned prejudice, at the very heart of his critique at pains to formulate an account of difference, the Cartesian dualism of the "'inner' world of the mind and the 'outer' physical world with which it is in contact" (17), the distinction between res extensa and res cogitans. Note in this context that Foucault's Madness and Civilization also critiques Cartesian dualistic philosophy in current psychiatric practice, but he strongly disagrees with regard to Descartes's role in forming the institution of the asylum: "The heterogeneity of the physical and the moral in medical thought is not a result of Descartes's definition of substances; a century and a half of post-Cartesian medicine did not succeed in assimilating that separation on the level of problems and methods, nor in understanding the distinction of substances as an opposition of organic to psychological. Cartesian or anti-Cartesian, classical medicine never introduced Descartes's metaphysical dualism into anthropology. And when the separation did occur, it was not by a renewed loyalty to Meditations, but by a new privilege accorded to transgression. Only the use of punishment distinguished, in treating the mad, the medications of the body from those of the soul. A purely psychological medicine was made possible only when madness was alienated in guilt" (182-3).

of psychiatric practices on the general discourse on mental health topics is currently framed as the process of "psychiatrization" (Beeker et al. 3).[326] Despite psychiatrization's permeation of clinical modes of knowledge throughout societies, however, the explicit critical framing of the discourse of the mind as a problem of space, as it can be traced within institutional discourse, cannot be found in current research on the wider public discourses on mental health. Against this background, the present analysis aims to examine the role of indie games that specifically attempt to portray mental health and mental illness.

6.3. Indie Games as Carriers of Practices of De/Marginalization and Mindspacing

Five indie games were selected for the analysis: *Actual Sunlight* (2014), *Shrinking Pains* (2018), *Gris* (2018), *The Longest Walk* (2022), and *The Psychotic Bathtub* (2024).[327] All five titles selected can be described as indie games following Garda and Grabarczyk. Their set of contingent features, which were "determined by cultural, social, economic and technological circumstances of the video game culture of the era," became "highly correlated" (1) with the use of the label. Following these features, all titles are digitally distributed,[328] of experimental

[326] Beeker and colleagues describe psychiatrization as "a complex process of interaction between individuals, society, and psychiatry through which psychiatric institutions, knowledge, and practices affect an increasing number of people, shape more and more areas of life, and further psychiatry's importance in society as a whole" (3). At the same time, however, the recent discursive developments have been driven by actors and networks that are no longer exclusive to the institution of psychiatry itself, as the authors note: "it seems to be a main characteristic of psychiatrization in modern and postmodern societies that it is advanced to a significant degree by laypeople without professional ties to psychiatry or the healthcare system in general" (5).

[327] For the conceptualization of indie games, Garda and Grabarczyk's 2016 essay was vital. The authors relate the indie game to the broader category of independent games. The latter is thought of as a disjunction of three types of independence, defined as a relation between the game and a respective external factor: (A) financial independence (constituted by the developer-investor relation); (B) creative independence (developer-intended audience), and (C) publishing independence (developer-publisher). Garda and Grabarczyk regard none of these disjuncts taken in isolation as a necessary condition for game independence, while they understand the whole disjunction in this way. Drawing from this, the authors claim that "the term 'indie' functions as a label for a specific kind of independent games that emerged around the mid-2000s" (14). The authors hold that it was "at this point [that] indie games became so prominent and so distinct that they started to be easily identifiable via a set of contingent properties - what users have identified as a certain 'indie look' or 'indie feel' (14).
Regarding the pool of games, the search functions of commercial platforms like Valve's *Steam* (https://store.steampowered.com/) or *Itch* (https://itch.io/) were used. In addition, the website *safeinourworld.org* has been exceptionally helpful; it is organized by the charity *Safe In Our World*, founded in 2019. The self-proclaimed mission of it "is to foster positive mental health and wellbeing, and deliver support not only for players but also developers, publishers, retailers and all the other incredible folk who make up the video games industry" (Safe In Our World).

[328] All titles are digitally available via the platform *Steam,* while physical copies of *Gris*, (e.g., for the PS4) are available in addition. *The Psychotic Bathtub*, for which a release on Steam in 2024 is scheduled, is currently available from the website of the small team of creators (https://www.natsha.ch/psychotic-bathtub). While the version made available there is labeled as a "demo," it features multiple endings and is fully playable.

nature, feature a small budget, low price, and a small developing team,[329] are of small size,[330] and express a certain indie mindset.[331] Some of them further engage in a distinct retro style,[332] are tied to the indie scene in one way or another,[333] and use middleware.[334] Besides qualifying as indie games, the titles were selected since they specifically (but not necessarily explicitly – as will become apparent with the case of *Gris*) address topics of mental health and mental illness. Furthermore, games were preferred that gave a fuller account of the phenomena at hand,[335] were published more recently, and have not been examined closely by previous research.[336]

In the following, the titles are examined regarding the three overlapping questions set out in the introduction to this chapter. To recap briefly, the titles are questioned 1) as carriers of practices of de/marginalization and their specific strategies in the context of mental health/illness, 2) for their respective imaginaries of play implicit/explicit in their contributions as play partners, and 3) as carriers of practices of mindspacing and thus games that participate in the mutual co-constitution, placing, and expressing of space and the mind.[337]

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[329] *Shrinking Pains* (2018) and *The Longest Walk* (2022) are currently free and made by a single person as designer. *Actual Sunlight* (2014), made by a single person, and *Gris* (2018), created by a small developing team who is also clearly associated with AAA productions with other titles, are both more explicitly monetized. *The Psychotic Bathtub* (2023) was/is being created by a small team of six designers and its future price is yet unknown.

[330] This is true for all titles except *Gris*, which, despite being a smaller and shorter game than most AAA titles, is still roughly 4 GB.

[331] An indie mindset can be related to all of them including *Gris* (2018), which has gained the most public attention since its release. As will become apparent from the analysis, many of its game mechanics specifically strive for difference instead of repetition.

[332] This is particularly the case for *Actual Sunlight* (2014), *Shrinking Pains (*2018), and *The Psychotic Bathtub* (2023).

[333] *Actual Sunlight*'s creator Will O'Neill, for instance, is related to the Toronto indie scene, while *Shrinking Pains* was created for the 2018 *Global Game Jam,* a decentralized convention aiming at creativity and innovation.

[334] *Actual Sunlight* uses the *RPG Maker* (see Gotcha Gotcha Games), *Shrinking Pains* was created with the *Unity* engine (see Unity Technologies).

[335] Many games use labels and concepts from the realm of mental health, but fail to contribute much to the discussion. A game like *OTXO* (2023), for instance, whose setting certainly engages in mindspacing, does not strive to be anything more than an action title.

[336] The obvious exception regarding the last criterion is *Actual Sunlight*, which is older than the other titles and has been discussed briefly by Mittal and De Choudhury, and King and colleagues, as well as mentioned by Hoffman and Buday and colleagues. However, in light of its relevance for the indie scene (the creator of *The Longest Walk*, for instance, refers to the title as a source of inspiration), and regarding its strategies of mindspacing, which have not been discussed, there is still a lack of research regarding the game. Its predecessor, *Depression Quest* (2013), for instance, has been discussed more extensively, albeit much of the attention it has received was tied to the unfortunate context of the Gamergate events. Overall, a rather large potential corpus for the present analysis was revealed; the entire list of titles is reported in the conclusion of this chapter.

[337] To emphasize again the scope and limits of the analysis, in the following, any reference to terms that are used as diagnostic labels and categories (such as depression, anorexia, psychosis, etc.) is not to be understood as a statement about clinical phenomena and actual people suffering from and living with experiences that a clinician might group under these terms and for whose professional context they mean different things. Instead, the present account is invested in how the cases selected make these phenomena intelligible as parts of broader socio-cultural discourses in which clinical terms surface everywhere today. To be blunt, all descriptions and interpretations of this analysis relate to games and the experiential qualities of interacting with them, never to individual people or

6.3.1. *Actual Sunlight* (2014)

Actual Sunlight is a short narrative-focused game in which you play as 30-something protagonist Devon Winter who struggles with depression, suicidal thoughts, his habits of overeating and excessive gaming, his job and the estrangement through neoliberal ideas of work, his loneliness, the lack of love in his life, and what he perceives as his inertness and inability to change. The game's take on the depiction of depression and suicide is to place and situate these topics in the midst of Evan's life, where they become tangible and relevant for the player through his focalization.

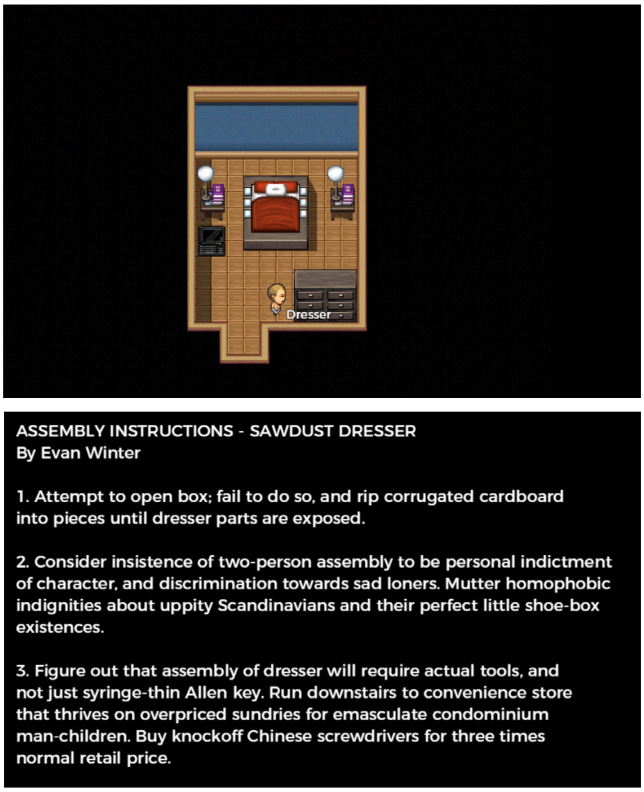


Fig. 72. *Actual Sunlight*'s (2014) traversable game world (top) and an example of a hyperlinked text (bottom still).

The main strategy for demarginalizing the experience of depression employed by the game is to position the player not exactly in the role of Evan but in his perceptual-affective net of relations to the world. The game design operationalizes this through a specific hyperlinked spatiality in which the player can direct the main character in a traversable world (via the arrow keys) and interact with objects and people (by pressing a single additional button) (fig. 72, top still). Via moving Evan, the player is enabled to interact with the objects of his world, which trigger small narrative events in text form. Interacting with the drawer in Evan's apartment, for example, reveals a brief snippet of personal failure in the form of sarcastic assembly instructions, which run counter to both the genre of their form and the narratives of efficiency and goal-directedness embodied by so many other game protagonists (fig. 72, bottom still). Evan's strong role as focalizer also relates to sound effects (such as imagined canned laughter) and color, as the visual outlook of the game world is immersed in red signaling his anger when he breaks down later in the game.

a generalization of typical experiences of a group of people. Finally, having been trained as a psychologist myself, I do not advocate any of the games discussed here for broadly psychological contexts such as (primary, secondary or tertiary) prevention, psychoeducation, or therapy.

Two spatialities are thus interwoven: one of visual extension into the world revealing Evan's flat, his way to work, his desk job, and so on, and a second textual one, revealing pieces of memories, fantasies, dreams, and thoughts about the world of the main character, who retains a distinctive sense of authorship and independence from the player. While this use of mindspacing seems dualistic at first glance, this misses the impression of in-betweenness that arises from the constant movement between the two overlapping spatialities. The textual level, while indeed animated by reflection, language, and thought, always continues to be related back to the physical game world, which affects the textual piece in question. While Evan's thoughts and fantasies are often more than sardonic, full of loathing for himself and others, a border between him as a person, his depression, and the world he lives in can never be drawn.

The physical world, in turn, is cross-cut by a third kind of image (fig. 73): single art pieces designed as POV-close-up shots affecting and animating the traversable world, which, relying on the *RPG Maker* tool (Gotcha Gotcha Games), features a few elements contradicting the narrative level (e.g., fairy-like character models encountered in the tram). Taken together, the three spatial images thus form an ecology of relations in which the mental and the spatial are always already intertwined and co-constitute each other.

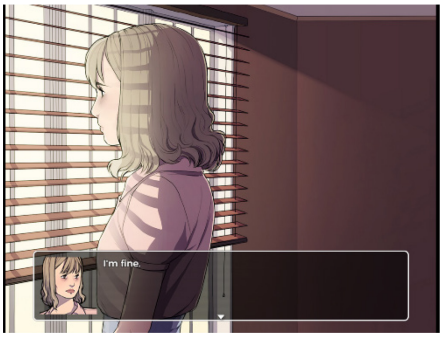


Fig. 73. Cross-cut concept art revealing close-ups.



Fig. 74. Seemingly trivial choices in *Actual Sunlight*, which are neither truly choices nor trivial.

The three-fold and non-dualistic spatiality thus preconfigured by the game carries Evan's nexus of relations to his environments, but also only emerges from the playful negotiation with the player. The title initially communicates a concept of play to the player that is based on the prominent gaming elements of exploration and agency: while instructions for the controls appear on screen at the beginning, the game urges to "try everything." The player, however, quickly realizes that the role assigned to her fundamentally clashes with this instruction, which turns out to be a strategic false promise. *Actual Sunlight* frequently uses procedural logics that implement small and seemingly trivial yes or no choices (fig. 74). Contrary to the initial framing by the game, however, these choices do not offer different

narrative paths, and the player finds out she can often only choose one option if she wants to progress. Sometimes, the protagonist downright refuses the player's choice, e.g., regarding the decision of where to sit on the tram, which further puts an emotional distance between the character and the player. When the player does not buy a video game in the store and attempts to leave, Evan even directly breaks the fourth wall by addressing the player to emphasize that there is "no getting out of this" – he will only end up in the store buying another game later. In this way, the choices in *Actual Sunlight* are neither simply meaningless nor signify the lack of meaning but present the player with, and indeed, draw her into a condition of meaninglessness and deprive her of agency.[338]

Exploring and continuing the story by triggering the often depressing and hopeless self-testimonies by Evan, the player takes part in choices that only enact and repeat the character's insistence on the futility and meaninglessness of any action. As a result, the game mechanics form an existential metaphor by enabling the player to be disabled by the game in play. Unable to fully identify with Evan but drawn in by his brutal and unflinching honesty, I find myself attentive, curious, and sympathetic as much as resisting, wanting to shut myself off, and being dragged along by the linearity of the narrative. Playing with the game entails friction; it is not fun, even painful in many moments. The ensemble of play is not able to act; if anything, the very fundamental *act* in question is the raising of a question. Not the ultimate one at the end, in which the main character sees no other option than jumping off the building. Rather, the very first question, the only choice of any relevance, is given right at the beginning with the disclaimer. After being informed about the severe and sensitive themes of the game, the player is given the choice to either continue or stop (fig. 75). It is this non-trivial and existential problem that the game successfully continues to pose throughout with any of the non/trivial choices, and it is this experience in relation to which the player may or may not learn to develop response-ability: Do I look away or do I allow the story to unfold? Do I want to become a part of this? The entire dynamic of de/marginalization is thus carried from moment to

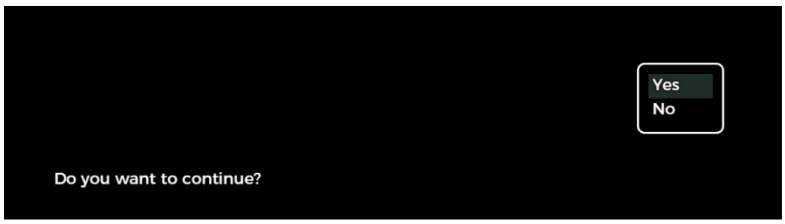


Fig. 75. The disclaimer given at the beginning.

[338] Here, my reading of *Actual Sunlight* parallels Vozaru's reading of the later game *The Missing* (2018). Vozaru argues that two strategies are used to relate the inner struggles of the main character: the first one "focuses on the game's departure from genre-specific conventions, which results in the destabilization of the player's expectations and an increased focalization on the portrayal of the main character's internal turmoil through game mechanics" while the second one "centers on the destabilization of the relationship the game initially establishes between the player and the character they control, changing it from one of submission to one of cooperation"(67).

moment by the entangled pair of game and player, going through the motions together, affecting each other, until the very end.

One further recurring strategy of the title's attempts at demarginalization is its explicit thematization of the digital game and its mediality. Evan comments on the hollowed-out consumerist nature of the games he plays, publishes devastating reviews online, and yet cannot turn away from excessive gaming, which further isolates him. Parallel to this, both narrative and mechanics of the game refer to, mock, and counter dominant game logics such as ant/agonistic struggle, self-efficacy, anthropocentric agency, and the extractivist reaping of rewards. Moreover, there is an instance at the beginning of the game, in which the interaction with a passer-by in the streets triggers a narrative event in which an implied game designer, going by the name of the actual creator, Will O'Neil, makes a couple of truth claims about the game. The narrative instance claims that *Ancient Sunlight* is not a game at all, but a portrayal, and that players under the age of 25 should not think that the game is about them, no matter how much they identify with the main character. Here, the game makes an agist and somewhat patronizing claim to interpretative hegemony through the concept of authorship, which frames its narrative as an explicit discursive placing of an account of depression.

Finally, *Actual Sunlight* by all means weaves an individual story, one in which authorship and personality serve particular purposes in how the title speaks about depression. Crucially, however, the game's way of individualizing depression in its self-proclaimed "portrayal" is not equivalent to an internalization of mental health. As the title's strategy of mindspacing is not reducible to an inside/outside dichotomy, the mental side that is expressed in play is as personal as much as it is inseparable from the socio-historical context and the critique of neoliberal capitalism that the main character formulates. One of Evan's longer rants clearly shows how he frames depression as inevitably tied to socio-economical precarity as well as stigmatizing tendencies of neoliberal ideals such as an exclusive focus on growth, positive emotions, and the expectation to always fit in:

> You do realize that the kind of life which only happened to other people for most of your existence is coming for you too, right? [. . .] It's just a graph on a page, just a short-term contract instead of a full time job, just a little leaning into what you are otherwise told is a very healthy retirement fund from a person who got paid to tell you that. But, someday, someone is going to fire you for the last time-not because you did anything wrong, not because you ran off to open some goddamn cupcake store, and not even because they actually can't afford to keep you. It will simply be because your life got

> too complex and expensive for what it was actually worth to anyone but you. If you don't become either rich or in charge of a bunch of people by the time you're 40, you might as well blow your fucking brains out for all the world will think of you. Even at 35, you'd better still be sexy. If you don't even know how all this will come together by the time you're 30, you're already so far behind somebody who does that I can't see how someone who doesn't would ever catch up. And then, for the sake of our collective sanity, you will be erased. Because nobody can give a fuck about you if you don't exist to give a fuck about. I mean, look at you. You're old. You're bringing down our Friday spirit. [. . .] You're upsetting all the twentysomethings who don't even get paid: Don't you think the least we can do is provide them with a workplace that resembles a television show? And no offense, but if you have kids who don't get to go to daycare because you didn't marry rich, nobody wants to know about it. If you have some disease that is eating you alive because you have no medical coverage, it's better for everybody if you don't say so. If you don't think you can be cheerful, or at least quiet, I hope you know how much we all resent you being here. Because this is not a place that has anything to do with anything but celebration. Celebrating success, driving forward with growth, powering ahead through innovation and smashing through it with remorseless joie de vivre.

Although the character of Evan embodies a privileged position as a White and educated male in a country that does well economically, and although his perspective is often idiosyncratic, complex, and not easily shared by others, it is through the particular and the personal that the game expresses what Moncrieff, as part of her Marxist critique of the clinical-scientific discourse on mental health, has advocated as "the view that many of our current mental troubles are consequences of the particular socioeconomic conditions of late capitalism" (3).[339] As the game refrains from thematizing the institutional discourse on mental health, *Actual Sunlight*'s mindspacing relates to the *psychic* rather than the *psychological*.[340] The critique, however, is similar. Mark Fisher has called depression the "shadow side of entrepreneurial culture" ("Why") along similar lines. Fisher argues that "[m]ental illness has been depoliticized" and

[339] For a recent discussion of mental health and neoliberalism as a starting point for what critics of mental illness take issue with, see Benson and Sonu.

[340] The figure of a therapist, however, does appear multiple times in the textual snippets made accessible via exploring the physical traversable world: in several so-called "patient transcripts," dyadic negotiations and thematizations between a "therapist" and "patient" are witnessed. Rather than giving them space, the therapist tends to immediately recontextualize, doubt, or rephrase the patient's testimonies throughout. At some point later in the game, however, the patient transcripts themselves address their imaginary status, and it is revealed that the main character never truly engaged in therapy in a psychotherapeutic setting. Hence, it is the imagination of it rather than the clinical discourse itself that is shown in the game.

stress privatized by the neoliberal policies implemented first by the Thatcher government in the UK in the 1980s.

In addition to the economic pressure expressed in the above quote, Evan's mindspacing points to the cultural codes and social expectations involved in placing mental health with the individual. When he attempts to imagine himself as a normal person in one of his fantastic outbursts, he tellingly imagines himself as a "famous writer and author" being interviewed in a late-night talk show. In small instances like this, the game convincingly argues that the phenomenon of depression cannot be severed from a socio-cultural world of expectations and imaginations, which, just like Fisher's concept of capitalist realism argues, envelop the body together with its own instruments of mapping its existence, feelings, thoughts, dreams, hopes, failures, and despair. Arguing with a story that is at the same time personal and political, individual and social, intimate and critical, immersing and revolting, *Actual Sunlight* thus succeeds in raising to a social level the question asked by the protagonist before he jumps off the building: "What does it mean to be an impossible person?"

6.3.2. *Gris* (2018)

The second case, *Gris*, is a 2018 Spanish multiplatform visual and auditory journey into the topics of loss, grief, trauma, and healing. Combining elements of platforming, puzzle, and adventure games, it narrates the story of an unnamed woman (although there is a broad consensus that *Gris* is both the game's title and this character's name), who wakes up in the hands of a crumbling statue (fig. 76). She loses her voice, the statue collapses, and she falls to a world devoid of colors, which she explores and learns to relate to anew in the course of the game.

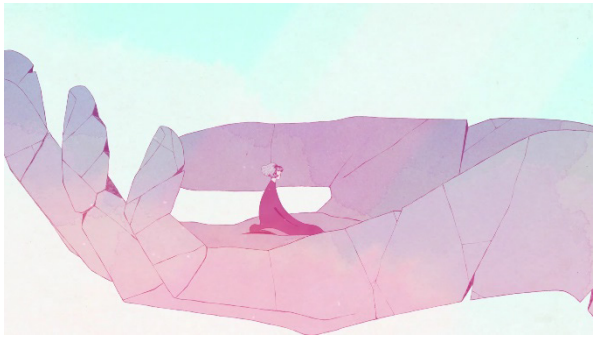


Fig. 76. The opening scene of *Gris* (2018).



Fig. 77. Hints as to the mourned/mourning figures: mausoleum scene (left) and hidden cut-scene (right still).

The title's strategy for thematizing the topics of grief and healing differs fundamentally from those of all the other titles discussed in this chapter for the reason that it does not rely on and thus exceeds the language-based patterns of making sense of mental health. Whereas *Actual Sunlight* constantly strives to link the emotional side of depression to verbal reflections and negotiations based on reason, *Gris* mounts its arguments entirely through affective and non-verbal channels of narrative spatialization: in the game, it is color, shape, motion, rhythm, music, and touch (here I am referring to the controller's presence and vibrations in the console-based versions of the title) that come to the fore. Hence, the overall narrative remains ambiguous. Throughout the game, it seems that the several statues that are reassembled into fractured wholes again portray a loved one who is being mourned. Towards the end, this second figure, who could be a further version of Gris herself, her mother, an older sibling, or her lover, can be seen laid out in a mausoleum (fig. 77, left still). If the player gathers all hidden "memento" achievements[341] throughout the journey, a hidden cut scene right before the ending shows a young Gris and the figure together in an instance of mindspacing that presents a memory (fig. 77, right still). While this scene implies that it is Gris's mother who has passed, the ending itself, in which Gris ascends to the stars, could also imply that it is the child who accepts her own death – ultimately, the emotional quality of the journey matters more than the concrete story and the player is invited to find her own access to the experience.

[341] *Steam achievements* are added epi-textual challenges, which are unlocked when particular game-states are brought forth, sometimes framing them as decisive moments of the narrative or highlighting when one of several possible procedural options was chosen.

Interwoven with the non-verbal storytelling of the title is the strategic use of mechanics that offer many of the game's themes as lived rather than signified experiences in play. Besides visually and auditorily perceiving the game world, the player is thus enabled and encouraged to playfully participate through movement and jumping in the manner of a typical two-dimensional side-scroller. However, the basic movement controls are already pushed beyond their unconscious role in many other titles: when the player, contrary to her expectations (and, thus, to an imagined normative gaming literacy) moves to the left rather than the right, Gris kneels down before a grieving statue and hangs her head (fig. 78.). When this moment came up in my personal first playthrough, I immediately pressed W to help her back to her feet thus missing an important moment. If the player allows her character this moment of lingering by not pressing any button and thus accepts and learns to respond to her inability to immediately go on, an achievement is awarded by the game, exemplifying[342] rather than verbally signifying one of the first section's themes, the topic of denial. When Gris finally gets up again, she hides her face in her hands, then shakes her head and accepts her place in life, just as the player accepts her need for the moment and allows it to overcome her denial.



Fig. 78. Strategic use of game mechanics: Gris accepts the moment to overcome her denial.

On the journey, which consecutively (re)introduces the colors red, green, blue, and yellow to the game world, the player-character gradually acquires new skills: energetic running replaces the initial slow shuffling, self-determined jumping replaces the beginning's nauseating endless fall. Gris and the player learn how to turn oneself into a block of stone so as not to be swept away from the sandstorms in the desert and combine this with jumping to break through blocked paths in the ground; the player and the character soon enable each other to swim through underground rivers, double-jump and glide through the air, and rediscover Gris's voice that affects and animates her surroundings to find new ways of progressing through the world. The game's preconfigurations of play heavily rely on the traditional design elements of progression and challenge. However, as the title communicates its message not despite or in

[342] Here, Günzel's approach towards the exemplification of space by digital games links to how *Gris* communicates its themes. However, as the moment discussed also highlights, the doing of the game is immediately interwoven with the doing of the player, which, in turn, is procedurally preconfigured by the possibility of the title's code to enable and respond to it (see "What" 20*)*.

parallel but almost entirely through its very architectonics of play, these elements give way to experiences that many traditional games neglect.



Fig. 79. Stone creatures (left), the forest companion (middle), and the glowing turtle (right still).

Gris is, for example, often dependent on other living and non-living beings. The game world indeed calls this distinction into question when the stone creatures in the desert temples switch from a seemingly inert existence to sudden nomadic mobilities (fig. 79, left still). In the forest, Gris finds a temporary companion who follows her, imitates her actions, and thus enables her to solve puzzles that are otherwise impossible to overcome (fig. 79, middle still). The companion, in turn, is fed by her (it really likes apples) and benefits from the unequal pairing in its own ways. In the underground water-based levels, a giant turtle enables the player-character to enlighten the pitch-black darkness (fig. 79, right still). These examples show that the game enables the player to depend on others in an ecology of relations in which the human is not the center; in this way, *Gris* exemplifies how healing may depend on learning to accept help, care for others, communicate with beings seemingly alien, and form unexpected alliances (beyond instrumentality and extractivist logics) that may lead to new ways of understanding the world thus shared. Even those creatures that initially appear hostile offer ways of going on, which are otherwise blocked (as in Gris' interaction with a giant bird who, at first, seems to chase her but later lifts her into the sky).

Beyond the dichotomic non-choices of *Actual Sunlight*, *Gris* enables the player to act out various experiences of healing in and communicating with a world. Subtle and non-verbal messages can thus arise from the spatial negotiation in play such as with the element of light in the game: during the introduction of yellow color to the world in the final level, the player-character first experiences that light reveals something invisible, which only seemed not to be there before (fig. 80, top stills). Later, however, when a glowing creature follows Gris, the mechanic changes and its light really does give presence to new elements that were actually not

there before, such as stairs of light one can ascent (fig. 80, bottom stills). Light as a play partner, the game enables the player to experience, is, beyond a merely epistemic tool (the revealing light of the enlightenment scopic regime), reveals a shared existential force of being in the world, and how different alliances allow for new modes of being. Here, *Gris*'s architectonics of play tie into Haraway's notion of cultivating response-ability while going visiting as the player and the main character "venture off the beaten path to meet the unexpected [. . .], and [. . .] propose together something unanticipated" (*Staying* 130).

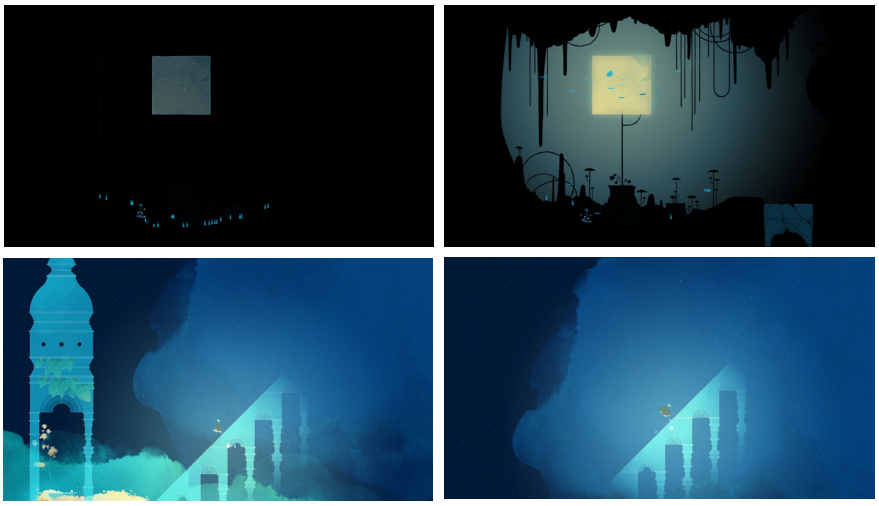


Fig. 80. Two different uses of light-based mechanics: epistemic (top), and ontic (bottom stills).

In moments of more-than-hegemonic play that these examples point to, the game, in sum, links the experience of grief to a vulnerability that is not necessarily dangerous, the dependency on and communication with a non-human world, adversaries that are truly troubled beings who offer unexpected alliances, and an intimacy with the unknowable. In all of this, *Gris*'s challenges are serious, but never punish the player and allow for her own pace; its progression is not one towards power over others but one of self-empowerment through and with others. Play, as the title preconfigures it, is the very mediality in which growth and healing are experienced as non-subjective, ecological, embodied, and thus more-than-cognitive or merely mental phenomena.

Regarding the title's practices of mindspacing, which here already become apparent, the aforementioned non-verbality of its spatial configurations is remarkable. In its distinguishable watercolor[343] sceneries, the world becomes individuated through distinctive outlines and shapes but retains its dynamisms and movements as affective colors cross and animate the limits of figures, which become zones of contact and touch – even the very white background of the

[343] See also Lorenzo's arguments which explore in more depth the artistic links of *Gris*'s visual style to the Chinese practice of Shānshuǐ painting.

initially black-and-white world bristles with subtle micro-forces, resulting in a spatiality of faceicity, which transcends the notion of a bounded and static kind of Western subjectivity.

Though its main themes, grief, acceptance, loss, and healing, become intelligible, *Gris* refrains from using a verbal discursive marker of any kind, such as a reference to a clinical diagnosis or a character's verbal testimony of their inner feelings, like those by Evan Winter. Whereas *Actual Sunlight* called into question the distinction between an inside and an outside together with the marginalizing tendency to privatize depression and confine the individual to their own body, *Gris* makes such a distinction radically unintelligible since its affective worldbuilding envelops emotion as extension, the mental as the spatial without the option of an intermediary or an in-between level.



Fig. 81. Design-footage indicating the link between the colors and the five stages of grief.

Given this radical and successful flatness of *Gris*'s mindspacing and its disregard of reflective language, it is all the more remarkable that the title is still shaped by the discourse of psychology in a subtle but profound way. A quick look at the epi-text of the game together with a bird's eye view of the montage of its images testifies to the ongoing discursive influence of psychology: the conceptual design footage, accessible with the main menu of the game, links the colors (red, green, blue, and yellow) that the player reintroduces to the game word one after the other to the five stages of grief as described by the famous Kübler-Ross model from 1969 (fig. 81).[344] The in-game achievements, too, link the colors to one of the stages with the black-and-white section signifying denial, the red desert section anger, the green forest region bargaining, the blue underground caves and streams depression, and the yellow temples with their light and flower themes acceptance (fig. 82).

[344] Drawing from her work with terminally ill patients, Elisabeth Kübler-Ross's 1969 book *On Death and Dying* introduced a conceptual mapping of how people deal with death and dying, although it is often read as a model about grief itself. The book distinguishes five phases: 1) denial, 2) anger, 3) bargaining, 4) depression, and 5) acceptance. Although many critical voices from the field of psychology have questioned its empirical foundations and it is today no longer considered an accurate or recommended model (see Stroebe et al.), it continues to be influential and present in public discourse more than fifty years after its publication.



Fig. 82. The spatial sequence of color in *Gris*'s level design.

In summary, *Gris*'s strategy for demarginalizing the experience of grief gives a novel radical shape to *Actual Sunlight*'s criticism of dualistic mindspacing. It places grief and healing with shared action and being in the (game) world. The emerging non-dualistic spatiality dethrones the realm of language that cannot claim its territorializing position. While the deeply emotional sonic and auditory journey of the game successfully reconfigures the very intelligibility of what is labeled *mental health*, the strong influence of the discourse of psychology still permeates through the spatial composition and highlights that there is no outside to discourse and no difference detached from repetition. Still, the game succeeds in abstaining from framing grief as a mental disorder, which is of particular significance and relevance given the recent trends of establishing grief-specific disorders.[345]

6.3.3. *Shrinking Pains* (2018)

Shrinking Pains was made in only 48 hours for the Global Game Jam and saw subsequent release on Steam in 2018. With a total playtime of about 15 to 20 minutes, it is a short, free (according to its own admission) autobiographical and narrative-driven game that explores experiences of living and struggling with anorexia.

[345] For an overview of recent changes in the classificatory systems, see Wada's work, which discusses the benefits and problems of the recent medicalization of grief. The author critically points to normative societal expectations of grief and its cultural embeddedness in the context of the homogenizing effects of medicalization in our current diagnostic cultures (9-11).

The visual novel approach of the title aims to depict anorexia through a composite spatiality that resembles the few point-of-view shots in *Actual Sunlight* (fig. 83). The images presented are tied to the (first person) point of view of the main character, who thus remains invisible but indirectly focalizes all layers of the narrative from sound effects to moments of close-up style impressions.[346] As in the graphic novel, the surrounding physical world is combined with speech and thought bubbles relating everyday conversations and thoughts of the protagonist. Whereas Evan Winter retains a strong sense of independence from the player and even addresses her, the unnamed protagonist of *Shrinking Pains* is explicitly identified with the (implied) player herself by the game: the many speech bubbles directly frame the protagonist's thoughts as the player's addressing her in the second person singular. Fostering further this close coupling of player and character, the title varies the gender of the protagonist's partner according to player preference.[347]

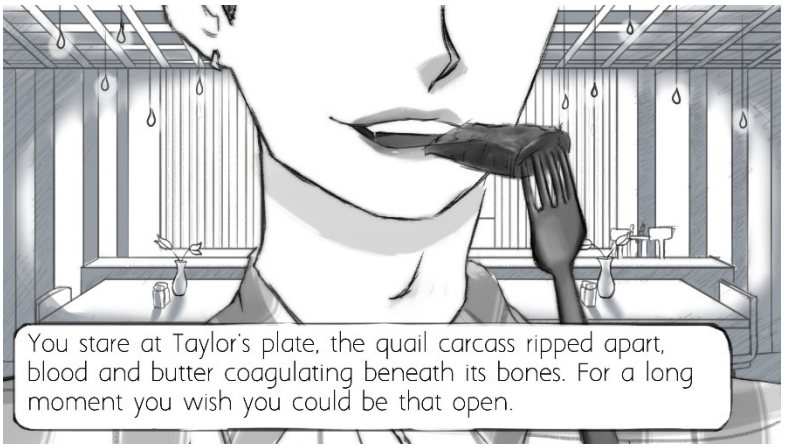


Fig. 83. Example of *Shrinking Pains*'s composite spatiality and point-of-view-images.

Through these strategies of strong focalization and player positioning, a personal narrative is created that draws the player into the character's individual net of feelings, affects, and thoughts, as well as interpersonal relations and expectations all coming together in daily situations, which border heavily on existential themes: the player-character wakes up next to her partner, stares at the ceiling, hardly gets out of bed, and is challenged by the conflicting

[346] Note that the invisibility of the player-character also strategically refuses to describe them via a particular constellation of sex and gender, which is significant because eating disorders (including anorexia nervosa) are often framed as *female* illnesses, whereas a fourth of people affected are men (see Murnen and Smolak; Price 347-51). Furthermore, this allows the player to fill in the gaps on her own in the process of embodying the player-character coupling.

[347] One can choose from three pre-coded options before starting a playthrough: "Femme," "Everyone," and "Masc," each resulting in a different constellation of characters, whereas the overall dialogues remain the same.

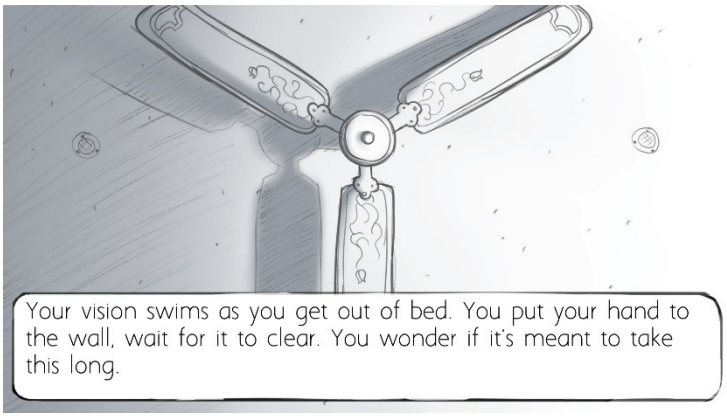


Fig. 84. Phenomenological reflections on the anorectic body offered as situated knowledges.

emotions of feeling both cared for and heavily pressured by the offer of a cup of coffee. As the couple later celebrates their anniversary over dinner, the player-character struggles not just with eating anything herself but also with watching her partner eat. In scenes like this, *Shrinking Pains* strategically utilizes the semantic register of the body and the senses relating to the smell and texture of meat, which are perceived as revolting and nauseating, or the feeling of the own body perceived as an absurd object evoking "the feel of the fat of your thighs pressing together when you sit down, the fold where your stomach meets your legs." The controlling and thus objectifying style of self-referencing of the anorectic experience is reflected in the often almost medical terms used in the stream-of-consciousness, such as "vertebrae" or "collarbone." As the bodily/mental well-being of the main character deteriorates as the plot unfolds, the game offers these bodily sensations as situated knowledges to the player, who is confronted with an attentive and small-scale phenomenology of the anorectic body, its drives and affective reactions towards the world (fig. 84). In situated perceptions and the reflection upon them, as when the player-character watches the ceiling and realizes how their perception has changed (because of malnutrition), the player is directly approached by this phenomenology that suggests itself as an intimate and honest reflection of experience.

As in *Gris*, a further strategy to relate to the experience of the protagonist is carried by the distinct visual style of the artwork. Besides the verbal and, in spite of their intimate and honest sense of embodiment, still abstract reflections of the speech and thought bubbles, the stencil-style drawings directly convey some of the messages of the title: dominant white patches, akin to an indifferent nothingness, seem to threaten the already thinning-out lines and shapes of bodies and written words, adding to the non-verbal staging of a personal fight against extinction, in which a will to power and a will to live are both part of the same shifting conflicted self. Then, in a handful of single images only, there is red, immediately mixed with black, a drive or impulse underlying it, an existential condition of hunger, of reaching out for another

with the force through which life wills itself into the world. It is telling that this patch of red Eros only appears in the scene in which the player-character has a one-night stand in which pain and pleasure, though (or maybe because) detached from love and affection, reach unity (fig. 85).

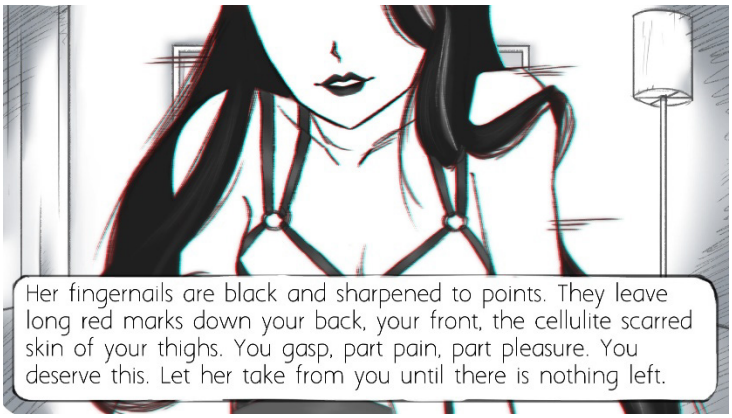


Fig. 85. One of the few colored images in *Shrinking Pains*.

Besides sharing the situated knowledges and progressing the prepared story (by clicking the left mouse button), how does the title enable playful interaction? The linearity of the procedural montage is shot through with small choices that confront the player, ask her to position herself further as the main protagonist in relation to the moment in the story, and introduce forks in the road, thus adding non-linearity and encouraging the player to relate herself to the more-than-possible in play. Considering her options, she imagines the potential consequences for the situation and the further narrative, and may, however, only pick one option, which immediately raises curiosity for a further playthrough in which other options could be explored. Particularly as the game is short, it thus attains a high sense of replayability due to its capacity to respond differently to the different responses by the player.

Concerning the nature of the choices, mundane but deeply existential matters are negotiated, highlighting the realm of everyday experience as a tragic playground for the player and a site of the struggle of life and death for the character. The first choice in the game, for instance, involves the decision of what to eat for dinner (fig. 86). Besides eating, choices involve the responses to friends on social media and whether the player-character reaches out to others or allows them to care for her. Overall, *Shrinking Pains*'s imaginary of play is similar to that of *Actual Sunlight* for its refusal to submit to the tyranny of fun to appeal to an audience. It engages in a self-aware framing of the choices and plays against the implied



Fig. 86. Enabling interaction: the first choice in *Shrinking Pains.*

player's expectation of total self-efficacy. Sometimes, the choices simply disappear when the player chooses to eat. Other times, the bubble communicating an alternative course of action simply gets smaller and smaller when one clicks on it until it is a mere pixel, technically still there, but fundamentally out of reach for the player-character. Here, the disabling of the player is again a strategy to involve her in a different mode of being, operating under a different regime of agency afforded to the anorectic experience. In clicking again and again on the option she considers right, the player can, however, attempt to counter the anorectic pattern. Therefore, through disabling the player, the game also enables her to position herself, take care of the player-character, and develop a sense of responsibility and agency. Contrary to *Actual Sunlight*, the choices matter and influence the ending of the game, in which the main character will either pass out (and is indicated to die) alone and isolated at home, or wake up at the hospital after having reached out to a friend often enough throughout the course of the game.


It's like the air has been sucked out of your lungs. Panic. You watching them eat. Them watching you eat. Watching them watching you watching your plate you can't you can't you can't you can't you can't you can't you can't you can't you can't -
you can't -
you can't you can't you can't you can't you can't you can't you can't you can't you can't you can't you can't you can't you can't you can't you can't you can't you can't you can't you can't

The strategic framing of anorexia as a personal experience thus succeeds in placing it in a social world where the themes of personal borders, the responsibility of friends, and the viability of interpersonal (and, particularly, romantic) relationships can be questioned and explored. The downside to immediately individuating the player-character in this way lies in severing anorexia from its socio-cultural genesis, which is why questioning the role of the media or the internalizing and privatizing tendencies of the psychological/psychiatric discourse on anorexia is beyond the otherwise balanced approach of the title.

6.3.4. *The Longest Walk* (2022)

The Longest Walk is a short experimental game from 2022 that is advocated as a further "deeply personal" and "biographical" take on the experience of living with depression (Tarvet). It was designed as a walking simulator[348] and, hence, features a three-dimensional traversable world that is combined with sonic footage from an interview with the designer's father about the latter's depressive episodes.[349] While, as in *Actual Sunlight* and *Shrinking Pains*, a personal micro-narrative is thus employed to portray mental illness, the documentary character of the design goes in another direction.



Fig. 88. The opening scene of *The Longest Walk* (2022).

The game opens with an abstracted and endless dark void, a black cloud hovering in the distance. By pressing W, I move the floating perspective forward. With the mouse, I turn the perspective around on a 360-degree axis. White footsteps on the ground appear, leading into the black smoke lying ahead. As I slowly move closer, shifting my attention with the mouse, a man's voice with a Scottish accent begins speaking: "I felt, um… anxious. So anxious that I, eh… I was burning. I was, em… My heart was beating really fast. I couldn't sleep. I got tireder and tireder because I couldn't sleep

[348] Games such as *Dear Esther* (2012) or *What Remains of Edith Finch* (2017) are often called *walking simulators* (or *walking sims*) for their (often exclusive) focus on movement and environment interaction. While the term is often used derogatively, it ties into broader discussions of what designates a game and what does not (see Ilano).
[349] For the analysis, a transcript of the interview footage was created that can be found in Appendix B.

because I was worrying…" Subtitles link the words I hear back to the space of the screen where my eyes trace them. Reaching the dark cloud, I make out the fragmented image of a human body on a rug just as the voice conjures the memory of breaking down, howling with self-hatred (fig. 88). Then, the scene fades and the game relocates me in grey-white emptiness. The voice speaks of realizing something was wrong when driving back home crying. A blur of color in the distance. I move towards it and recognize a fragmented version of a car. As the voice pulls me further into the distance, more detached patches of scenery appear: pieces of pavement, grass, road signs, and later, an underpass, glistening sand, and stripes of the ocean.

The Longest Walk differs from the previous games in that it features no other mechanics than movement and progression: the player navigates along the traversable and linear path and triggers the more than 20 narrative instances consecutively. While its concept of play is thus necessarily rudimentary, the three-dimensional world to be explored combines both a documentary claim to realism and estranging but expressive fragmentation.

Regarding the visual style of the game, the white all-embracing nothingness does not allow the perception of a world as a whole: only stripes and patches, fragments and pieces, interrupted and surrounded by more nothingness (fig. 89). The shapes thus presented appear photorealistic and are identifiable (as a car, a piece of road, a rock and so on) from the distance, but once the player moves in closer, they cease to communicate stable identities and reveal that they are made up of further single squares of colors instead. Every tiny fragment, every positive element, thus remains isolated, disconnected, and lost. As with the strategic use of visuality in *Gris* and *Shrinking Pains*, *The Longest Walk* presents its map in a way that expresses and links to its overall themes of loss of meaning, fragmentation, and collapse, which also surface in the spoken narrative elements.



Fig. 89. Two stills detailing the fragmentation of the game's visual spatiality.

The auditory recording used to create the soundscape consists of a personal testimony, a retrospective account of living with depression. As it speaks and moves, the voice is laden with emotion, affected by memories and feelings that are not mere recollections of the past but animations of the voice itself; it hastens, struggles, stutters, pauses, loses itself in silence, or becomes stuck in repetitions, gains sudden speed, and leaps ahead as it gathers itself and finds the right words. It recounts bodily sensations, vivid memories, and suicidal thoughts, focuses on the emotional qualities of anxiety and self-doubt, and links depression to the contexts of work, friends, and family. The soundscape testifies to a distinct and situated recording: the voice's rhythm, pitch, accent, and idiosyncrasies (such as spontaneous laughter) clearly individuate the narrative account and create a sense of giving testimony and an atmosphere of the particular and the personal. At the same time, the recording includes the reactions of a microphone (e.g., cracking and irregularities of volume), not intended sounds in the background, and a distinct noise floor, which highlight the mediality of an amateur recording, i.e., its artificiality and yet its paradoxical sense of unfiltered documentation and heightened faithfulness to reality. As the person asking the questions in the original interview is cut out,

the recording is a monolithic monologue that enables the player to an addressability without an immediate need to answer the disembodied yet present speaker.

The game's two expressive channels, fragmented visuality and documentative sound, come into contact with the processual and embodied interaction with the player. Though the body is engaged in the activities of navigation, perception, and movement in a way resembling the (more telic) genre of the guided walking tour, it is also enabled to playfully relate to the game through these activities forming a contrast between intimate attention to the scripted visual-auditory narrative and playful probing of the limits and features of the game as a space of possibility. Meddling with the fragmented frame of the car at the beginning of the walk, for instance, may turn into the creative activity of exploring novel sights/sites of play with the game's materiality: recursively positioning and rotating the camera perspective within the blue interior of the car may allow different constellations of color patches to appear, akin to the genesis of new unique universes of pixels (fig. 90).

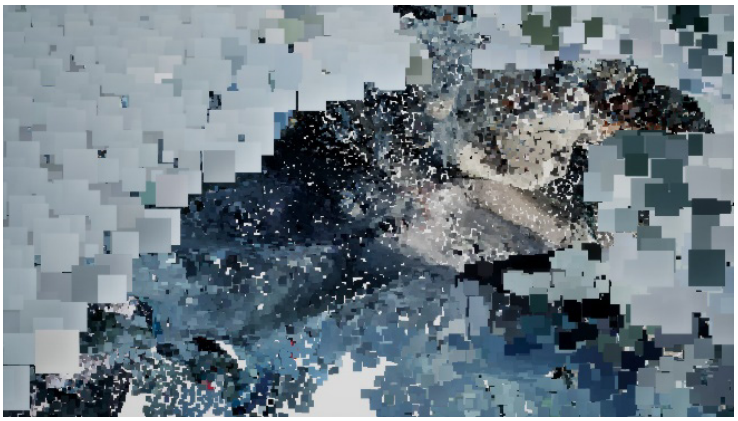


Fig. 90. A color patch universe in the interior of the in-game car.

Movement, overall, thus becomes an important site for the negotiation of meaning in the game, whereas a straight walking and queer meandering forms of movement rival (see Ruberg). *The Longest Walk*, however, fosters a linear and straight movement, in which straying and strolling, the movements of the flaneur, are possible but not rewarded; branching and non-linear paths are not explicit parts of the design (which blocks the side sections between narrative triggers with invisible walls). The two channels, sound and visuality, however, constantly animate each other even when they vie for attention. As the game places its walk on the Tay Road Bridge, Scottland, "which is an infamous local landmark for those seeking to take their life" (Tarvet), the fragmented patches do not merely add a setting for the sound file but site it as an account of depression and mental health and open it up to larger socio-historical dimensions that become accessible through it.[350]

[350] In line with this, the game's description on *Steam*, written by the creator appearing in the role of biographical author, claims the following: "Whilst my father's experience and the locations depicted in the game are specific to him, the thoughts, feelings, and message conveyed through his recollection of lived experience are universal" (Tarvet).

Combining movement, sound and visuals, *The Longest Walk* engages in ethnographic practices, which, at the intersection of objectivity and subjectivity, participation and distance, pleasure and truth, involve "[t]he ethnographer's personal experiences, especially those of participation and empathy, [which] are recognized as central to the research process, but [. . .] are firmly restrained by the impersonal standards of observation and 'objective' distance" (Clifford 13). In this sense, the game is not just an ethnography of mental health and depression but also a site for ethnographic writing in that the participation of the player is required, but also thematized together with her agency. In intra-action with the game, a skilled ethnographic body is produced together with the field that confronts and challenges her. James Clifford, scrutinizing ethnography as a kind of writing rather than a one-to-one representation of reality, held that "[e]ven the best ethnographic texts - serious, true fictions - are systems, or economies, of truth. Power and history work through them, in ways their authors cannot fully control" (7). A "serious, true fiction" is negotiated between player and game, whereas writer/text/meaning relations continuously come into being in the unfolding power relations – even the narrative voice, though monolithic[351], as the dialogical and polyvocal elements are purged from the initial ethnographic interview, is a shifting source when confronted with the narrative visuality of the site and the mediated agency of its real place. Together with the player, the game thus processually allows, refuses, directs, distributes (centralizes and makes diffuse), places, replaces, and displaces, bridges and collapses attention and relevance, makes spaces for becoming-self-aware and distracted slipping elsewhere, as the play ensemble performatively engages in ethnographic writing in its digital walk.

Concerning the question of the relation of space and mind, the visual-spatial composition links depression to two instances of mindspacing. The first, the initial scene of the game, erases external space to show a direct image of depression, a black cloud, and, in its midst, the collapsed human body. Through the white footprints (whose authorship is ambivalent), space retains its rudimentary experiential quality of containing and establishes between player and the phenomena of depression an initial relation, a matter of concern. The second map's documenting and fragmenting of space, however, does not subjugate the spatial to the mental but immediately interweaves them, showing a real place affected by suicide as well as fragmented visually by the graphical logics.

[351] Concerning the benefits of using a single narrative account in close conjunction with a site in the context of ethnographic writing, as *The Longest Walk* does, Mary Louise Pratt holds that the "strategy of defining itself by contrast to adjacent and antecedent discourses limits ethnography's ability to explain or examine itself as a kind of writing" (27). Hence, the use of a personal register and source material ties into the effect of questioning ethnographic practices in the game.

The sonic spatiality, via the title's ethnographic elements, frames depression as an "invisible illness" (see Appendix B) and problematizes its observability in an attempt to raise awareness: the voice says, "if I had a broken leg and it was in a plaster, it's obvious… But because I've got a broken head, it's not obvious to see that I'm ill." Clearly, the account maps an inside-outside dichotomy of observability onto the register of the body to raise awareness of the condition. A further aspect conveyed by the recorded footage links depression to the social world and the realm of work, framing it in the context of "a build-up of stress and work, and expectations at work" as well as the self-perception of not being good enough.

Finally, visuality and sound together produce resonances that contribute to the mental aspects of space as well as the spatial aspects of mind. The game, for instance, visualizes a broken-down car in the moment the voice recounts breaking down while driving, shows the curled-up body mentioned in the initial sentences, or gives the sound of crashing waves as the recording speaks of taking a walk by the beach. The most obvious combination of sound and visuals for the sake of mindspacing is the very act and motive of walking itself mirroring the therapeutic effect of taking time for oneself, which the interviewee emphasizes. Whereas *Actual Sunlight*, *Shrinking Pains*, and, as will become apparent in a bit, also *The Psychotic Bathtub* create challenged main characters and place the player in their roles, the ethnographic approach to mindspacing by *The Longest Walk* rather gives space to a single micro-narrative of a person's experience of living with depression as well as the player who is enabled to relate to it.

6.3.5. *The Psychotic Bathtub* (2024)

The Psychotic Bathtub is an indie project that deals with psychosis[352], bath time, self-care, guilt, loss, and rubber ducks. Although the game has, as of the time of writing, not yet seen official release, its playable demo features extended gameplay and multiple endings. Like *Actual Sunlight* and *Shrinking Pains*, it situates its themes amidst the eventful details and surprising depths of mundane and daily life: Ophelia, the main character, lives through a

[352] Generally, the term psychosis denotes difficulties in determining what is real and what is not, and thus refers to phenomena such as delusions (a false fixed belief that is not changed when confronted with conflicting evidence) and hallucinations (a perception that lacks an according external stimulus) as well as disorganized behavior, speech, and thought. Note that in the clinical context, the term *psychosis* is a vague concept today and no longer designates its own diagnosis in *DSM-5* and *ICD-11*. Rather, psychosis can be part of the symptom clusters of several different diagnoses, such as schizophrenia, bipolar and affective disorders, substance-induced psychosis, and others. As these diagnoses already show, quite different factors can be underlying, such as mental illness and medical conditions, trauma, sleep deprivation, certain medications and drugs, and other factors, as in a particular type that can occur after giving birth.

plethora of memories, fantasies, and psychotic experiences and explores the vastness of her mind and her surrounding everyday objects – all while taking a bath.



Fig. 91. Ophelia, the main character of *The Psychotic Bathtub* (2024), taking her bath.

The very first moment of gameplay confronts the player with two closed eyes and the text option "keep eyes closed" beneath. Hovering the mouse cursor over the eyes reveals the option "open eyes" while hovering over the text highlights it as the alternative choice. Whereas keeping the eyes closed will allow the main character to dwell in darkness, opening them will reveal Ophelia sitting in her bathtub (fig. 91). *The Psychotic Bathtub*, like *Actual Sunlight* and *Shrinking Pains*, chooses an everyday situation and a heavily focalizing main character who is closely coupled with the player to thematize her mind, its idiosyncrasies and challenges. Again, the player is positioned through choices and addressed through a combination of interwoven images and text. The textual elements again address the player as player-character in the second person singular and via language from the register of the body: when the eyes are opened in the first choice, the screen says, "there is a scratching at the inside of your skull."



Fig. 92. The game narratively links Ophelia's self-concept to clinical terminology.

Besides directly referencing an originally clinical piece of terminology in its title, the game clearly communicates to the player that her character is living with particular mental conditions. When Ophelia speaks to her rubber duck that suddenly turns into her father, the game draws a direct link from what is happening to the term "psychosis" and from it back to the player-character (fig. 92). This explicit reference to clinical discourse is combined with affective color, language, and images that are shaped as to involve the player in

a surreal phenomenology of Ophelia's experiences. Frequent sensory-related language affords the embodiment of the player: when the player-character drinks from the glass on the edge of the bathtub, she feels how "desperation rushes through every fiber of you. Something freezing covers the inside of your ribcage." The title's sounding practices accentuate the visual elements, adding the pouring sound of water when a new game is started or indicating that the player-character drinks the "desperation juice" from her glass via gulping sounds. Additionally, subjective ambient sounds affect the mood of play, such as when fear and danger are signaled by a menacing buzzing that escalates into the shrieking sounds of a distorted guitar in one situation.

The positioning of the player in the midst of the affective, perceptive, and associative web of relations of Ophelia's experience is closely tied to the game's imaginary of play: the player is asked and allowed to explore rather than conquer, be open to be surprised rather than see her hypotheses and expectations realized to reap rewards, and to relate to the main character in a myriad of ways, from wanting to get to know, communicating with, caring for, turning away, or even harming her. The player may be as mischievous or supportive as the procedurally prepared paths of the title allow. In one ending, Ophelia gets swallowed by the darkness of her mind; in another, she falls in love with death; in a third, she floods the bathroom, creating a red sea (with "Madame Margaret's magical strawberry bubble bath" causing the red color, not blood). In most playthroughs, however, the player-character's actions crystallize to the "peace of mind" ending, in which a "long desired silence" is achieved. The game says it "won't last forever," but "it's all we ever wanted." Opening up to multiple playthroughs, the concept of the unknowable and unexpected affecting the body at play is thus operationalized in the myriad of options, the multiplicity that emerges from the very mind of the main character. Some twists, turns, and themes are particularly dark – Ophelia finds opportunities to face her thoughts on death, disability, the figure of her recently passed-away father, childhood memories, and anxieties situated in the very here-and-now of the bath itself. While the game usually gives alternative options and sympathetically foreshadows these darker (and, frankly, sometimes downright scary) themes by asking the player to insist on a given line of choice, *The Psychotic Bathtub* also does not shy away from them. Through the interrelation and communication of the play partners, the game thus allows a negotiation of the very limits of play itself, offering a site to counter (or reinstall) what I have called the tyranny of fun.

As the framing of the main ending in terms of "peace of mind" discloses, what is played with is the concept of the mind as much as Ophelia's personality as a shifting sum of embodied memories, thoughts, feelings, perceptions, actions, and ways of relating. Hence, mindspacing takes center stage in the unfolding of play with *The Psychotic Bathtub*. Regarding the procedural genesis of the title's distinct spatiality, there is a constant chaotic interweaving of linguistic and visual material, a ruptured metamorphogenesis that jumps from one moment to the next via wild associations and creates rather than discovers reality: What is in Ophelia's cup? Grape juice or poison (fig. 93) - the player may follow either thought that might set themselves as reality.[353] Depending on the procedural paths followed, the rubber duck in the bathtub that begins speaking to Ophelia either turns into her dead father, a mix of her father and the duck, or Jesus (fig. 94). The three ducks, however, are not just shown as temporal distortions of reality but as three lasting versions of reality, as the ducks remain what they turn into until the end of the present playthrough.



Fig. 93. Grape Juice or poison? - Choosing between two realities?



Fig. 94. Three versions of reality as outcomes of different mindspacings in differing playthroughs.

Hence, the ongoing processual genesis of space in play is procedurally preconfigured by something akin to what Frederick Jameson describes as "schizophrenic writing" (33). Schizophrenic art and the schizophrenic experience, Jameson argues, drawing from Lacan, are marked by a "breakdown in the signifying chain" (33). Lacan's account of meaning does not rely on a direct one-to-one relationship between signifier and signified and points instead to the movement from signifier to signifier; meaning, according to Jameson's reading of Lacan, is

[353] Going with the poison option in this scene reveals that the game's mental spatiality is more than self-aware as Ophelia's inner voice claims that "paranoia isn't on the spectrum of your disorder."

generated as a "meaning-effect" (33). "When that relationship breaks down," Jameson argues, "when the links of the signifying chain snap, then we have schizophrenia in the form of a rubble of distinct and unrelated signifiers" (33):

> The connection between this kind of linguistic malfunction and the psyche of the schizophrenic may then be grasped by way of a two-fold proposition: first, that personal identity is itself the effect of a certain temporal unification of past and future with one's present; and second, that such active temporal unification is itself a function of language, or better still of the sentence, as it moves along its hermeneutic circle through time. If we are unable to unify the past, present and future of the sentence, then we are similarly unable to unify the past, present, and future of our own biographical experience or psychic life. With the breakdown of the signifying chain, therefore, the schizophrenic is reduced to an experience of pure material signifiers, or, in other words, a series of pure and unrelated presents in time. (33)

In the game, what is usually distinguished as material and semiotic, physical and mental, form and meaning, signifier and signified, the thing and the word, all exist on the same plane as a new kind of flat materiality that co-positions image and text without establishing between them a relation of depth. The player thus witnesses and practices a materiality without anchors, floating and adrift. In this "experience of pure material signifiers," this "series of pure and unrelated presents in time," the player, together with the game, does not just trace but exert the narrative and territorializing function of the mind (at play with) itself. The player negotiates the borders and balances between a becoming-schizophrenic and a becoming-unschizophrenic, creative disintegration and therapeutic attempts to re-link the floating signifiers: does Ophelia face the death of her father or drown the father-duck in the red floods of her bath? Does she dare think about death or even fall in love with it? Does she reconcile her guilt or claim to be Jesus?

How do the title's practices of mindspacing, in sum, position the mental and the spatial? Returning to the very beginning of this section, a first insight is to be found in the scene in which the player-character considers opening the eyes or keeping them closed. In Ophelia's exchange with her inner voice, the game considers the possibility of the mind as an inner realm, secluded but whole. If the player pursues this option of separating the inside from the outside, the game discards it and ends the player's playthrough: Ophelia's mind becomes impossible and she dies. When the player-character, on the other hand, chooses to open the eyes and see the world, however, the experience of schizophrenic chains of meaning cannot be mapped onto

a matrix that would distinguish the interior from the exterior. While the game seems to present an objective world in the static image of Ophelia in the bathtub, which serves as point of departure for interacting with the duck, the glass, the taps, etc., these very encounters change this reality in lasting ways, as was pointed out above. Hence, the playful negotiation of spatiality is a negotiation of the physical and the mental, the exterior and the interior, whereas the player actively and processually mindspaces the preconfigured mindspacings (e.g., why click on an option if one is sure that it is delusional and will lead nowhere?). Still, what is explored in the various metamorphoses, however, is the mind appearing as the very place through which the shifting sum of logics of association, emotional-cognitive preoccupations, passing sensations, impressions, and their libidinous occupations, attracting and repelling forces, their rhythms and affective powers, links and breaks, alliances and oppositions come to be.

In this way, *The Psychotic Bathtub* does not portray the psyche as a container (the place in which psychic spatiality would reflect the outside) in favor of an ongoing formation of psychic spatiality in which the body is pre-individually caught up in power dynamics, meaning, and micro-forces that precede the psyche or mind itself. In short, the psyche is not a container in which life is reflected but (via the creation of psychic spatiality) an effect and expression of life (and lived play) itself – very much in contrast to the subtitle of the game, "a story of an escalating mind." Hence, the closed eyes signify the death of the psyche as no psychic life is possible without a world to animate it, a more-than-psychic milieu of exteriority in which psychic spatiality is negotiated and through which the psyche or mind and what is called interiority are differentiated.

6.4. Conclusion: Indie Games as Discursive Counterspaces and Play as Care of the Self

There is a severe gap in the literature concerning work on indie games in the context of mental health topics and discourses. Drawing up a widely applicable and yet specific perspective of mindspacing, which highlights the connections between visual media dealing with the mind and a spatial perspective of analysis, the present chapter has attempted to pave the way with an initial series of qualitative case studies.[354] Five cases were selected for the analysis: *Actual Sunlight* (AS), *Shrinking Pains* (SP), *Gris* (G), *The Longest Walk* (LW), and *The Psychotic Bathtub* (PB).

Concerning the first of the three questions set out at the beginning, a major common strategy of all titles was found to be narrative individualization making phenomena of depression, suicide and suicidal thoughts, grief, anorexia, negative feelings about the self, psychosis/schizophrenia, and others intelligible by crafting stories of individuals in particular historico-social situations. However, narrative individuation takes very different forms, diversifying the strategies chosen by the games: common is the implementation of a protagonist and strong focalizor, who becomes a key narrative and perceptual figure, often directly verbalizing and reflecting upon experiences (AS, SP, PB). Beyond this, however, documentary practices (LW) or characterization without the use of language akin to a radical approach of show rather than tell (G) are employed. Further recurring strategies are the phenomenalization of the body for a player who is directly addressed (SP, PB) and the depiction of everyday situations (AS, SP, PB) making phenomena of mental health tangible by placing them amid what may be conceived of as personal and private situations (as opposed to institutional settings, most notably).

At first glance, the games' imaginaries of play, which concern the second question, are even more varied: from absolute reduction (LW) to the creative reimagination and reappropriation of mechanics (to the point where they occupy the greatest meaning-creating function) (G), and from the deliberate deception (AS) or disabling of the player (SP) for additional expressive effects to affording her the agency to shape the game world in her

[354] As the scope of the present chapter was limited, a plurality of further games remains open for future research. Concerning indie games that tackle mental health topics, the following titles can be potential candidates for further research endeavors: *A Taste of the Past* (2022), *Acting Minds. A Journey of Transcendence* (2022), *Another Day* (2021), *Before I Forget* (2020), *Celeste* (2018), *Deficit* (2023), *Depression Quest* (2013), *Fractured Minds* (2019), *Fran Bow* (2015), *I am OK* (yet to be released), *In Sound Mind* (2021), *LISA: The Painful* (2023), *Night In The Woods* (2017), *OCG/Obsessive Compulsive Game* (2022), *Omori* (2020), *Promising Times* (2023), *Sea of Solitude* (2019), *Social Moth* (2022), *Sym* (2015), *The Almost Gone* (2020), *The Ballad of the Past Loue* (2022), *Timothy Tinyhat* (2023), *Town of Light* (2016), *Ruya* (2017), *What Comes After* (2020), *You Don't Look Sick* (2021).

playthrough (PB). A strong but simple recurring element in this regard is the implementation of choice segments, which, however, again vary between expressive elements of design that do not alter the procedural playthrough (AS) and others that vitally contribute to a game's ending (SP, PB).

Beyond the first look, a shared feature of all games is that they offer themselves as play partners that allow and afford intimate experiences in which new response-abilities can be developed. Furthermore, their playful actions seriously disregard the tyranny of fun, which forbids so many other games from addressing mental health topics that might conflict with hegemonic notions of player agency, anthropocentrism, and the (reduced) role positive emotions are allowed to play. Meaningful play with the five games analyzed may be painful (AS), scary and dark (PB), existential (SP), or thematize the struggle for balance, healing, and growth (G, LW, PB).

The final question on mindspacing finds a striking answer in that all games link the question of the mind to the one of space. Most notably, they go beyond dualistic inside-outside oppositions, either to question the politics of the separation (AS), show the responsibility that comes from their links (SP), give micronarratives of mental illness an expressive space (LW), try to find more-than-verbal depictions that go beyond the conventions and limits of language (G), or because the very separation is utterly beyond the flat mental spatiality entailed by the phenomenon depicted (PB). All titles analyzed thus think of the mind or the psyche as something more than a mere container or medium of reflection of an outside world, whereas some (AS, LW, PB) question the mind as a detached and isolated sphere more than others (SP). Rather, it can be said that the titles aim to produce mental or psychic spatialities that problematize the privatization of mental health together with the objectification of space. The non-demarcation and linkage of the spatial and the mental, thus effected, can happen in critical (AS) or creative (G, PB) modes of expression or to raise awareness and give presence (SP, LW). Though the focus of the titles in their respective projects is on psychic spatiality, the games are evidently (and, at times, unexpectedly and subtly, as G exemplified) shot through with psychological/psychiatric spatiality (e.g., the five stages of grief which influence G's mindspacing or the dialogic structure of Evan's fantasies about a therapist in AS) and clinical terminology (e.g., clinical diagnoses, or the vocabulary of "triggers" or "techniques" in AS, LW, PB). In this regard, though they express the ongoing influence of psychiatrization, it is striking that the games selected do not thematize the institutional side of mental health more. In contrast to the medium of film (see Rabkin), for instance, it is telling that the only therapist to appear in the games is imagined (AS).

To briefly reflect on the relevance of the concept of mindspacing that has so profoundly shaped the mode of questioning of the present chapter, three benefits of the concept need to be noted. First, mindspacing as a critical concept allows not to subjugate the practices of game design and game play to the discourses of clinical psychology and psychiatry, which is a potential and recurring problem with how mental health is and can be written about. Second, the concept may, therefore, allow imaginaries of the mind, of space, and their interrelations to come to the fore of analysis (the case of PB, for instance, clearly shows that the notion that both space and mind are subject to an ongoing mutual coproduction of undifferentiated and pre-individual constellations of inside/outside is inconceivable without an enhanced concept of mindspacing). Third, the imaginaries thus appearing may, by referring them back to the institutional discourses, be understood as political-cultural doings with demarginalizing and anti-hegemonic capacities.

Concluding and drawing from the results of the present chapter, the indie games thematizing mental health issues and experiences discussed can be described as discursive "counterspaces" (316) speaking with a concept by Erica Principe Cruz.[355] In the context of de/marginalization, the games' preconfigurations of play are marked by the struggle to both a) address marginalized or invisibilized groups, positions, and experiences and b) creatively reimagine hegemonic notions of play, which ongoingly contribute to said marginalization in other contemporary games but also wider socio-cultural discourses of play (including scholarship on play and games).

Tying into the notion of "counterplay," an option for "marginalized players to reclaim space in games that were essentially not made for their enjoyment," Cruz's concept aims at a proactive kind of design "with marginalized players as the imagined player archetype while attending especially to how the game could support them" (316). One of the merits of the concept is to question the hegemonic notion of an implied "standard player" who is too often secretly and implicitly expected to be the (cis-)male, White, able-bodied, young, neoliberal subject prone to extractivist and ant/agonistic ideas of the world and the human, which the two previous chapters have made an effort to question. However, in addition to this notion, the potential of a game to serve as a counterspace also lies in the overall contributions of a title to play, i.e., both counterplay and the design of counterspaces depend on how play is imagined,

[355] Cruz's 2022 essay reflects upon the author's positionality as "pansexual Pilipina American game designer, developer, and researcher" in the context of "Queer Filipino American Oppression" (319) and autoethnographically works with *Stardew Valley* (2016) to conceptually produce novel strategies for creating more inclusive games.

operationalized, and enabled (which includes but exceeds and is not reducible to player positionality prioritized by Cruz).

The indie games discussed above, in this sense, offer themselves as discursive counterspaces in that they give space not just to marginalized players but to sociocultural themes at the margin of discourses in conjunction with reimagining hegemonic forms of play, particularly in the context of AAA games. In this regard, the titles analyzed convincingly challenge Sicart's notion that "it is in play, and not in games, where politics resides" (*Play Matters* 73).[356] Their preconfigurations are certainly negotiated in the excessive mediality of play. However, the way the titles reimagine, sometimes tease, and frustrate hegemonic notions of play (such as a game being winnable or the apotheosis of player agency and telic progress) is as profoundly critical as political and testifies to the capabilities of indie games' discursive intertextuality. Instead of and in place of these tropes, the games preconfigure different forms of play that can only fully come to be in intra-action with the player.

The present account has argued for a dual though non-dualistic motion in practices of play – production/negotiation (poiesis/praxis). In the titles discussed and their efforts to preconfigure a different kind of play (in relation to hegemonic forms), the preconfiguration includes a negotiation, fostering excessive forms of what game and player share. Here, play is allowed to revolve around Bateson's question, "Is this play?" (141). However, the question, unlike in Bateson's account, involves a double relation that is being reimagined: that of player and game and that of the place of play and the place for play. Contrary to the previous chapter's preconfigurations of farming, for instance, the games attempt to re/enable the player to re/imagine play itself and herself in play rather than focus primarily on repetition.

As all titles, via differing paths, carry practices of demarginalization and mindspacing, the indie games discussed shift the focus from entertainment and reproduction to the cultivation of new response/abilities involving the player in often unexpected and uneasy entanglements. Winnicott pointed out that "playing is always liable to become frightening. Games and their organization must be looked at as part of an attempt to forestall the frightening aspect of playing." (59). The games analyzed move away from this patronization of the player to

[356] To emphasize and repeat, the present work has challenged the lingering notions of objectivation in the relation of games and play, which *Play Matters* - at least in part – re-dichotomizes. The perspective in question is at risk of falling back to an appropriating political player-subject, which is one of the cornerstones of hegemonic play. (see: "Like any other object or instrument or technology, games are political, but the true political effect of these objects takes place when we occupy them, that is, when they become instruments for political expression" [73]). To speak with Gadamer, "play does not have its being in the player's consciousness or attitude, but on the contrary play draws him into its dominion and fills him with its spirit" (109).

reimagine the relational ecology of play in place of the tyranny of fun. In the way the titles enable the player to new insights, new pains, and new experiences of being baffled, challenged, and disabled, and afford new positions and economies of visibilities and affect, they can be described as moving play closely to what we can call with Foucault the practices of the *care of the self* or the *arts of existence*.[357]

In the *Use of Pleasure*, Foucault refers to these practices as follows:

> [A] group of practices that have been of unquestionable importance in our societies: I am referring to what might be called the "arts of existence." What I mean by the phrase are those intentional and voluntary actions by which men not only set themselves rules of conduct, but also seek to transform themselves, to change themselves in their singular being, and to make their life into an *oeuvre* that carries certain aesthetic values and meets certain stylistic criteria. (10-11)

The cases discussed foster play as an "art of existence" through a care of the self, which is a care for the Other.[358] They enact entanglements that are shaped by Lugones' close coupling of play with a "loving attitude in travelling across worlds" (14-5). Demarginalization, as the games practice it, is impossible without a change in one's own existence, reaffirming play as a mutual enabling to be. Hence, the practice of play as a care of the self, which the games carry and ask the player to open up to, involves another double relation, the one of the player to herself that animates her response/ability for the Other.

The indie games discussed thus imagine play both as 1) a care of the self that *is* a care for the Other and, it can now be concluded, 2) as a form of mindspacing. Mindspacing, it was argued, relates, reproduces, and brings forth material-semiotic configurations of subjectivity. As the player intra-actively negotiates spatiality with a game-as-play-partner, the lived body undergoes various processes in play that shape her imaginative links of mind and space; the excessive mediality of play, in this sense, negotiates the very categories through which the mind grasps its own existence and participates in the spatialization and mentalization of the lived and shared modes of being in the world. Discovering counter-spaces as places for and of play, the

[357] An example for Foucault's use of the term in his second and third volumes of the *History of Sexuality* would be moral conceptions in Greek and Greco-Romanian antiquity, which were focused on "the relationship with the self that enabled a person to keep from being carried away by the appetites and pleasures, to maintain a mastery and superiority over them, to keep his senses in a state of tranquility, to remain free from interior bondage to the passions, and to achieve a mode of being that could be defined by the full enjoyment of oneself, or the perfect supremacy of oneself over oneself" (*The Use of Pleasure* 31). For a more thorough overview of Foucault's use of the concept, see White's paper "Foucault on the Care of the Self as an Ethical Project and a Spiritual Goal."

[358] Contrary to the kenotic qualities of farming made visible in the previous chapter, the Other in question, its experience and social positionality, truly matter - it cannot be an any-Other-whatever.

player may bring into being a game's capacities not to subject but to subjectify, to enable her to cultivate a series of novel response/abilities, and, thus, to share and foster novel demarginalizing and empowering impulses in and of play.

7. Conclusion and Final Notes on Hegemonic Play

Phenomena of space offer crucial epistemic points of access for the play and the analysis of digital games. *Playing Place* has offered a novel approach to how the emergence of spatiality with digital games can be accounted for and questioned critically. With the body of the work laid out, a series of final summaries and evaluative reflections can be established.

Inspired by the fertile contributions of accounts of place in spatial theory, the central project of the present work was to reconsider the question of the production of space with digital games, the place-making and place-taking of their spaces and spatialities, in the context of practices of play. In a reaffirmation of the vital forces of play through the concept of *playing place*, the present account has argued that games can be situated among places for and of play. As play partners in locally gathered ensembles with excessive sides that affect the unfolding of play, games can be questioned for their participation in the double moment of the production/negotiation of spatiality in play. Drawing from a range of mostly self-referential titles and two machinima series as sites, spatial theory, play theory, feminist persepctives, and process philosophy as theoretical lenses, and the fruitful interdisciplinary conversation between game studies and cultural studies, the first half of the present work has contributed an open framework for the analysis of spatial phenomena in digital game play. The latter's fourfold mediality includes the dynamics and intricacies of the excessive processuality of play, those pertaining to the body, the role of games as designed technologies for play that contribute designed architectures and architectonics, and the latter's digitally preconfigured procedurality. The framework thus dispenses with a strict mapping and causal linkage of its elements in favor of the potential of radical and site-specific individualization and the resulting actualization of its elements.

The accomplishments of the first half of the project resonate with the fields of game studies and cultural studies in the following ways. In the context of game studies, it adds to the relevance and variety of spatial approaches, extending in particular the role assigned to concepts of place. Where place was thought of as an experiential outcome of player investment, the present account emphasizes place's relational, fluid, dynamic, practiced, and real-and-imagined character. In its problematization of games as cyberspaces, *Playing Place* holds that our places for and of play have always already been mediated and do not cease to require embodied play partners.

Crucially, it brings the practices of play into the light of analyses of said places, which also adds to cultural perspectives on social spatialization, which traditionally tend to prioritize

the allegedly more serious forms of culture. Game studies, in turn, are not just challenged to consider play as a secondary site of meaning-making in addition to spatio-formal analyses of games. Rather, they are more radically challenged to reengage with the affective and processual nexus from which meaning-form relations of game play come into being in the first place.[359]

The project's spatial rhetoric of play, furthermore, adds to Sicart's criticism of instrumental play and extends it to the subfield of spatial approaches to the medium of games. Here, the relational and closing spatial view on play can be of use as a strategic but self-aware counter-hegemonic mode of describing play.[360] The rethinking of playfulness as one of the projects of this rhetoric, for instance, offers new interdisciplinary routes of analysis, potentially speaking to architecture and design, psychology and sociology, game studies, cultural studies, and media studies alike.

Finally, by describing the assemblage-like nets of (power) relations unfolding with and in play not merely spatially but as spatialities, the present account underscores the critical intersection of game studies and cultural studies in a way that adds to either interdiscipline.[361] Extractivism, to use an example that already leads to the second part of the present work, was shown to be an overarching socio-cultural formation part of practices of play, design, and monetization, as well as the neoliberal and colonialist imaginaries of nature, work, and space running through them. In this regard, the spatial lens on extractivism and farming practices has highlighted and added to the potential of digital games to serve as sites of cultural formations, and thus shared (though not equally conceptualized) "boundary objects" (Star 602) within and among cultural studies and game studies.[362]

Turning to the second half of the present work, three case studies have explored spatialities in reference to the social, environmental, and mental sets of relations in current game

[359] For game studies, as already exemplified throughout the present project, the concept of *games-as-play-partners* shifts the focus of many traditional and still valuable terms such as *game actions* and more recent ones like *operational logics* in that the terms can receive new impetus from the question of what they reveal about games' imaginaries of play and their concrete and practiced en/disabling relations to the player.

[360] This is true in two potentially clashing regards. First, it is able to add to the agency of the player position in accounts of games, thereby enriching formal analyses of games. Second, it is well-attuned to questioning the human- and subject-centered prejudices of many traditional theories of play, which are in danger of resurfacing in play-centered critiques in the form of a detached and appropriating player-subject.

[361] In this sense, Sicart's ecology of play (see *Play Matters* 43) was read as a real-and-imagined spatial formation, which includes concrete discursive, mental, and material sets of relations. Whereas I describe play spatially, the metaphor *playing place* is not meant to weaken the concrete argument that play is generative of spatialities, as I hope has become clear throughout the work.

[362] Star's concept of *boundary objects* refers to "a sort of arrangement that allows different groups to work together without consensus" (602). She thinks of a boundary object as "a shared space, where exactly that sense of here and there are confounded" (602-3). Games as boundary objects within a spatial frame of analysis between game studies and cultural studies can foster "cooperative work in the absence of consensus" (604) in Star's sense.

play. The first case study has described the ant/agonistic elements and relations in an analysis of the figure of the ghoul in the *Fallout* game series. Once the figure's colonial history is uncovered, the ghoul shows vividly how games may express and oppose wider discursive formations in the context of U.S. race relations. The case thus points to meaning-making in play and beyond it, to wider discursive rifts, shifts, and transitions, in which play partners can constantly attain new sets of meanings in multiple series of cultural reimaginations. However, the excessive potential of play can never be finally closed, and, where games like the earlier *Fallout* titles allow for a space of negotiation, ghouls and zombies can unveil their ambivalent critical potential of questioning the logics of their Othering with every playthrough.

The second case began its exploration of extractivist spatiality with a fresh conceptualization of farming practices. Probing farming's role in the architectures and architectonics of two sandbox games, the chapter could reveal striking similarities between the cozy and soft-capitalist neoliberal world of *ACNH* and *CE*'s unflinching and uncritical escalation of barbarism and colonial subjectivity. In either title, farming is assigned a key role, testifying to the multiple rampant cultural extractivisms drawing from the shared imaginaries of space, nature, race, and work, which reveal ongoing epistemic and practical ties between neoliberal capitalism and its repressed colonial heritage in European and U.S. culture. As these issues may become sedimented, expressed, or differentiated in playful repetition, farming may receive various different meanings in the lived and embodied experience and will be misunderstood if taken as a mere epiphenomenon or a kind of failure. In that it sites current extractivist spatialities in play, farming needs to be regarded as a problematic and problematizing expression of cultural extractivisms.

To add to the role of the counter-hegemonic potentiality of play and games, the third case was dedicated to indie games and their practices of de/marginalization in the context of mental health discourses. Opposing negative trends in AAA games, the indie titles chosen as sites reveal a myriad of strategies to narrativize mental health phenomena creatively and without succumbing to the tyranny of fun and its stigmatizing exclusion of severe topics as play partners. Questioned as carriers of practices of mindspacing, the titles explicitly preconfigure linkages and relations between the mental and the spatial for strategic effects with an expressed tendency to oppose the inside-outside dichotomy of Western metaphysics that poses mental problems as an individual deficiency. As play partners, the games do not just offer different characters, stories, emotions, and phenomena as architectures for play but reimagine their very architectonics of play in a way that opposes other games' solutions to the question of how to

organize play. As discursive counterspaces, the games thus express an overarching imaginary of play as a form of the care of the self that is a care for the Other.

Revisiting the general approach developed in the context of the results worked out in the case studies, it needs to be concluded that an analysis of play is possible and prolific that starts from the element of spatial relationality instead of detached player subjectivity and agency. Viewing the emergence of spatiality in relation to the processual and affective entanglement of play partners, the analysis of farming practices highlighted game play's intra-activity/passivity and regarded the meaningful unfolding of play as a shared accomplishment. The affective visuality of the Ghoul in *Fallout*, which was described through an abjective-existential schema in relation to the historico-racial schema, only emerged from a perspective beyond formal features and beneath the semiotic level of digital games. The demarginalizing practices of indie games such as *Gris* or *The Psychotic Bathtub* can only fully be understood if linked to the efforts of the titles to reimagine the shapes and dynamics of play in addition to the compelling narratives of the titles. At the same time, the approach suggested does not disregard the usefulness of interpretative means focusing on procedural logics – without the close-reading of procedural logics pertaining to resources, inventory, and object ontology, the micro-politics of farming practices, for instance, would have remained implicit.

Many phenomena accounted for by the analysis have testified to the complex relations of the double moments of spatial production and negotiation, such as the Tenpenny Tower quest in *Fallout 3*, small instances of trifling and fooling around with the perspective in *The Longest Walk*, or the trading practices of *ACNH* players. The latter are an insightful example in that some cycles of negotiation with a game only begin from the excessive extension of some of its preconfigurations of play, adding further to the convoluted, often iterative, and nested relationship of the two moments that the theoretical arguments have already emphasized.

On the methodological level, it can be concluded that the open conceptualization of the approach developed indeed allows for heavy individualization in the analysis, rendering it highly adaptable and sensitive in the case studies. The analysis has taken three distinct shapes in relation to three different cases, showing how the theoretical approach may enable various modes of analysis, from historico-sequential (Chapter 4) and comparative (Chapter 5) to genre-related (Chapter 6) modes. A flexible use of postphenomenological techniques has proven to be beneficial for analyses that otherwise primarily engage in the interpretation of game logics: the lived dynamics of farming, for instance, give insight into play and gaming as everyday

mediated experiences that may conflict the messages implied by formal features and show how the latter, nevertheless, give shape to affects that cannot be reduced to mere procedurality.

In the form of an analysis of dominant spatialities, the three case studies have provided several insights into the critical potential of the concept of *counter/hegemonic play* and can now contribute to the latter's final entrance and epilogue. The chapter on practices of de/racialization and the zombie/ghoul has detailed how the very means to uphold hegemonic spatialities in play and games can sturdily continue to carry their own sedimented histories that call these hegemonies into question. Though its deracialization is currently continued in the *Fallout* universe,[363] the figure of the zombie/ghoul, in this sense, carries a counterhegemonic potential that cannot be fully silenced or prevented from resurfacing where consensus is continuously achieved rather than made dispensable by the total eradication the ghoul continues to be confronted with.

Speaking with Chapter 5, farming phenomena indicate that practices of play may be subject to wider formalization processes as those relating to the preconfigurations of a particular title. Hence, the analysis of counter/hegemonic dynamics of play cannot be reduced to hegemonic elements in design and architectures as part of places for play. Though the latter clearly express these counter/hegemonic formations with *ACNH* and *CE* assigning extractivist resource logics center positions in their architectonics of play, practices of play appear as distinct and decisive elements in the processual production and negotiation of spatial hegemony. Hegemonic play practices, as farming details, can draw attention to their implicit politics via excessive repetition, akin to a cultural return of the repressed.

Finally, the analysis of mindspacing practices in Chapter 6 shows that the implicit accomplishments that secure hegemonic knowledges can be reappropriated in game design to tell stories of difference that could hitherto not be made intelligible. This aspect reveals a vital and subversive kind of cultural work, though still part of the implicit aspects in indie games' strategies of demarginalization. One could argue, however, that it is this kind of work that the politically involved, rather than the detached position of the scientist is immediately and necessarily drawn and dedicated to if the critical impulses of cultural studies are taken seriously.

[363] The current American TV series *Fallout*, which was released in 2024, continues the deracialization of the ghoul and confuses the ontology of the figure while paying close attention to other details of the game lore. Visually likening the ghoul to the figure's outlook in *Fallout 4*, the series portrays one of its main characters as a cannibalizing and unkillable antihero, discarding any thematization of social marginalization and anti-ghoul bigotry as present in the earlier *Fallout* titles.

Against these aspects and findings, what can the concept of *hegemonic play* contribute to the field? What does it reveal about the kind of work of questioning dominant spatialities in play?

Generally, the term *hegemony* does not depict an idea of power as a single opinion held by a ruling group that is imposed on all members of society by force. Rather, it points to the (mostly) hidden and invisible workings that stabilize a series of perspectives as natural and necessary readings of an event. Hall's thinking has, along these lines, referred to "the 'work' required to enforce, win plausibility for, and command as legitimate a decoding of the event within the dominant definitions" ("Encoding" 270) of a culture.

Linking Gramsci's work to digital games, Cassar has argued that "games do their part in establishing and consolidating a general consensus, which is cardinal to the reproduction of the current state of affairs" (338). At the same time, he contends that games may also "provide a counter ideological framework that moves society to question the status quo and fight to initiate change" (345), to which the final case study of the present work can only testify. Fron and colleagues have, in a similar fashion, described a "hegemony of play" referring to the way the gaming industry has "infused both individuals' and societies' experiences of games with values and norms that reinforce that industry's technological, commercial and cultural investments" (1).[364]

The present contribution has added to these discussions of hegemonic formations via an analysis of play, one side of which has described play spatially and via the concept *playing place*, in a strategically closing manner. Its counterpart, however, *hegemonic play*, attempts to uncover a new level of analysis, which adds to Cassar and Fron and colleagues' works. Through a radically opening motion, hegemonic play strives to move from the question of *the ludic forms of culture* to the *cultural forms of the ludic*. In Jenkin's gaming world of "transmedia storytelling, one that depends less on each individual work being self-sufficient than on each work contributing to a larger narrative economy" (124), hegemonic consensus does not merely rely on the denotative repetitions of games, their spatial architectures, but, additionally, on the hegemonic forms of the embodied performance of repetition and difference in the ludic, i.e., on hegemonic and counterhegemonic play. Counter/hegemonic play refers to a momentary

[364] Though the authors use the term *hegemony* in relation to play, they primarily criticize the sites of game production, technologies, and (gendered) stereotyping of the player thus disregarding play itself as a processual discursive site where consensus is negotiated with the player (rather than economically imposed by the gaming industry). Here, the present insistence on a double moment of production and negotiation can enrich too strict conceptualizations of economic determination, echoing Hall's reading of Gramsci in the formative phase of British cultural studies.

process, in which play negotiates its own form, limits, and futures among play partners. Hence, it does not go far enough to maintain a dichotomy of hegemonic games and counterhegemonic players, as is often done. Whether *Fallout 3* offers to kill an entire city of marginalized ghouls, *Conan Exiles* affords practices of slavery, and *Actual Sunlight* poses its disclaimer "Do You Want To Continue?" – the play partners negotiate play's limits, its spatial unfolding, together and by en/disabling each other in a mutual unfolding and distribution of playfulness and agency.

For the side of the researcher engaged in a critical analysis of games as culture, taking seriously hegemonic play and hegemonic games means that it is not enough to make a list of statements about play, an inventory of its possible and preferred meanings. Rather, the work involved is about mapping the hidden epistemic components and contributions by the social practices that play gathers and that gather play. To use a language-based terminology but immediately push it beyond its purely linguistic use and sense, a critique of hegemonic play involves a work that relates to more than the *denotative* level of play. Hall's insistence on the *connotative* domain of cultural knowledge is informative in this regard:

> Connotative codes, above all, which enable a sign to "reference" a wide domain of social meanings, relations, and associations, are the means by which the widely distributed forms of social knowledge, social practices, the taken-for-granted knowledge which society's members possess of its institutions, beliefs, ideas, and legitimations are "brought within the horizon" of language and culture. These codes constitute the crisscrossing frames of reference, the sedimentations of meaning and connotation, which cover the face of social life and render it classifiable, intelligible, meaningful. ("Culture" 315)

Connotations are the result of a constant, ephemeral, and yet concrete cultural work, which extends to the places for and of play. Not the work of drawing up a set of truth-claims about play, but the hidden kind of work of establishing the consensus that makes these truth-claims eligible as meaningful in the first place.

The present project has engaged in this kind of connotative work throughout its case studies: the racial logics that inform the ghoul as a meaningful play partner, the background knowledge of "a category that does not have a common name in gaming culture," as one of the respondents to the survey on farming put it, and mindspacing as a distinct and hidden level to the work of mainstream and indie games, which makes mental and spatial phenomena meaningful and intelligible for various projects. In these cases, the analyses started from a distinct conceptual work that aimed at the political, historical, and contingent shapes of

knowledges and practices. Though the form of the cultural codes and logics that subject us as their carriers to their doings and effects is often arbitrary, once viewed from a distance, it is, yet, massively powerful, particularly if left unattended.

The cultural work of the researcher of anti/hegemonic play, the dominant spatialities of games, and their architectures and architectonics of play, along these final thoughts of the present work, can thus be linked ambivalently back to the excessive mediality of play. Play, as this work has argued, can both negotiate hegemonic figurations as well as take hegemonic forms itself. Those interested in the analysis of the abundant and vital forces of play are, hence, called to relate to play itself as if to a play partner, to both affirm and question it continuously, without subjecting an attentive eye to a loving heart.

Appendix A: Differentiating Farming and Grinding – An Online Survey

This section summarizes the details of a short online questionnaire study conducted during the preparations for Chapter 5. It is structured following a shortened version of the usual sections of empirical quantitative papers (*introduction*, *method*, *results,* and *discussion*). In the context of the game studies literature on farming (see again section 5.1.), it strives to prepare a more praxeological and emic conceptualization of farming phenomena, drawing from a set of online discussions that were taken up in a mixed quantitative and qualitative study design. Drawing from the online discussions, multiple personal conversations with gamers, qualitative contributions by study participants, and feedback during the ongoing survey, a set of thirteen items (each capturing one argument made by gamers) was created and then rated by 108 study participants according to their personal agreement. Together with the qualitative responses, the quantitative results present a distinct pattern of differentiation, reflecting potential ways of conceptualizing *farming* and *grinding* (for the potential benefits of adopting the emerging perspective or the relevance of the results in the context of game studies, refer again to Chapter 5).

Introduction: An Emic Impulse to Conceptualize *Farming* and its Difference from *Grinding*

The starting point for the present exploration was given by several online discussions (dating from 2016 to 2020) on the platform *Reddit*[365] that thematized the differentiation between *farming* and *grinding*[366] in a gaming context (see Keltyrr; Rage_Engage; "Is There a

[365] Reddit is an American social news network in which content (ranging from written posts and links to pictures and videos) can be shared, rated, and discussed. Users can join (mostly) thematically organized communities or subreddits and are thus presented with the content of others, which they can either up- or down-vote so that affect allows the algorithmic differentiation of posts.

[366] The term *grinding*, as these posts link it to *farming*, shares the latter's original ties to early MMOs: a 2013 dissertation by Bojin focusing entirely on this phenomenon and its conceptualization by the community around the game *Guild Wars* (2005), defines "grinding" (also "the grind") as "a commonly exchanged term within MMOG player communities" that refers to "the constant and repeated engagement with one or more already repetitive tasks or mechanics" for the sake of "acquisition of in-game experience points or virtual goods" (3). Other scholars have used the term to primarily denote a type of game mechanic (see Sgandurra), which might even be described as a "dark pattern" of game design by some, "a way of coercing the players into needlessly spending time in a game for the sole purpose of extending the game's duration" (Zagal 3-4). Currently, the term is even well-known enough to be used metaphorically by researchers of games and gamers (Biklas and colleagues, for instance, use the term for the physical strains of professional gamers).

Difference between Grinding and Farming in a Game?"; Stillhart). The central concern of them was with gamers' perceptions of their gaming experiences, which is why they offer a pool of emic praxeological (self-)conceptualizations emerging from the field itself (the subreddits were all linked to gaming, e.g.: "r/gaming" or "r/MMORPG," without a researcher framing the question beforehand). Taking up this impulse to combine an inductive with a deductive approach, the present study started by differentiating and clustering the arguments presented by the gamers qualitatively. Posts either presented single arguments (e.g., "Imo grinding is cranking out xp and farming is cranking out materials lol" or "To me, farming is when it's still slightly enjoyable, and grinding is when you've sone [sic] it so much its lost all enjoyment") or whole definitions compiled from multiple differences ("i cant really put it into words right now, but as i see it, Farming is usually enjoyable bit of time where i farm some ingredients, whether from nodes or from Mobs, while Grinding is a soul sucking boring repetitive Mess of Doing the same thing over and over and over, and generally when something is called grinding it usually takes much longer then farming. maybe im wrong but thats how i see it"). Hence, the arguments needed to be collected, clustered, and differentiated into discrete (non-overlapping) dimensions, which formed a set of twelve initial items. The latter were formulated in such a way that they could be related to both farming and grinding. A final thirteenth item was added during the survey due to qualitative feedback from study participants (the survey explicitly asked for qualitative input at the end). The developed thirteen dimensions represent three potential commonalities (1-3) of and ten potential differences (4-13) between farming and grinding (table 3).

Table 3

Items, dimensions, and dimensional poles as outcomes of the first inductive step [a]

item	dimension	poles (if any)
1 - *"... is about repetition of a part or an element of a game."*	repetition	-
2 - *"... is about rewards (i.e., something is gained)."*	reward structure	-
3 - *"When I am ...ing , I have a particular goal in mind."*	telic structure	-
4 - *"... is more of a 'style' of play or game design than a single act."*	type	style - act
5 - *"... is tied to a positive feeling of accomplishment."*	feeling of accomplishment	-
6 - *"... is more about items, materials or resources than it is about leveling up or gaining experience."*	reward type	items/materials/resources - level/XP
7 - *"... is mandatory and not optional."*	freedom	mandatory - optional
8 - *"... is frustrating or boring rather than fun."*	positive emotions	frustrating/boring - fun/exciting
9 - *"... is stressful and time-consuming."*	resource cost	-
10 - *"... is difficult."*	difficulty	-
11 - *"For ..., a player needs skills."*	skill requirement	-
12 - *"In games with combat mechanics, ... is more about other mechanics than combat."*	focus on combat	-
13 - *"... is an inherently necessary part or content of the game more than a specific strategy of the designer (e.g., to lengthen the total play time)."*	design function	internal - external

a. Item 13 was only added in the course of the study to pay tribute to participants' feedback.

The purpose of the survey conducted in the second step was to produce further quantitative data regarding the dimensions to create a clearer picture of how most gamers use and differentiate *farming* and *grinding*. The main hypothesis (H1) put forth, therefore, was: *Participants' ratings of farming and grinding show a significant difference between the two phenomena*. The main interest of the survey was the question of which particular dimensions stand out in the perception of gamers, and, therefore, to move from the individual accounts to a more generalized but still historically contingent level of insight.

Method: Participants, Procedure, and Measures

An online survey was implemented via Qualtrics, and the link was distributed to English-speaking gamers on *Facebook* and *Reddit* via posting a short description of the survey and its purpose. Data collection was conducted between the end of August and early October 2023. No incentives were offered except that the results would be shared with the participants. Before starting the online survey, all participants were informed about the goals of the survey. They were only able to access the survey after providing informed consent. Besides being an English-speaking gamer, the inclusion criteria were: at least 18 years of age and not under the influence of drugs.

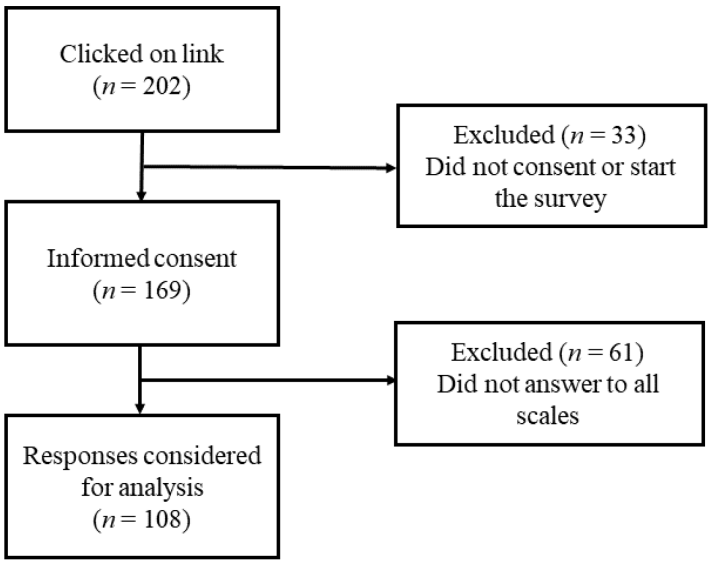


Fig. 95. CONSORT flowchart of participants of the present study.

A self-selected sample of 202 players initially followed the link (fig. 95). After excluding participants who did not meet the inclusion criteria or did not answer all scales needed for the statistical analysis, a final sample of N = 108 participants remained.

The data of N = 108 participants (women: 29.6%, n = 32; men: 62%, n = 67; non-binary: 7.4%, n = 8) showed a mean age of 30.6 ± 8.3 years (MD ± SD in the following) for the final sample. [367] Participants were between 18 and 56 years of age (data, furthermore, indicated a non-symmetrical bimodal distribution with a large peak at 26 and a smaller peak at 41 years of age).

After informed consent and the above minimal demographic variables, participants were asked to rate the thirteen developed items on a slider scale from 1 to 10 (representing their degree of agreement with higher numbers indicating higher agreement) when considering farming and grinding respectively. Additional questions operationalized further arguments from the field: 1) subjectivity, 2) game-specificity, and 3) game-type-specificity of the terms ("Is the line between farming and grinding subjective?"; "Does the use of the terms depend on the game?"; and "Do the terms only apply to multiplayer games?"). Then, the theoretical core question of the survey was presented abstractly, explicitly asking for the underlying differentiation of the participants on a meta-level. Here, participants were asked to pick the one statement out of the following that would best reflect their opinion: "Farming is only a subset of grinding (i.e. it is only a 'type' of grinding)."; "Grinding is only a subset of farming (i.e. it is only a 'type' of farming)."; "Grinding and farming are simply two different things."; "Grinding and farming are basically the same thing." Finally, an open text format was offered to participants where they could explicate their own conceptualization of farming and grinding and offer feedback on the study design.

As respondents suggested a further thirteenth dimension via the open question format early on in the survey process, the final item was added later (resulting in a marginally smaller number of participants having rated said item). Overall, choices were not forced, i.e. individual items could be left unanswered (fortunately, item non-response was neither a common nor a problematic issue because it occurred at random). Data revealed that participants completed the survey in 6 ± 4.2 minutes on average.

[367] The demographic variable *sex* (as well as age) was only asked for to check for extreme bias due to the sampling method; it did not enter the analysis as a variable in any way and reporting it was optional for the study participants.

Results

To test for H1 (Participants' ratings of farming and grinding show a significant difference between the two phenomena), a multivariate analysis of variance (MANOVA) was computed (with participants' ratings on the thirteen items as dependent variables and the two groups, farming and grinding, as independent variables). To first check the necessary model assumptions, Box's test of equality of covariance matrices was conducted. Here, the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups was not violated at a *p*-value level of .005, as suggested by Huberty and Petoskey.

Furthermore, the Shapiro-Wilk-Test was used to assess normal distribution of the data. As indicated by the result ($p < .05$), participants' acceptance ratings were not approximately normally distributed. However, MANOVA is considered relatively robust to violations of the normal distributions (see Finch). Still, non-parametrical testing was used in the further post-hoc procedures to avoid violating model requirements.

To further check for the equality of error variances (homoscedasticity), Levene's test was conducted. There was homogeneity of the error variances for all items ($p > .05$) except 2 ($p < .001$), 3 ($p < .004$), 4 ($p < .019$), 10 ($p < .008$), and 11 ($p < .008$). Though this somewhat limits the interpretation of the MANOVA, it does not limit the interpretation of the following post-hoc tests as they are independent of the former's assumptions.

Then, the one-way MANOVA was conducted to determine whether there is a difference between farming and grinding regarding the thirteen dependent variables rated by study participants. The results showed a significant difference in rated scores based on whether they concerned farming or grinding, $F(13, 187) = 20.307$, $p < .001$, $\eta^2 = .585$, Pillai's Trace = .585. Thus, the results indicate that, overall, 58.5% of the variance in the data set can be explained with the distinction between farming and grinding. Hence, the null hypothesis was rejected and it was concluded that there is a difference between farming and grinding with regard to the dependent variables.

As the present work was interested primarily in the single pairs of variables, post-hoc tests were computed to test for differences in the thirteen items between farming and grinding. As data neither revealed a normal distribution nor showed homogeneity of error variances for all items, Mann-Whitney-U tests were computed instead of regular t-tests (table 4 shows the medians, standard errors of medians, minima, and maxima).

Table 4

Descriptive statistics (sample size, median, median standard error, minimum and maximum) of the thirteen items according to group (farming or grinding)

		n	*Md*	*SE (Md)*	min	max
item 1	farming	108	7.5	0.24	1	10
	grinding	108	9.0	0.22	2	10
item 2	farming	108	10.0	0.21	1	10
	grinding	108	8.0	0.28	0	10
item 3	farming	108	9.0	0.20	1	10
	grinding	108	9.0	0.25	0	10
item 4	farming	108	5.0	0.28	0	10
	grinding	108	6.0	0.32	0	10
item 5	farming	108	5.0	0.25	0	10
	grinding	108	4.0	0.29	0	10
item 6	farming	108	9.0	0.26	0	10
	grinding	108	2.0	0.26	0	10
item 7	farming	107	2.0	0.27	0	10
	grinding	107	4.0	0.30	0	10
item 8	farming	108	5.0	0.25	0	10
	grinding	108	7.0	0.27	0	10
item 9	farming	108	5.0	0.25	0	10
	grinding	108	6.0	0.27	0	10
item 10	farming	107	2.0	0.20	0	8
	grinding	108	4.0	0.26	0	10
item 11	farming	108	3.0	0.22	0	9
	grinding	108	3,00	0.27	0	10
item 12	farming	108	6,00	0.29	0	10
	grinding	107	3,00	0.27	0	10
item 13	farming	101	2,00	0.24	0	10
	grinding	102	3,00	0.27	0	10

Adjusting the alpha level for multiple (.05/13) comparisons (α = .00384615), there were statistically significant differences between farming and grinding regarding items 1, 2, 6, 8, 9, 10, and 12 (fig. 96). The respective effect sizes were small to medium except for the comparison concerning item 6, which showed a large effect size (table 5).

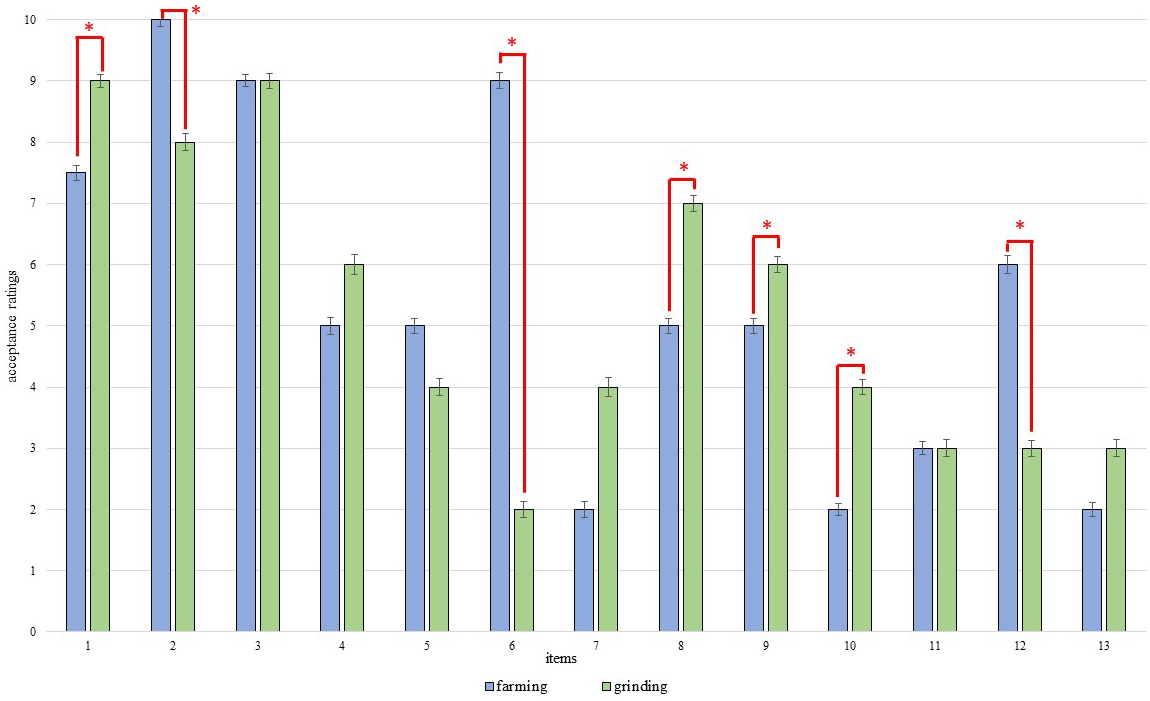


Fig. 96. Medians and standard errors of the median of the thirteen rated items paired according to groups (farming and grinding). Significant comparisons are highlighted.

Table 5

Results of Mann-Whitney U tests with effect sizes[a]

	n	*U*	*z*	*p*	r
item 1	216	4428.00	-3.158	.002*	.22
item 2	216	4042.00	-4.123	.000*	.28
item 3	216	5650.00	-0.411	.681	.03
item 4	216	4995.50	-1.830	.067	.12
item 5	216	5020.00	-1.780	.075	.12
item 6	216	1268.50	-10.052	.000*	.68
item 7	214	4498.00	-2.737	.006	.19
item 8	216	4179.00	-3.624	.000*	.25
item 9	216	4216.00	-3.544	.000*	.24
item 10	215	3984.50	-3.986	.000*	.27
item 11	216	5057.50	-1.703	.089	.12
item 12	215	3373.00	-5.315	.000*	.36
item 13	203	4814.50	-0.813	.416	.06

a. The sample sizes (n) in the comparisons represent acceptance ratings and not participants. The marked results (*) are significant at α (Bon. corr.) = .00384615 due to correcting for multiple comparisons (.05/13).

Finally, answers to the two ultimate items are depicted in figures 97 and 98.

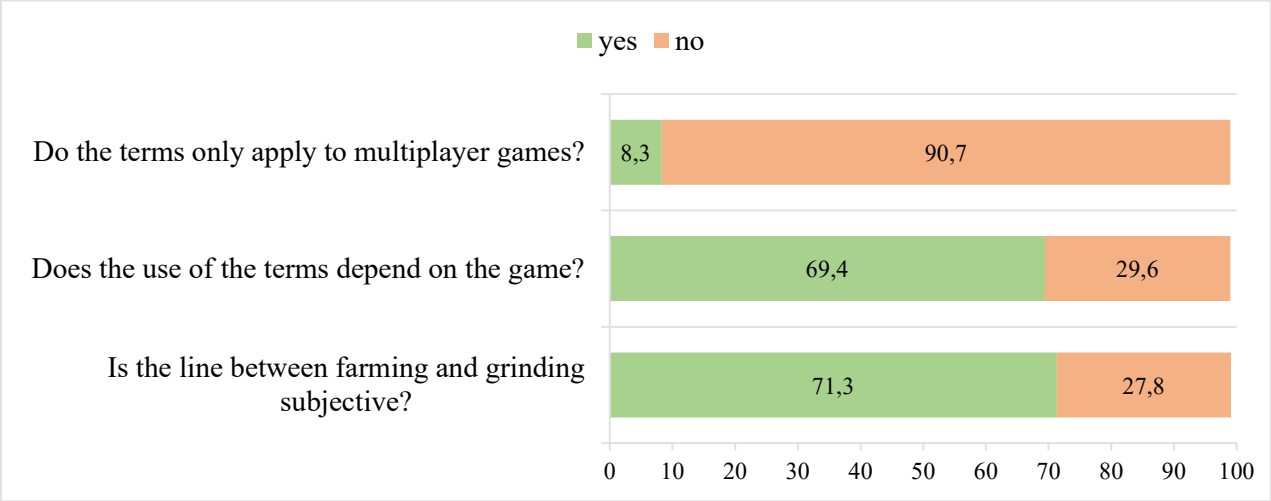


Fig. 97. Percentages of participants who answered the three binary questions with "yes" or "no."

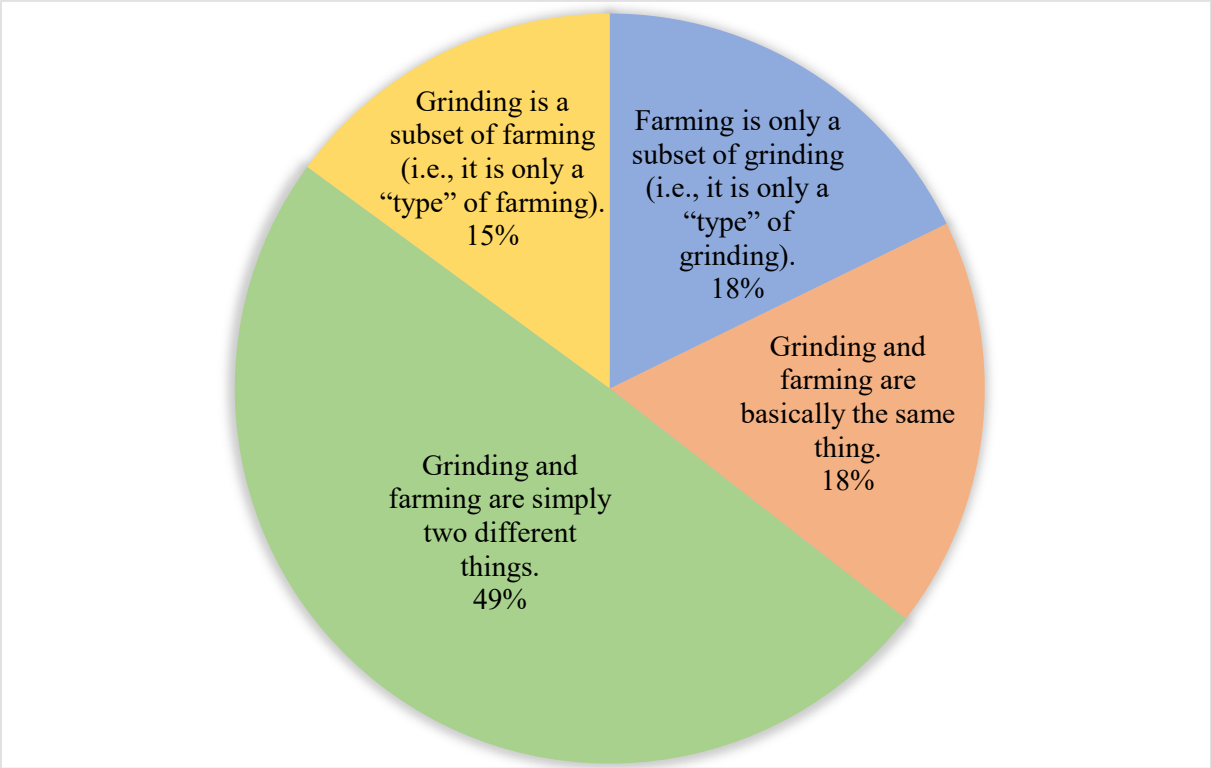


Fig. 98. Pie chart diagram showing the proportions of chosen answers regarding the relation between farming and grinding.

Beyond the quantitative responses, about a third of participants shared qualitative comments in open text format. Table 6 shows the responses grouped loosely around the thirteen categories (which the comments often expand rather than just reproduce) and an additional category for further aspects going beyond the established items (some of them, e.g., refer to the relation of farming and grinding as touched upon by the two final questions).

Table 6

Participants qualitative responses to the open text format question grouped thematically with the 13 items

Item 1 (*… is about repetition of a part or an element of a game.)*	"farming" just means performing repetitive or multiple actions to acquire something
	Farming and grinding are both subsets of a larger idea of repetitively performing the same thing over and over (as vaguely opposed to progressing through the game or doing different activities), and both have the explicit end goal of increasing a resource, but I don't know what I would call the superset of farming and grinding, or if there's even a term for it.
	Grinding is repetitive action, farming is meant to remove the repetitiveness through some automation.
	I feel like they're basically the same in that their repetitive tasks. I think grinding is basically killing for xp over time, while farming is typically more for certain drops
	Whether or not grinding or farming are an inherent part of the game or a strategy by the developers depends on the game, and sometimes it is neither, but rather a player strategy. Farming is meant to gather resources, either material or experience. Grinding is farming taken to an intense level, often more repetitive. A player running in circles on one small section of a map to trigger battle over and over is grinding. A player running through an entire dungeon repeatedly is farming (the length of each run and variety provided within it reduce the sense of grinding).
Item 2 (*… is about rewards [i.e., something is gained].*)	Farming is done only for the gain of items, objects, even some quests, etc.;
	Farming is about harvesting elements or resources
	Grinding to me means repeating some action over and over for some kind of gain. I think farming originally meant grinding for some material element (item, currency, etc), but now its pretty close to being the sake as grinding (one could use a term like "xp farm", or farming science). Still to me it seems like there's a subtle narrowing in farming as it has to yield some in game resource, while grinding doesn't (for example I think one could grind for achievements, I don't think one could farm them). This all is based on definitions I pulled from my ass, so it might all be bullshit.
Item 3 (*When I am …ing, I have a particular goal in mind.*)	"Grinding" is also usually done to acquire multiple of something (levels, items, etc.), while "farming" usually implies a single goal or instance of farming
	[farming and grinding] both have the explicit end goal of increasing a resource, but I don't know what I would call the superset of farming and grinding, or if there's even a term for it.
	Farming usually refers to killing enemies or otherwise harvesting resources from other entities and can usually be done in large batches or in quick

	succession (i.e. killing an entire group of enemies, killing one specific enemy over and over, etc) and can sometimes be accomplished quickly (if you're farming for a specific drop and you get it on the first try, congratulations!), and often has either an element of randomness or operates on a large scale (there may be a low chance that an enemy drops an item, so you farm them to get the item. Or maybe they drop it frequently, but you need multiple/many, so you farm to build up your stock). Grinding can take much longer, and is harder to skip, if at all. You can't really short-circuit grinding, since by definition it takes a while, but the end goal is deterministic (i.e. there's no random chance involved; you need X amount of experience to reach this level, and that number isn't going to change). [random vs. determinicist goal] Grinding is something that many games expect from you if you don't are especially skilled. You need to get experience to continue and have to play the same and same fights again. But it is not ABOUT the combant. It might need the combat, but it is ABOUT the levels you need to continue the story.
Item 4 (… *is more of a "style of play or game design" than a single act.*)	"Grinding" is playing the game as it's meant to be played, but non-stop and typically using the most efficient method to gain xp, money etc, while playing the game as it's meant to be played. "Farming" is playing the game NOT how it's meant to be played, typically using exploits or bugs to gain xp, money etc. But farming is typically much faster and less fun. I feel like farming can be passive while grinding is more involved. To contextulized it, I fallout 4 you can farm xp by building the same object over and over again with little trouble or you can grind xp by repeating dungeons and areas with many enemies. Same goal but different approaches
Item 5 (… *is tied to a positive feeling of accomplishment.*)	Farming for me is time consuming but often very relaxing. I would sometimes go farm (in this case herbs in WOW specifically to relax. Grinding (xp) is as time consuming but inherently a bit more stressful.
Item 6 (*... is more about items, materials or resources than it is about leveling up or gaining experience*.)	Grinding is specifically generating XP from combat. Farming is intentional accumulation of rewards, be that XP, a certain item, class of item, or all items generally. The difference between the two is pretty distinct: farming is for increasing your material resources (getting currency, crafting ingredients, consumables, weapons, etc) whereas grinding is increasing your personal strength (gaining experience, levels, increasing stats, etc). Farming usually refers to killing enemies or otherwise harvesting resources from other entities and can usually be done in large batches or in quick succession (i.e. killing an entire group of enemies, killing one specific enemy over and over, etc) and can sometimes be accomplished quickly (if you're farming for a specific drop and you get it on the first try, congratulations!), and often has either an element of randomness or operates on a large scale (there may be a low chance that an enemy drops an item, so you farm them to get the item. Or maybe they drop it frequently, but you need multiple/many, so you farm to build up your stock). Grinding can take much longer, and is harder to skip, if at all. You can't really short-circuit grinding, since by definition it takes a while, but the end goal is deterministic (i.e. there's no random chance involved; you need X amount of experience to reach this level, and that number isn't going to change). Farming is to gain items. Grinding is to gain experience. For me grinding is used more for mechanics like quests, levels or skills (for example in RPGs), meanwhile farming feels more related to specified things like items (currency, etc) and terms like „experience" For example: „grinding level" but „farm exp. points"

Grinding is more about xp and levels, whereas farming is more about trying to gain items or powers, imo.

I have Bachelor's in Video Game design from Brazil '2011 and have worked in a videogame company dealing with brazilian, korean, latin american and american communities. I believe some of the questions in this survey suffer from a language barrier. Grinding and Farming are two different terms in game design and any confusion between the two is likely due to people using the term in other languages.
-Grinding is for leveling up, making your character reach a certain level. It comes from the term of "to grind" which is to work for something day after day, in this case it's your character level
-Farming is for items. It comes from the idea of harvesting a crop and picking your vegetables when they are ready, in this case it is for items. You may have to use combat for these items, or explore many bushes etc., but collecting that specific item repeatedly is "to farm"

I pretty much use the terms to differentiate between getting items and EXP; farming IRL makes new items, while grinding IRL (i.e. on a grindstone) sharpens existing items

I think the linguistics plays a part in it for me - farming to me implies repetitive but not difficult, with materials gained (like the literal farming aspects of 'Zelda: ToTK' and 'Animal Crossing'), whereas grinding implies the game requires laborious/repetitive parts for progression but may not produce in-game materials (e.g. needing to catch numerous specific Pokemon in 'Pokemon Go' to unlock the next level")

I would say - "grinding levels" vs "farming xp" ('farming levels' sounds weird) / "grinding x enemy" vs "farming x drop" (or maybe "grinding *for* xyz drop") - just a semantic difference in many cases.

I'm coming at this survey from the perspective of a Borderlands player (mostly Borderlands 3), so I'm more familiar with farming items than I am with grinding EXP or money. When I think of grinding, I think of Souls games.

Item 7

(*... is mandatory and not optional.*)

Farming is done only for the gain of items, objects, even some quests, etc.; often which are not necessary components of the game. Grinding is done to further experience and story, and often times, is a necessary component of the game.

Farming is about harvesting elements or resources to use in fame [sic, most likely due to a typing error in failing to spell "game"] (cultivation of items). Grinding is more related to an unskippable element or hindrance to progression or game that must be overcome. You must TOIL doing something that may be fun, but gets repetitive. I typically associate this with a bad difficulty curve or RNG elements requiring repetative play that may not necessarily need skill

Farming is like... it implies you've sort of "broken" the game, like you're not meant to do that, it's outside the design. Like, if in some imaginary game there's a room that continually spawns monsters, with the idea being that you can never kill them all and just need to move on before you get overwhelmed, but you work out some trick to kill them instantly so you can just sit there and rack up infinite gold or whatever, you're "farming" that room. But if you need ten million gold pieces and the infinite monster room has been conveniently provided for the purpose of you doing that, that's grinding.

I would say farming is typically doing some repetitive activity by choice to gain multiples of an item so you can do something with it (craft stuff, sell them, whatever) whereas grinding is a repetitive activity built into the game (do repetitive missions, kill a lot of stuff for experience, etc.)

The line between Farming and Grinding for me is that Farming is an option to the player in the game to improve their abilities. Grinding is something the game requires in order to progress -> collect 32 xyz to get the next quest.

	Achievements shouldn't be tied to farming imo that makes them grindy. Play 1, 10, 100, 1000 etc. turns me off a game immediately, achievements need to be rewarding and intriguing on their own right.
Item 8 (*... is frustrating or boring rather than fun.*)	"Grinding" implies that it's tedious, monotonous/menial and time-consuming by definition Grinding is more related to an unskippable element or hindrance to progression or game that must be overcome. You must TOIL doing something that may be fun, but gets repetitive.
Item 9	You must TOIL doing something that may be fun, but gets repetitive.
(*... is stressful and time-consuming.)*	Farming for me is time consuming but often very relaxing. I would sometimes go farm (in this case herbs in WOW specifically to relax. Grinding (xp) is as time consuming but inherently a bit more stressful. Grinding also can have a connotation of being less relaxed, like you are going as fast as possible
Item 10 (*... is difficult.)*	Just wanted to add, I believe games (at least single player ones) should not force players to farm something in order to progress main story, but to certain extent it's acceptable to do so when it comes to grinding. Since usually main character players control gets stronger as story unfolds, at least it makes some sense to create level/skill/etc requirements, and personally, it feels more immersive and engaging to perform better in games just like how characters you control fight well in the story. Although there needs to be a setting to disable them for more casual players who do not want to experience too much difficulty in games.
Item 11 (*For ..., a player needs skills*.)	Grinding is moreso hours put in for an improvement in skill while farming is for improvement in equipment or stats
Item 12 (*In games with combat mechanics, ... is more about other mechanics rather than combat.*)	For me the main difference is items. In most cases farming would be for items and grinding is for skill/xp/lvl-up. I guess you can farm for XP but for me that wouldn't involve significant combat - would involve XP gains through other means like minigames, map discovery, etc. Grinding is mainly combat (or whatever the primary gameplay loop is) for XP. To me, grinding is more combat orientated; ie, "kill 500 of this type of mob/monster", the gain is experience or reputation. whereas farming is more about gathering resources ie "collect 500 piecesof this type of ore", the gain is materials for crafting etc. (World of Warcraft) When someone says "farming", I generally think of PVP. For example, farming kills, farming newbs, farming wins, etc. When someone says "grinding", I think of the tedious process of acquiring materials and experience in RPGs, without fighting other players.
Item 13 (*... is an inherently necessary part or content of the game more than a specific strategy of the designer [e.g., to lengthen the total play time].*)	Grinding feels like game time stretching and less a part of the actual game. I see farming more as a part of the game and grinding more as a stretching of the game time through repeated farming, etc.
Further aspects	a farm is both a location within the game where farming happens, and the act of benefitting from or setting in motion that farm. farming is always at least partly automatic; at least some steps of grinding will complete on their own

without player involvement. think of actual farming, in a farming game. you do some things to set the task in motion (till ground, plant crops, water crops) and then you can leave and do other things and the crops will continue to grow. when you return later, they are ready for harvest. this inactive stage where the player's actions are not necessary is the defining point of farming.

Farming and grinding are both subsets of a larger idea of repetitively performing the same thing over and over (as vaguely opposed to progressing through the game or doing different activities), and both have the explicit end goal of increasing a resource, but I don't know what I would call the superset of farming and grinding, or if there's even a term for it.

Grinding and Farming are overlapping each other. Think about a Venn diagram. One circle is Grinding, one circle is Farming. The overlapping part includes about ~60% of the volume of both circles.

On the last question I would have put "Grinding and Farming are related, but neither is a subset of another." They could both be considered a subset of a category that does not have a common name in gaming culture."

Farming for me is time consuming but often very relaxing. I would sometimes go farm (in this case herbs in WOW specifically to relax. Grinding (xp) is as time consuming but inherently a bit more stressful.

I'd say that farming is about multiplayer, free to play and gacha while grinding can occur in single player games,ie when you need to level up to beat a boss or progress in the story.

They're synonyms; people just use "farming" when discussing games they like, because "grinding" has an even more negative connotation.

Discussion

Overall, the results of the study showed a general difference between farming and grinding as reflected in the expressed and elaborate response patterns of the participants. More specifically, the ratings of items 1, 2, 6, 8, 9, 10, and 12 differed significantly when compared pairwise (fig. 99).

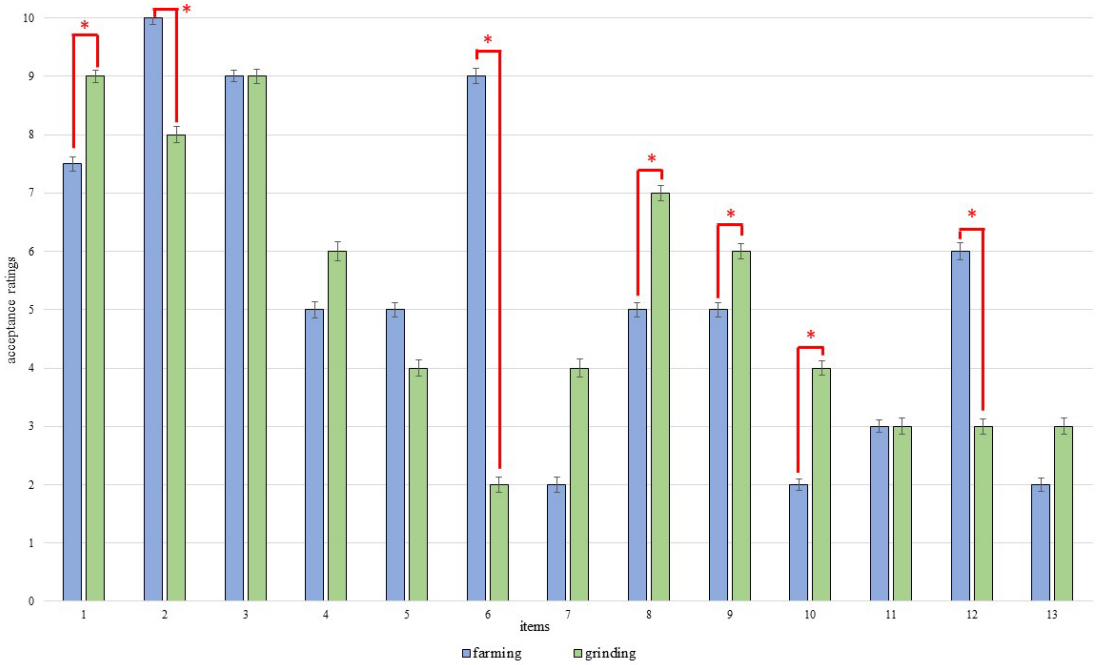


Fig. 99. Medians and standard errors of the median of the thirteen rated items paired according to groups (farming and grinding). Significant comparisons are highlighted.

The first three items were created considering gamers arguments about the similarities of farming and grinding. The very first item, on which both practices scored high (medians > 7), testifies to the common element of *repetition*. Many qualitative responses point in the same direction (e.g., "I feel like they're basically the same in that their[368] repetitive tasks," "Grinding is farming taken to an intense level, often more repetitive" or "Farming and grinding are both subsets of a larger idea of repetitively performing the same thing over and over"). However, the item significantly differentiated between the two with grinding being perceived as even more repetitive. This could, in part, be due to the tendency of gamers to frame the element of repetition more negatively for grinding (in line with this reading, grinding was perceived to be less fun according to item 8).

[368] In the many quoted comments to follow, the report refrains from highlighting all deviations from standard spelling for better readability.

The second item clearly shows that both farming and grinding include the element of *rewards* or *gains* (medians ≥ 8). Strikingly, farming reveals a median at the upper limit of the scale for this item (which, as none of the other items yield the same score, does not appear to be a mere ceiling effect). Thus, the results strongly show that gamers argue "something is gained" in farming.

The third commonality between the two practices is the telic structure, as operationalized through the subjective self-reported *goal-orientedness* of participants. Here, both farming and grinding score equally high (medians = 9). Though the previous question asked for the reward involved and it is likely that participants thought of the reward as the goal (e.g., as in "'Grinding' is also usually done to acquire multiple of something [levels, items, etc.], while 'farming' usually implies a single goal"), this is not necessarily so. The following rich commentary, for instance, relates the question of the goal rather to the randomness of rewards and points out that the overarching goal of grinding is *progression* (which they describe as deterministic):

> Farming usually refers to killing enemies or otherwise harvesting resources from other entities and can usually be done in large batches or in quick succession (i.e. killing an entire group of enemies, killing one specific enemy over and over, etc) and can sometimes be accomplished quickly (if you're farming for a specific drop and you get it on the first try, congratulations!), and often has either an element of randomness or operates on a large scale (there may be a low chance that an enemy drops an item, so you farm them to get the item. Or maybe they drop it frequently, but you need multiple/many, so you farm to build up your stock). Grinding can take much longer, and is harder to skip, if at all. You can't really short-circuit grinding, since by definition it takes a while, but the end goal is deterministic (i.e. there's no random chance involved; you need X amount of experience to reach this level, and that number isn't going to change).

A second commentary paints a similar picture arguing that "Grinding is more related to an unskippable element or hindrance to progression or game that must be overcome." As farming was not linked to progression in the same manner it remains an open and fruitful question to consider the nature of the telic structure further.

Item 4 slightly hints at participants regarding grinding to be more of a "style of play" compared to farming, but this difference was not statistically significant. Overall, both practices are not easily read as either "acts" or "styles of play" according to the quantitative results. The

qualitative responses, however, reveal how those thinking about the two as "styles" conceptualize the two as different: here, as a style of play, grinding seems to include heightened player involvement ("I feel like farming can be passive while grinding is more involved. To contextulized it, I fallout 4 you can farm xp by building the same object over and over again with little trouble or you can grind xp by repeating dungeons and areas with many enemies. Same goal but different approaches") while farming may involve *glitches* or *exploits* ("'Grinding' is playing the game as it's meant to be played, but non-stop and typically using the most efficient method to gain xp, money etc, while playing the game as it's meant to be played. 'Farming' is playing the game NOT how it's meant to be played, typically using exploits or bugs to gain xp, money etc. But farming is typically much faster and less fun").[369]

According to item 5, farming is associated slightly higher with a positive feeling of reward than grinding whereas both medians remain in the middle of the scale. The qualitative responses are noteworthy here as they link farming to another positive feeling, that of "relaxation" (see: "Farming for me is time consuming but often very relaxing. I would sometimes go farm [in this case herbs in WOW {World of Warcraft}] specifically to relax"). Taking into account item 9, the results similarly indicate that grinding is significantly more "stressful" – a finding that qualitative responses mirror (e.g., "Grinding also can have a connotation of being less relaxed, like you are going as fast as possible"). Furthermore, the ratings of item 8 show that grinding, on average, is experienced significantly more frustrating and less fun than farming.

All these experiential items need to be contextualized against the finding from the final set of items, which reveals that most gamers hold the line between farming and grinding to be subjective.[370] Hence, the quantitative descriptors with medians in the middle of the scale are less meaningful where opinions diverge and require further context. The tendency that grinding is perceived as more stressful, frustrating, and less fun can, nevertheless, be linked to item 10, which indicates that grinding is perceived as significantly more "difficult" than farming. While

[369] To clarify, *bugs* and *glitches* refer to mistakes that occur due to errors in procedural logics (as opposed to primarily narrative plot holes we know from other media) and, as deterritorializations, may receive a lot of player attention and can be experienced differently (e.g., as annoying or amusing). *Exploits* are instances in game play when game logics can be ab/used to gain disproportionate advantages (e.g., the broken way the enchanting and alchemy skills in *Skyrim* (2011) can increasingly enhance each other through crafted equipment and potions until overpowered items and armor can be obtained).

[370] This finding is in line with Bojin's argument that grinding (or in his terms, "the grind") has a subjective component: "definitions of the grind [. . .] tend to reference monotony, boredom, mindlessness, obligation and rote gameplay in characterizing grinding, and yet these things do not universally map to all player accounts of 'the grind'. Many players despise it, others enjoy it and some players do not even recognize what they do as grinding. In other words, there appears to be a subjective component to the grind" (5).

farming scores quite low on the difficulty scale, grinding was often described in terms of hard work (e.g., "You must TOIL doing something that may be fun, but gets repetitive"). The difficulty dimensions, beyond subjectivity, also depends on the *grindiness* of a game. In terms of examples, a wide range of games was referred to by respondents: *World of Warcraft* (2004), the *Borderlands* (2009-2019) and *Animal Crossing* (2001-2020) game series, *Pokémon Go* (2016), *The Legend of Zelda: Tears of the Kingdom* (2023), and even hypothetical games. An outstanding example was the *Dark Souls* series (2011-2016), which is (in)famous for its unrelenting difficulty – the description of a game as "Souls-like" was used by respondents as the epitome of grindiness. Testifying to the agency of games in grinding, the majority of gamers in the survey claimed that the use of farming or grinding depends on the game in question.

Somewhat contradicting these aspects, farming and grinding scored equally low on item 11 that asked for the skill requirement of the practices. Whereas one qualitative contribution argued for grinding to involve skill improvement (see: "Grinding is moreso [sic] hours put in for an improvement in skill while farming is for improvement in equipment or stats"), this did not become visible in the quantitative ratings.

Echoed by a cornucopia of qualitative comments, item 6 revealed the strongest statistical evidence for the possibility to differentiate farming and grinding according to reward type. Following the ratings, many of the contributions stated again that "Farming is to gain items. Grinding is to gain experience," as one participant put it. Another argued that "farming is for increasing your material resources (getting currency, crafting ingredients, consumables, weapons, etc) whereas grinding is increasing your personal strength (gaining experience, levels, increasing stats, etc)." A game designer taking part in the survey shared their viewpoint from a design perspective:

> -Grinding is for leveling up, making your character reach a certain level. It comes from the term of 'to grind' which is to work for something day after day, in this case it's your character level
>
> -Farming is for items. It comes from the idea of harvesting a crop and picking your vegetables when they are ready, in this case it is for items. You may have to use combat for these items, or explore many bushes etc., but collecting that specific item repeatedly is 'to farm'

The comments of many participants mirror these conceptualizations immediately linking the verbs to different objects in writing: "grinding levels" and "farming items." It is crucial to

mention, however, that according to some uses of the terms, "XP" can also be farmed for while items cannot be grinded for (compare also: "I would say – 'grinding levels' vs 'farming xp' ['farming levels' sounds weird])."

Tying into many of these arguments on the reward type, item 12 further differentiated farming and grinding according to the role of combat in a statistically significant way. While the tie between grinding and combat mechanics received higher ratings than the one to farming, it is again crucial not to deduce from this that farming excludes combat. While many participants tied the dimensions of items 6 and 13 together as their main arguments (e.g., "Grinding is specifically generating XP from combat. Farming is intentional accumulation of rewards"), some gamers specifically conceptualize farming within combat-focused games: "When someone says 'farming', I generally think of PVP. For example, farming kills, farming newbs, farming wins, etc."[371] In this regard, it makes sense that farming does not score higher than the middle of the scale since it is not *necessarily* "more" (as the item was worded) about other mechanics than combat.

The final items 7 and 13 explore further the role of game design necessitating farming/grinding. Item 7 asked whether the practices are rather mandatory or optional. Here, the results show a non-trivial tendency towards grinding scoring higher on being mandatory, but the results fail to yield statistical significance when correcting for multiple comparisons.[372] The tendency is nevertheless reflected by the qualitative commentaries as the two following examples detail:

> I would say farming is typically doing some repetitive activity by choice to gain multiples of an item so you can do something with it (craft stuff, sell them, whatever) whereas grinding is a repetitive activity built into the game (do repetitive missions, kill a lot of stuff for experience, etc.)

[371] The term *PVP* in the comment stands for *player vs. player*, which is a game mode (sometimes also mechanic) allowing players to fight each other in a game (e.g. *Fallout 76* or *Conan Exiles*). The term *newbs* refers to *newbies* or *newcomers* who only begin to learn how to play a game (successfully). Here, the competitive PVP mode (where more experienced players farm new players) can be a competitive reason for grinding.

[372] To clarify, statistical hypothesis testing is based on rejecting the null hypothesis if the likelihood of the observed data under the null hypothesis is low, usually at least as low as 5% (hence, the confidence level of 95%). If multiple hypotheses are tested, as in the present multiple comparisons, the probability of observing a rare event increases, and the likelihood of making a so-called *Type I error* (i.e., incorrectly rejecting the null hypothesis where it is, in fact, true) increases with the number of tests performed. Therefore, to *correct* the 5% level ($\alpha = .05$), it is adjusted by division through the number of comparisons. If the comparison for item 7 had been the only one observed, it would easily be statistically significant with a *p*-value of .006.

> The line between Farming and Grinding for me is that Farming is an option to the player in the game to improve their abilities. Grinding is something the game requires in order to progress -> collect 32 xyz to get the next quest […]

The final item 13, which was added due to player feedback, also points to the role of game design in that it asks for whether the design function is perceived to be internal, i.e., inherently necessary, or rather external, for example as a strategy to increase the total play time. While the difference is not statistically significant, grinding shows a stronger tendency to be perceived as serving an internal function that ties into the previous notion of *grindy games* that challenge the player more than other games. Both grinding and farming, however, score rather low on the scale (medians between 2 and 3 out of 10) indicating a general perception of both practices as being rooted in design strategies that might exceed the individual (e.g., narrative) necessity for the practices for a game due to strategical (i.e., most importantly, sales-related) reasons. The comment by one gamer can be read along these lines when they write "Grinding feels like game time stretching and less a part of the actual game. I see farming more as a part of the game and grinding more as a stretching of the game time through repeated farming, etc."

Concluding these insights into some possible ways of differentiating farming and grinding, one result stands out: the largest group of gamers held that the two phenomena are "simply two different things." At the same time, however, there is no simple consensus between the participants, and several (at times) conflicting praxeological conceptualizations resonate through the qualitative and quantitative results. The most robust evidence was that farming is more about gaining items than levels compared to grinding and is perceived as less frustrating/boring, stressful, and difficult. Grinding was perceived to be more about combat, but both were not thought of as requiring particularly specific skills. While both practices tend to be thought of as generally optional in gameplay, they are also conceived as design strategies to stretch the total play time of a game. All these tendencies, however, are vastly generalized and depend on both the individual player and the game in question, which is also an argument raised by the responding gamers themselves.

Appendix B: Transcript of *The Longest Walk*

Table 7

Transcript of *The Longest Walk*

map	trigger spot	spoken text[a]	ambient sounds
1 (black)	darkness with smoke in distance	/ I felt, um… anxious. So anxious that I, eh… I was burning. / I was, em… My heart was beating really fast. I couldn't sleep. / I got tireder and tireder because I couldn't sleep because I was worrying… It was worry worry I've let my family down. Everyone is going to suffer because I'm no good. / Everybody who relied on me, it was a false reliance. I was a fake, therefore, I worried even more about what financial disaster I put on my family. / Em so, anxiety. Nervous energy burning off. Lack of sleep.	miscellaneous reversed and distorted noises, dripping water, beating heart (speeding up). Additionally: background noise (also in the following) along with the recorded voice.
1 (black)	entering the dark smoke	/ I remember vividly… Curling up in a ball on the living room floor. Howling… not even crying. Howling… saying how shit I was. Yeah I felt so bad, that was all I could do. I just wanted to be taken away from it all.	As before, all sounds increase volume.
2 (white)	car	/ I only realized something was wrong, when I was driving back from school crying… and I knew, this wasn't right. / It was a build-up of stress and work, and expectations at work, and then finding that I couldn't do it. I wasn't alone. Other people were struggling with it but I just thought "I can't do this. I can't do this. Why? What's wrong with me? Why can't I do it? I'm a failure."	Sound of the wind in distance.
2 (white)	paved path with grass, leading into underpass	/ I knew I was stressed… I didn't know I was depressed. And I think it just got worse after that point. Uhm, there was no stopping it. / Once it started, the feelings of negativity about not being good enough, I couldn't stop it. The whole thing made me feel I was worthless. So, I didn't want to meet anyone. I didn't want to speak to anyone. I was so worthless, there was no point in… I shouldn't indulge in my hobbies, [laughs] which I love. My cycling and my books. I couldn't do that. / I couldn't… I couldn't see. Now I can. That these were the sort of things I should have kept doing. I should have kept in contact with people. I should have gone out on my bike. I should have gone to the cinema. I should have done this. I just had to hide, because I was an embarrassment and I was… a worthless human being. And all the things that, laterally, I know is how you deal with it I couldn't.	Wind, when approaching underpass: cars overhead
2 (white)	underpass leading into paved path by the sea	/ It consumed me, finding a way to kill myself that nobody would get hurt with, i.e., if I, I didn't want to jump in front of a train in case the train driver had to suffer shock. I didn't want to hang myself in the forest because some kid might find you. But I didn't want to kill myself… but I did and it was not a drama thing. It wasn't "Oh attention, oh, I want to kill myself," it was… "I'm a useless piece of shit and I'm no good to anyone… the whole… everybody would be better off without me." Which didn't make sense. Now when I see it, it doesn't make sense, but… I was so desperate… I was so down… I could understand it why people would do it. / And I was so numb that, I could feel people in my	Wind and car noises, giving way for waves rolling in

		position then would, I could see how they could do it. But fortunately, I knew I couldn't because of my family. There was no way, even though I was suffering and I was absolutely hating myself, I would have never done this to my family.	
2 (white)	rocky beach area	/ I remember a run and actually being on the beach at Kingsbarns and thinking, … because I was away from you all and I was having me time. Then I reflected what a fucking great life I have, this is brilliant. I love my family and this is a great, I can do this. / I am a guy who did a lot of things on his own. And I think when you're giving time to other people with your job, you sometimes need a wee bit time to yourself without being too selfish. / But as soon as I got out there ad into my stride, which, [laughs] I'm not a good runner, but into my stride, I could. The head would clear and then you could just enjoy the experience. You hear the birds, you listen to the sea crashing in, you feel tactile of the sand, and the experience of being, doing that sort of thing. So I could enjoy the surroundings. / But yeah, at the start: "Aah, panic, rush, rush, rush was because all it was, about timetabling. At the end, yup: more relaxed. I could come home and get on with the rest of it.	Waves rolling in
2 (white)	Paved path by the sea 2	/ I know that I've had these issues. I'm hopeful I won't have them again. I can't tell if I'm going to have them or not. I don't know what's going to kick in… you know, I didn't think I'd get it after the second time. But then I went back into a position of responsibility, and had a trigger there, and whoah… / I knew things were happening and I knew that I didn't want to be ill and I knew that I should be doing certain things and doing all these different techniques but I couldn't stop it. Ehm and that, that, that was also a frustrating thing that. To have that experience of two big episodes and then for the third one to come again and know, and be aware, - 'cause I was aware of triggers and stresses – and because I couldn't get a grip of that that it made it worse…	Wave give way to sounds of cars passing again
2 (white)	Paved path with street signs	/ And for the second and third episodes, I got better at dealing with it and saying "well, I can't do anything about it. I'm ill…" If I had a broken leg and it was in a plaster, it's obvious… But because I've got a broken head, it's not obvious to see that I'm ill." I think the last time that I was ill, it was so much quicker 'cause, eventually, I did get a grip. / I would like to think that I'm a better person for it. It was a good thing. It was a horrible thing, but it was a good thing, in that it made me reflect on what is important. My family was more important than anything else. What other people think doesn't matter… apart from the ones close to you. Em, so… and work is important, but hey… It's a job and getting that balance right, that's what was wrong.	Sounds of cars passing fast
2 (white)	Stairs	/ The boys… I don't know exactly what we talked about and I think they weren't fully aware just how seriously ill I was, which is brilliant, because they were too young to deal with that, at the time. But it's good to talk about it now. / I hope they know that if anything like that happens to them, then they understand it, well… it's happened to their Dad, so…and he's still here and he's still ok. I hope, ehm, and yeah, that if it happens to their friends and it happens to people they love that they'll have insight into it and to know that people need help.	Sounds of cars passing fast

a. The "/" marks the in-game place of the narrative triggers required to start the next bit of a section.

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